

Collection: ABDM/Accession no.: ABDMS016412	Object name: Vertical Drilling Machine	Updated/by: M. Dey
Manufacturer: [Unknown]		 A photograph showing the main metal frame and a large wheel of the vertical drilling machine, resting on a wooden surface.
Description: Vertical drilling machine. Currently dismantled into parts - a mid-height square metal frame, a number of metal wheels/cogs/drilling attachment en-masse and a separate metal wheel with wooden handle (not attached).		 A black and white photograph of a workshop interior. A vertical drilling machine is visible on the left. The room is filled with various tools, equipment, and materials, suggesting a busy working environment.
Location: In storage		
Production date: 19 th century		
Place of production: [Unknown]		
Place of use: Archibald Campbell		
Industry: Plumbing		
Description of operation: [For boring holes in metal.]		
Technical details: Height: 101cm Width: 52cm		
Classification: Metalworking		
Type: [vertical drilling machine]		
Drive: Belt driven with treadle feature.		
Attachments: Hook attached to base.		
Features: [Not specified]		
Condition/Completeness: Good, complete. Currently dismantled.		
Suitability for student projects: Possible. [Please contact Aberdeen Maritime Museum for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: ABDM/Accession no.: ABDM016413	Object name: Pedestal Grinding Machine	Updated/by: M. Dey
Manufacturer: [Unknown]		
Description: Pedestal Grinding Machine. The machine has a square pedestal which has a bolt hole in each corner. The shaft is fluted and narrower at the top than the bottom. The grinding stone sits upon the fluted shaft attached to a circular steel rod and bolts. Cast iron steel: emery bearing and stone at one end.		
Location: In storage		
Production date: 19 th century		
Place of production: [Unknown]		
Place of use: Archibald Campbell		
Industry: Plumbing		
Description of operation: [For finishing work surfaces.]		
Technical details: Height: 125 cm Width: 44.1 cm Depth: 33.3 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [pedestal]		
Attachments: [Not specified]		
Features: [Not specified]		
Condition/Completeness: Good, complete.		
Suitability for student projects: Possible. [Please contact Aberdeen Maritime Museum for further assessment.]		
Comments: /		

Collection: ABDM/Accession no: ABDMS065285	Object name: Treadle Lathe	Updated/by: M. Dey
Manufacturer: [Unknown]		
Description: Treadle lathe mounted on bench-cabinet which holds treadle mechanism. Steel and wood.		
Location: In storage		
Production date: 1900-1950		
Place of production: [Unknown]		
Place of use: Thomas Tait		
Industry: [Not specified]		
Description of operation:		
Technical details: [Not specified]		
Classification: Woodworking		
Type: [treadle operated]		
Drive: [treadle operated]		
Attachments: [Not specified]		
Features: [Not specified]		
Condition/Completeness: [Not specified. Please contact Aberdeen Maritime Museum for further assessment.]		
Suitability for student projects: Possible.		
Further documentation: [Not specified]		
Comments: No image available.		

Almond Valley Heritage Trust/Accession no.: LVSAV1996.012	Object name: Power Hammer	Updated/by: 14/08/2015/S.Funch
Manufacturer: Possibly by The Toledo Machine and Tool Co.		
Description: Power hammer driven from line shafting, with anvil block and suspended operators chair from Chieftain Forge, Bathgate. (Anvil block has since been deaccessioned on 18/08/2009)		
Location: On display at Almond Valley Heritage Centre		
Production date: circa 1911		
Place of production: Possibly Toledo, Ohio, USA.		
Place of use/Acquired from: Bathgate		
Industry: Spade Forge Industry		
Description of operation: Operated by the hammerman, the hammer was used to hammer out red hot billets of steel into the rough shape of a spade. The operators chair is suspended by a chain from the roof of the building which allowed him to move quickly to ensure that the hammer hits the steel billet in exactly the right spot.		
Technical details: Height 2m 57cm (approx) Length 1m 70cm (approx) Width 1m 26cm (approx)		
Classification: Metalworking		
Type: [Not specified]		
Drive: Belt driven via electricity (although the first machines utilised by the Chieftain Forge were originally water powered.)		
Attachments: /		
Features: None		
Condition/Completeness: Fully operational with original parts.		
Suitability for student projects: Suitable; further assessment required.		
Further documentation: Related archive records of Chieftain Forge Ltd.; drawings of products.		
Comments: /		

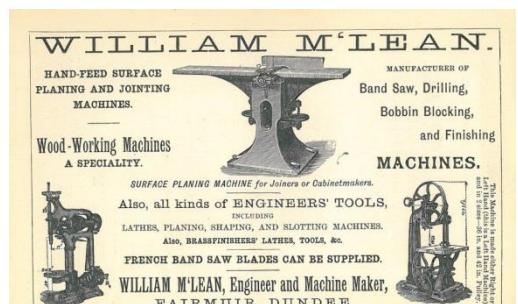
Collection: Almond Valley Heritage Trust/Accession no.: LVSAV1996.013	Object name: Power Press	Updated/by: 14/08/2015/S. Funch
<p>Manufacturer: Possibly The Toledo Machine and Tools Co.</p> <p>Description: Screw press driven from line shafting for forming shovels from Chieftain Forge, Bathgate.</p> <p>Location: On display at Almond Valley Heritage Centre.</p> <p>Production date: circa 1911</p> <p>Place of production: Possibly Toledo, Ohio, USA.</p> <p>Place of use: Bathgate</p> <p>Industry: Spade Forge Industry</p> <p>Description of operation: This machine is designed to press metal into the shape of a shovel head.</p> <p>Technical details: Height 2m 60cm (approx) Length 2m 30cm (approx) Width 1m 10cm (approx)</p> <p>Classification: Metalworking</p> <p>Type: [Not possible]</p> <p>Drive: Belt driven via electricity (although the first machines utilised by the Chieftain Forge were originally water powered.)</p> <p>Attachments: /</p> <p>Features: None</p> <p>Condition/Completeness: Fully operational with original parts.</p> <p>Suitability for student projects: Suitable; further assessment required.</p> <p>Further documentation: Related archive records of Chieftain Forge Ltd.; drawings of products.</p> <p>Comments: /</p>	 	

Collection: Almond Valley Heritage Trust/Accession no.: LVSAV1996.015	Object name: Billet Punch	Updated/by: 14/08/15./S. Funch
<p>Manufacturer: A.J. Acaster & Co.</p> <p>Description: Billet punch for hot forging shovel blanks from Chieftain Forge, Bathgate.</p> <p>Location: On display at Almond Valley Heritage Centre</p> <p>Production date: circa 1911</p> <p>Place of production: Engineers Princes Works, Sheffield, England.</p> <p>Place of use/Acquired from: Bathgate</p> <p>Industry: Spade Forge Industry</p> <p>Description of operation: [For hot forging.]</p> <p>Technical details: Height 3m (approx) Length 3m (approx) Width 2m (approx)</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: Belt driven via electricity (although the first machines utilised by the Chieftain Forge were originally water powered.)</p> <p>Attachments: /</p> <p>Features: Makers mark/stamp embossed on the side of the machine.</p> <p>Condition/Completeness: Fully operational with original parts.</p> <p>Suitability for student projects: Suitable; further assessment required.</p> <p>Further documentation: Related archive records of Chieftain Forge Ltd.; drawings of products.</p> <p>Comments: /</p>	  	

Collection: Almond Valley Heritage Trust/Accession no.: LVSAV1996.017	Object name: Woodworking Lathe	Updated/by: 14/08/2015/S. Funch	
Manufacturer: Possibly made by The Toledo Machine and Tool Co.			
Description: Lathe for turning taper on wooden shovel shafts from Chieftain Forge, Bathgate.			
Location: On display at Almond Valley Heritage Centre			
Production date: circa 1911			
Place of production: Possibly Toledo, Ohio, USA			
Place of use/Acquired from: Bathgate			
Industry: Spade Forge Industry			
Description of operation: This machine was designed to trim wooden shovel handles to fit within the specified sizes required for the shovel head.			
Technical details: Height 4m (approx) including upper belt and wheel mechanisms Length 2m 20cm (approx) Width 2m 30 (approx) including upper belt and wheel mechanisms			
Classification: Woodworking			
Type: [Not specified]			
Drive: Belt driven via electricity (although the first machines utilised by the Chieftain Forge were originally water powered.)			
Attachments: /			
Features: None			
Condition/Completeness: Fully operational with original parts.			
Suitability for student projects: Suitable; further assessment required.			
Further documentation: Related archive records of Chieftain Forge Ltd.; drawings of products.			
Comments: /			

Collection: Almond Valley Heritage Centre/Accession no.: LVSAV1996.019	Object name: Woodworking machine	Updated/by: 14/08/2015 S. Funch
<p>Manufacturer: Possibly The Toledo Machine and Tool Co.</p> <p>Description: Machine for forming tenons to fix handles at the end of wooden shovel shafts from Chieftain Forge, Bathgate</p> <p>Location: On display at Almond Valley Heritage Centre</p> <p>Production date: c. 1911</p> <p>Place of production: Possibly Toledo, Ohio, USA</p> <p>Place of use/Acquired from: Bathgate</p> <p>Industry: Spade Forge Industry</p> <p>Description of operation: This machine was designed to create insertions into a projecting piece of wood (i.e. the shovel shaft) to allow it to be attached to the metal shovel head.</p> <p>Technical details: Height 4m (approx) including upper belt and wheels mechanism Length 1m 10cm (approx) Width 2m 5cm (approx) including upper belt and wheels mechanism</p> <p>Classification: Woodworking</p> <p>Type: [Not specified]</p> <p>Drive: Belt driven via electricity (although the first machines utilised by the Chieftain Forge were originally water powered.)</p> <p>Attachments: /</p> <p>Features: None</p> <p>Condition/Completeness: Fully operational with original parts.</p> <p>Suitability for student projects: Suitable; further assessment required.</p> <p>Further documentation: Related archive records of Chieftain Forge Ltd.; drawings of products.</p> <p>Comments: /</p>		

Collection: Almond Valley Heritage Centre/Accession no.: LVSAV1996.016	Object name: [Wood] Bending Machine	Updated/by: 14/08/2015/S. Funch
Manufacturer: The Toledo Machine and Tool Co.		
Description: Machine for forming offset in steamed wooden shovel shafts from Chieftain Forge, Bathgate. Called The "Toledo No. 554 Handle Bending Machine (Old No. 12)"		
Location: On display at Almond Valley Heritage Centre		
Production date: c. 1911		
Place of production: Toledo, Ohio, USA		
Place of use/Acquired from: Bathgate		
Industry: Spade Forge Industry		
Description of operation: This machine is designed for bending the handles for welded or plain back shovels. It is so constructed that the attachments may be easily removed and replace by others, converting it into a handle driving machine for forcing or driving the hollow back shovels on to the handles. Capacity, 200 to 300 dozen handles per day.		
Technical details: Weight 2.700 lbs (approx) Height 1m 20cm (approx) Length 2m 5cm (approx) Width 90cm (approx)		
Classification: Woodworking		
Type: [Not specified]		
Drive: Belt driven via electricity (although the first machines utilised by the Chieftain Forge were originally water powered.)		
Attachments: /		
Features: None		
Condition/Completeness: Fully operational with original parts.		
Suitability for student projects: Suitable; further assessment required.		
Further documentation: Related archive records of Chieftain Forge Ltd.; drawings of products.		
Comments: /		

Collection: DHT	Object name: [Vertical] Drill	Updated/by: L. Attaheri
Museum/Accession no.: DUNIH 2015.86		
Manufacturer: William McLean and Sons Ltd., Dundee		
Description: Large [vertical] metal drill (with drill bits removed). Originally powered by line shafting and features two pulleys with covers.		
Location: On display at Scotland's Jute Museum/Verdant Works		
Production date: Circa 1900		
Place of production: Fairmuir Machine Works, Dundee		
Place of use/Acquired from: Verdant Works		
Industry: Jute Production		
Description of operation: To bore holes for production/ repair of jute machinery parts- used in the mechanics workshop at mill.		
Technical details: Height 230 cm Length 55 cm Width 160 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: moulding: side: 'Wm. Mclean Fairmuir Dundee'		
Condition/Completeness: In good condition, cleaned and waxed August 2015 for display in High Mill project		
Suitability for student projects: No longer operational.		
Further documentation: Advert for William McLean featuring illustration of drill- taken from book 'Essay on the Disc and Differential Notions as applied to the Roving Machines of Messrs Fairbairn, Naylorm Macpherson and Co., Leeds' by Joseph Howell. Published by James P. Matthew and Co., Dundee, 1899. (DUNIH 55.18)		
Comments: /		

Collection: DHT Museum/Accession no.: DUNIH 2015.85	Object name: Sharpening Stone	Updated/by: L. Attaheri
<p>Manufacturer: Unknown</p> <p>Description: Limestone wheel set into an iron fixing mounted on a wooden stand</p> <p>Location: On display at Scotland's Jute Museum/Verdant Works</p> <p>Production date: Unknown</p> <p>Place of production: Unknown</p> <p>Place of use/Acquired from: Verdant Works</p> <p>Industry: Jute production</p> <p>Description of operation: Made from limestone this would have been used for sharpening tools, particularly the axes used within the batching department to open the raw jute bales. The stone would sit in a pool of water in order to keep this cool.</p> <p>Technical details: Height 89 cm Length 68.5 cm Width 38 cm</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: In good condition, cleaned and waxed August 2015 for display in High Mill project</p> <p>Suitability for student projects: No longer operational.</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: DHT Museum/Accession no.: DUNIH 2015.84	Object name: Grinder	Updated/by: L. Attaheri
<p>Manufacturer: Superior</p> <p>Description: Metal stand with 9 inch Carbondirum wheel, complete with covers.</p> <p>Location: On display at Scotland's Jute Museum/Verdant Works</p> <p>Production date: Circa 1910</p> <p>Place of production: Unknown</p> <p>Place of use/Acquired from: Verdant Works</p> <p>Industry: Jute Production</p> <p>Description of operation: Used within the mill workshop for both sharpening tools and smoothing down rough castings and machine parts.</p> <p>Technical details: Height 122 cm Length 77 cm Width 70 cm</p> <p>Classification: Metalworking</p> <p>Type: [9 inch grinder]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: moulding: front: 'Superior', metal plaque also front, centre of metal stand reads 'Rev per min: 6 inch Diam 3200, 8 inch Diam 2400, 10 inch Diam 1900, 12 inch Diam 1600'</p> <p>Condition/Completeness: In good condition, cleaned and waxed August 2015 for display in High Mill project.</p> <p>Suitability for student projects: No longer operational.</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Falkirk Museums Accession no.: 1980-018-001	Object name: Rivet Boring Machine	Updated/by: Niamh Conlon
<p>Manufacturer: Loudon Brothers</p> <p>Description: Huge machine with a guillotine at one end and a borer at the other, drive gear and exhaust pipe in the middle. Painted an orangey brown colour by the museum. "Loudon Brothers, Machine Tool Makers, Glasgow".</p> <p>Location: In storage</p> <p>Production date: circa 1940</p> <p>Place of production: Glasgow</p> <p>Place of use/Acquired from: Cochrane Brothers/Seaview Iron Works/Union St/Bo'ness town centre/Bo'ness area</p> <p>Industry: Shipbuilding industry/Shipwright's trade</p> <p>Description of operation: To bore rivet holes into sheet metal plates for ship repairs.</p> <p>Technical details: Height 2m 57cm (H 8' 5 3/16") Length 3m 17cm (L 10' 4 13/16") Width 87cm (W 2' 10 1/4")</p> <p>Classification: Metalworking</p> <p>Type: [Not specified] Drive: [Not specified] Attachments: [Not specified]</p> <p>Features: Moulding: side: "Loudon Brothers, Machine Tool Makers, Glasgow"</p> <p>Condition/Completeness: Restored/with matching components</p> <p>Suitability for student projects: [Not specified. Please contact Falkirk Museums for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>	 	

Collection: Falkirk Museums Accession no.: 1982-066 008/001	Object name: Hammer	Updated/by: Niamh Conlon
<p>Manufacturer: Samuel Platt Ltd.</p> <p>Description: Large "Hercules" belt driven hammer, painted grey.</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: England/Staffordshire/Wednesbury</p> <p>Place of use/Acquired from: Grangemouth Dockyard Co. Ltd./Dalgrain Rd/Old Grangemouth/Grangemouth area</p> <p>Industry: Shipbuilding</p> <p>Description of operation: The machine can work up to a pressure of 70-75 tons.</p> <p>Technical details: Height 2m 13cm (H 6' 11 7/8") Length 1m 17cm (L 3' 10 1/16") Width 21cm (W 8 1/4")</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: Belt-driven</p> <p>Attachments: Motor</p> <p>Features: stamping: label: "TOGGLE PRESS / TYPE H3 SERIAL NO 5446 / PATENT / NO 587363 SMART & BROWN (MACHINE TOOLS) LTD MANCHESTER SQUARE, LONDON W1 / ENGLAND""BUCK & HICKMAN LTD / Engineers / WATFORD / BIRMINGHAM / LEEDS / MANCHESTER / GLASGOW / LONDON"</p> <p>Condition/Completeness: Good/complete</p> <p>Suitability for student projects: No restriction access. [Please contact Falkirk Museums for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Falkirk Museums Accession Number: 1992-016-026	Object name: Horizontal Milling Machine	Updated/by: Niamh Conlon
<p>Manufacturer: Adcock & Shipley Ltd., England/Leicestershire/Leicester</p> <p>Description: Black horizontal milling machine made by Adcock & Shipley of Leicester and supplied by George Hales, 1944. The date suggests that this machine went into the BA Works at its inauguration.</p> <p>Location: In storage</p> <p>Production date: 1944</p> <p>Place of use/Acquired from: British Aluminium Works/Davids Loan/Langlees/Falkirk area /British Aluminium Co. Ltd.</p> <p>Industry: Aluminium Industry/Chemist's Trade War/Home Front</p> <p>Description of operation: [For cutting and removing material from a workpiece.]</p> <p>Technical details: Height 1m 60cm (H 5' 3") Length 94cm (L 3' 1") Width 80cm (W 2' 7 1/2")</p> <p>Classification: Metalworking</p> <p>Type: [Not specified] Drive: Pedal operated. Attachments: [Not specified]</p> <p>Features: Moulding: base:" Adcock/ & Shipley Ltd/ Leicester/ Eng" stamping: label 1:"SUPPLIED BY/ GEORGE HALES/ MACHINE TOOL CO. LTD/ LONDON, W.1" stamping: label 2:"ADCOCK & SHIPLEY LTD/ SIZE No 1 MODEL M/ A & S ORDER 12206//36 DATE 12//44/ CORRECT LUBRICATION// SUPPLIES BY/ VACUUM OIL COMPANY LTD/ MAKER LEICESTER ENGLAND" painting:side:"0958"</p> <p>Condition/Completeness: Good/no information due to access restriction.</p> <p>Suitability for student projects: Limited as hard to access. [Please contact Falkirk Museums for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Falkirk Museums Accession no.: 1981-031-005	Object name: Vertical Milling Machine	Updated/by: Niamh Conlon
Manufacturer: W.M. Robertson & Co., Johnstone/Renfrewshire		 A large, light-green vertical milling machine. The side panel has a circular hole and the word "MANN" stamped on it. The machine is mounted on a heavy base with various adjustment knobs and a worktable.
Description: Vertical milling machine painted grey		 A close-up view of the machine's headstock and worktable. A workpiece is being machined, with a bright spark visible as the cutter cuts through the metal.
Location: In storage		
Production date: 1870		
Place of use/Acquired from: Falkirk Brass & Sanitation Co. Ltd./Falkirk Brass Works/Bainsford/Falkirk area		
Industry: Brassfounding Industry		 A view of the machine from the side, showing the vertical column and the worktable. A small sign is attached to the side of the machine.
Description of operation: [For cutting and removing material from a workpiece.]		
Technical details: Height 1m 97cm (H 6' 5 9/16") Length 1m 38cm (L 4' 6 5/16") Width 68cm (W 2' 2 3/4")		
Classification: Metalworking		
Type: [Not specified] Drive: [Not specified] Attachments: [Not specified]		
Features: Moulding: side: "MANN" stamping: label: "MANN supplied by / EH Jones/(machine tools Ltd)/ EDGEWARE ROAD THE HYDE/ LONDON, N.W.9/MACHINE STOCK NO 28471"		
Condition/Completeness: Greasy and dirty, but seems good.		
Suitability for student projects: Good; no access restriction.		
Further documentation: [Not specified]		
Comments: /		

Collection: Falkirk Museums Accession no.: 1986-094-001	Object name: Toggle Press	Updated/by: Niamh Conlon
<p>Manufacturer: Smart & Brown Ltd.</p> <p>Description: Heavy cast iron toggle machine, painted blue. A brass label on the front reads: "TOGGLE PRESS / TYPE H3 SERIAL NO 5446 / PATENT / NO 587363 SMART & BROWN (MACHINE TOOLS) LTD MANCHESTER SQUARE, LONDON WI / ENGLAND" "BUCK & HICKMAN LTD / Engineers / WATFORD / BIRMINGHAM / LEEDS / MANCHESTER / GLASGOW / LONDON".</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: England/Greater London</p> <p>Place of use/Acquired from: Glasgow</p> <p>Industry: Mechanical Engineering Trade</p> <p>Description of operation: [Manually operated bench top press for bending metal.]</p> <p>Technical details: Height 42cm (H 1' 4 9/16") Length 29cm (W 11 7/16") Width 21cm (W 8 1/4")</p> <p>Classification: Metalworking</p> <p>Type: [Not specified] Drive: [Not specified] Attachments: [Not specified]</p> <p>Features: Stamping: label: "TOGGLE PRESS / TYPE H3 SERIAL NO 5446 / PATENT / NO 587363 SMART & BROWN (MACHINE TOOLS) LTD MANCHESTER SQUARE, LONDON WI / ENGLAND" "BUCK & HICKMAN LTD / Engineers / WATFORD / BIRMINGHAM / LEEDS / MANCHESTER / GLASGOW / LONDON"</p> <p>Condition/Completeness: Good</p> <p>Suitability for student projects: Good; no access restriction. [Please contact Falkirk Museums for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>	<p>Falkirk Museums & Archives</p> 	

Collection: Falkirk Museums Accession no.: 1977-071-001	Object name: Horizontal Planing Machine	Updated/by: Niamh Conlon
<p>Manufacturer: MacLellan, P & W Group</p> <p>Description: Extremely large planing machine with cast iron frame, painted black. On the arch is moulded "MACLELLAN". Used at Falkirk Iron Works to shape large castings. The cutter remained fixed while the large flat bed travelled back and forwards underneath. The Company purchased it in 1925 for just under £1,000.</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: Glasgow</p> <p>Place of use/Acquired from: Falkirk Iron Works/Grahams Rd/Grahamston/Falkirk area/Falkirk Iron Co.</p> <p>Industry: Ironfounding Industry/Finishing</p> <p>Description of operation: To shape large castings.</p> <p>Technical details: Height 2m 80cm (H 9' 2 1/4") Length 6m (L 19' 8 1/4") Width 2m 60cm (W 8' 6 3/8")</p> <p>Classification: Metalworking</p> <p>Type: [Not specified] Drive: [Not specified] Attachments: [Not specified]</p> <p>Features: moulding: bed:"P. and W. MACLELLAN/ GLASGOW/ MACLELLAN" moulding: side:"MACLELLAN" stamping: label:PLANT/ NO 22"</p> <p>Condition/Completeness: Good/no information due to access restriction.</p> <p>Suitability for student projects: Limited as hard to access.</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		<p>Falkirk Museums & Archives</p>

Collection: Falkirk Museums Accession no.: 1988-011-002	Object name: Exhaust Pipe Bending Machine	Updated/by: Niamh Conlon
Manufacturer: W. Alexander & Sons Ltd.		
Description: Exhaust Pipe bender used by Walter Alexander & Sons Ltd and painted in the company's maroon livery. It has a large circular drum with a cogged brass rail attached to the top and a large three-spoked wheel set at right angles. Brass ratchet rail.		
Location: In storage		
Production date: Unknown		
Place of production: Stirling		
Place of use/Acquired from: Bus Depot/Brown St/Camelon/Falkirk area		
Industry: Transport; Road/Bus Maintenance		
Description of operation: It consists of a sliding spindle which carries the cutting chisel mounted vertically on a heavy cast iron stand. To cut the mortice, the spindle is forced downwards with a long lever; it is drawn up again by a counterweight.		
Technical details: Diameter 68cm (Dia 2' 2 3/4") Weight 327kg (720lb 14 9/16oz) Height H 1m (H 3' 3 3/8") Length 1m 30cm (L 4' 3 3/16")		
Classification: Metalworking		
Type: [Not specified] Drive: [Not specified] Attachments: [Not specified]		
Features: Stamping: label: "W.ALEXANDER & SONS/ MACHINE No TFP2870"		
Condition/Completeness: Good		
Suitability for student projects: Good; no access restriction. [Please contact Falkirk Museums for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: Falkirk Museums Accession no.: 1988-011-019	Object name: Riveting Machine	Updated/by: Niamh Conlon
Manufacturer: W. Alexander & Sons Ltd.		 A photograph of a red riveting machine. The machine is a vertical structure with a curved top and a heart-shaped base. It has a red-painted frame and several mechanical components like belts and pulleys. The text 'Falkirk Museums & Archives' is overlaid in the top right corner of the image.
Description: Upright riveting machine with a cast iron frame, painted red. On both sides of the curved top is moulded "WANDESS", and on a label on the heart-shaped pedestal foot reads "W. ALEXANDERS & SONS LTD/ MACHINE NO FP 1517". To either side of the working head are small trays with pierced plates for holding the rivets.		
Location: In storage		
Production date: Unknown		
Place of use/Acquired from: Bus Depot/Brown St/Camelon/Falkirk area		
Industry: Transport; Road/Bus Maintenance		
Description of operation: For sheet metal working.		
Technical details: Height 1m 26cm (H 4' 1 5/8") Length 56cm (L 1' 10 1/16") Width 50cm (W 1' 7 11/16")		
Classification: Metalworking		
Type: [Not specified] Drive: Pedal operated. Attachments: [Not specified]		
Features: moulding: side: "WANDESS" stamping: label on foot: "W.ALEXANDER & SONS LTD/ MACHINE No/ FP 517"		
Condition/Completeness: Good.		
Suitability for student projects: Good; no access restriction. [Please contact Falkirk Museums for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: Falkirk Museums Accession no.: 1980-044-042	Object name: Slotting Machine	Updated/by: Niamh Conlon
<p>Manufacturer: W.M. Robertson & Co., Johnstone/Renfrewshire</p> <p>Description: Large cast iron slotting machine, painted drab green (by the museum). A brass plate reads: "WM ROBERTSON & Co./ MAKERS/ JOHNSTONE".</p> <p>Location: In storage</p> <p>Production date: 1870</p> <p>Place of use/Acquired from: Dundas Engineering Co./Grangemouth Docks/Grangemouth area</p> <p>Industry: Shipbuilding/Ship repairing</p> <p>Description of operation: Large cast iron slotting machine, painted drab green (by the museum). A brass plate reads: "WM ROBERTSON & Co./ MAKERS/ JOHNSTONE". The machine dates to c. 1870, and was used to cut slots in metal, especially for cutting internal keyways in the hubs of metal wheels. Used by the Dundas Engineering Co. Originally light blue in colour, repainted by YOP.</p> <p>Technical details: Height 1m 93cm (H 6' 4") Length 1m 50cm (L 4' 11 1/16") Width 1m 50cm (L 4' 11 1/16")</p> <p>Classification: Metalworking</p> <p>Type: [Not specified] Drive: Belt driven Attachments: [Not specified]</p> <p>Features: Moulding: side 1:"CARRON COMPANY/ STIRLINGSHIRE" moulding: side 2:"CARRON/ ESTO/ PERPETUA/ 1759" stamping: front: "No 26"</p> <p>Condition/Completeness: Good.</p> <p>Suitability for student projects: Good; no access restriction. [Please contact Falkirk Museums for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Falkirk Museums Accession no.: 1982-066-009	Object name: Wood Boring and Morticing Machine	Updated/by: Niamh Conlon
Manufacturer: John McDowall & Sons		
Description: Large cast iron wood boring machine, painted black with red lettering. This machine can go up to a pressure of 70-75 tons.		
Location: In storage		
Production date: Unknown		
Place of production: Johnstone		
Place of use/Acquired from: Grangemouth Dockyard/Dalgrain Rd/Old Grangemouth/Grangemouth area/Grangemouth Dockyard Co. Ltd.		
Industry: Shipbuilding Industry		
Description of operation: For boring and morticing ships' timbers.		
Technical details: Height 3m (H 9' 10 1/8") Length 1m 45cm (L 4' 9 1/16") Width 90cm (W 2' 11 7/16")		
Classification: Woodworking		
Type: [Not specified] Drive: [Not specified] Attachments: [Not specified]		
Features: moulding: side: "JOHN McDOWALL/ & SONS/ JOHNSTONE/ SCOTLAND" / moulding: Label:"WEBSTER'S/ PATENT"		
Condition/Completeness: Good.		
Suitability for student projects: Good; no access restriction. [Please contact Falkirk Museums for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: Falkirk Museums Accession no.: 1989-082-002	Object name: Morticing Machine	Updated/by: Niamh Conlon
<p>Manufacturer: Carron Co.</p> <p>Description: Small free-standing 'Carronade' morticing machine made by the Carron Co. Painted dark green. Crossed carronades faintly on the side.</p> <p>Location: In storage</p> <p>Production date: circa 1920</p> <p>Place of use/Acquired from: Larbert area/Stenhousemuir/Stenhouse Rd/Carron Iron Works</p> <p>Industry: Joiner's Trade</p> <p>Description of operation: [For cutting holes in wood.]</p> <p>Technical details: Weight 345 kg Height 1m 70cm (H 5' 6 15/16") Length 94cm (L 3' 1") Width 1m (W 3' 3 3/8")</p> <p>Classification: Woodworking</p> <p>Type: [Not specified] Drive: [Not specified] Attachments: [Not specified]</p> <p>Features: side: decoration: "CARRON COMPANY/ ENGINEERING DEPT/ CARRON WORKS" moulding: side: "CARRONADE" stamping: front: "No 378"</p> <p>Condition/Completeness: Good, not clean, but metal seems fine.</p> <p>Suitability for student projects: No access restriction.</p> <p>Further documentation: Archive records of manufacturer with Falkirk Archives.</p> <p>Comments: /</p>		

Collection: Falkirk Museums Accession no.: 1977-033-249	Object name: Morticing Machine	Updated/by: Niamh Conlon
Manufacturer: A. Mathieson & Son		
Description: Large morticing machine with a cast iron body and rectangular base, painted red. The lever handle has a counterweight at the end. A red wooden box contains the interchangeable chisel heads.		 A photograph of a large, red-painted morticing machine. The machine is made of cast iron and has a rectangular base. A prominent red wooden box is attached to the side, containing interchangeable chisel heads. A long wooden lever handle is attached to the side of the machine, with a counterweight at the end. The machine is set against a background of a workshop or museum setting.
Location: In storage		
Production date: Unknown		
Place of production: Glasgow (Council Area)/Glasgow City/Possilpark/Saracen Foundry		
Place of use/Acquired from: Unknown		
Industry: Joiner's Trade		
Description of operation: It consists of a sliding spindle which carries the cutting chisel mounted vertically on a heavy cast iron stand. To cut the mortice, the spindle is forced downwards with a long lever; it is drawn up again by a counterweight.		 A photograph of the same red morticing machine in use. A piece of wood is being processed, and the machine's mechanism is shown in action. The red wooden box is visible on the side. The background shows a workshop environment with various tools and equipment.
Technical details: Height 1m 64cm (H 5' 4 9/16") Length 72cm (L 2' 4 3/8") Width 58cm (W 1' 10 13/16")		
Classification: Woodworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: moulding: side: "ALEX MATHIESON/ GLASGOW/ SARACEN TOOL WORKS" moulding: side 2:"CRESCENT"		
Condition/Completeness: Good.		
Suitability for student projects: [Possibly. Please contact Falkirk Museums for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: Falkirk Museums Accession no.: 1984-012-001	Object name: Morticing Machine	Updated/by: Niamh Conlon
<p>Manufacturer: Carron Co.</p> <p>Description: Small free-standing morticing machine made by the Carron Co. Now painted khaki green. Crossed caronades shown on the side. No. 26.</p> <p>Location: In storage</p> <p>Production date: c. 1920</p> <p>Place of use/Acquired from: Larbert area/Stenhousemuir/Stenhouse Rd/Carron Iron Works</p> <p>Industry: Joiner's trade</p> <p>Description of operation: Cutting square or rectangular holes in a piece of timber.</p> <p>Technical details: Height 1m 70cm Length 1m (W 3' 3 3/8") 60cm (W 1' 11 5/8") Width 60cm (W 1' 11 5/8")</p> <p>Classification: Woodworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: stamping: front: "No 26". Six machine bits. Part 1 = L26.5cm. Part 2 L22cm with stamped on it "O". Part 3 L22.3cm with stamped on it "DEE" "O" "9/16". Part 4 L19.3cm with stamped on it "O" "3/8". Part 5 L21.6cm with stamped on it "0" "1/3". Part 6 L18.5cm with stamped on it "0" and "7/16". moulding: side 1:"CARRON COMPANY/ STIRLINGSHIRE" moulding: side 2:"CARRON/ ESTO/ PERPETUA/ 1759"</p> <p>Condition/Completeness: Good/complete.</p> <p>Suitability for student projects: No access restriction.</p> <p>Further documentation: Archive records of manufacturer with Falkirk Archives.</p> <p>Comments: /</p>	<p>Falkirk Museums & Archives</p> 	

Collection: Falkirk Museums Accession no.: 1980-034-001	Object name: Wood Moulding Machine	Updated/by: Niamh Conlon
Manufacturer: White		
Description: Wood moulding machine used by Walter Alexander & Co Ltd. The body is painted pale blue with red parts. The machine has a motor, grinder, cutters (19 of) and accessory tools (56 of). Related items e.g. tools and belt in Pallet Bay.		
Production date: Circa 1940		
Location: In storage		
Place of production: Renfrewshire/Paisley		
Place of use/Acquired from: Walter Alexander & Co. Ltd./Falkirk		
Industry: Coachbuilding Trade		
Description of operation: To re-cut teeth on circular saws.		
Technical details: Height 1m 37cm (H 4' 5 15/16") Length 3m 33cm (L 10' 11 1/8") Width 1m (W 3' 3 3/8")		
Classification: Woodworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: Moulding: side: "White/ WOODWORKING MACHINERY HEADQUARTERS/ PAISLEY/ Reference No ---" moulding: side: "TYPE HM/ White/ MOULDER"		
Condition/Completeness: [Not specified. Please contact Falkirk Museums for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [[Not specified]		
Comments: /		

Collection: Falkirk Museums Accession no.: 1980-044-046	Object name: Wood Trimmer	Updated/by: Niamh Conlon
<p>Manufacturer: Oliver Machinery Company</p> <p>Description: Large cast iron wood trimmer, moulding on the front "OLIVER No 2 WOOD TRIMMER". Painted pale blue (modern).</p> <p>Location: In storage</p> <p>Production date: 1910</p> <p>Place of production: Grand Rapids, Michigan, USA</p> <p>Place of use/Acquired from: Dundas Engineering Co. Ltd./Grangemouth Docks/Grangemouth area until 1980</p> <p>Industry: Shipbuilding/Ship repairing/fitting out.</p> <p>Description of operation: Used to mitre wood.</p> <p>Technical details: Diameter 58cm (Dia 1' 10 13/16") Height 1m 7cm (H 3' 6 1/8") Length L 1m 4cm (L 3' 4 15/16") Width 90cm (W 2' 11 7/16")</p> <p>Classification: Woodworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: Wheel with four wooden spoke handles.</p> <p>Features: moulding: side: "OLIVER, No 2 WOOD TRIMMER" moulding: side 2: "PATENTED MATE TESS U.S.A. ENGLAND, GERMANY, FRANCE./ MADE BY/ "OLIVER" MACH'Y CO. GRAND RAPIDS MICH. U.S.A."</p> <p>Condition/Completeness: Good/complete</p> <p>Suitability for student projects: No access restriction. [Please contact Falkirk Museums for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Falkirk Museums Accession no.: 1988-010-004	Object name: Saw Cutting Machine	Updated/by: Niamh Conlon
<p>Manufacturer: Wheatman & Smith</p> <p>Description: Fly press consisting of a solid cast iron base and bracket with a steel screw thread attached to two spherical iron weights on opposite ends of a horizontal bar to act as a flywheel. Painted black.</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: England/Yorkshire/Sheffield</p> <p>Place of use/Acquired from: Springfield Sawmill/Grahams Rd/Grahamston/Falkirk area/J. Baird & Co. (Falkirk) Ltd.</p> <p>Industry: Timber trade.</p> <p>Description of operation: To re-cut teeth on circular saws.</p> <p>Technical details: Height 98cm (H 3' 2 9/16") Length 1m 58cm (L 5' 2 3/16") Width 38cm (W 1' 2 15/16")</p> <p>Classification: Woodworking</p> <p>Type: [Not specified] Drive: [Not specified] Attachments: [Not specified]</p> <p>Features: moulding: plaque: "WHEATMAN/ & SMITH/ SHEFFIELD"</p> <p>Condition/Completeness: Good.</p> <p>Suitability for student projects: Good; no access restriction. [Please contact Falkirk Museums for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Glasgow Museum/Accession no.: 1915.51.ao	Object name: [Vertical sensitive] drilling machine	Updated/by: John Messner
Manufacturer: Andrew MacGregor		
Description: Sensitive [vertical] drilling machine fitted with ball bearings to drill at any degree. Designed, made and finished on foot lathe at home by Mr MacGregor.		
Location: In storage/GMRC		
Production date: Unknown		
Place of production: [Not specified]		
Place of use/Acquired from: Unknown		
Industry: Unknown		
Description of operation: [For drilling holes in metal.]		
Technical details: Weight 33.6kg Height 81 cm Length 73 cm Width 30 cm		
Classification: Metalworking		
Type: [vertical]		
Drive: Belt drive		
Attachments: Single drill bit		
Features: /		
Condition/Completeness: Complete as model.		
Suitability for student projects: Yes, study as model.		
Further documentation: [Not specified]		
Comments: /		



Collection: Glasgow Museums/Accession no.: T.1982.10.a.1-10	Object name: Treadle lathe	Updated/by: J. Messner
<p>Manufacturer: Pfeil & Co</p> <p>Description: Treadle lathe with faceplate, part of brass finisher's Lathe treadle operated.</p> <p>Location: In storage/GMRC</p> <p>Production date: Unknown</p> <p>Place of production: London, England</p> <p>Place of use/Acquired from: Unknown</p> <p>Industry: Brass finishing</p> <p>Description of operation: [For cutting and turning metal.]</p> <p>Technical details: Height 33 cm Length 15cm Width 26 cm</p> <p>Classification: Metalworking</p> <p>Type: [treadle lathe]</p> <p>Drive: Treadle operated, converted to belt drive.</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Incomplete</p> <p>Suitability for student projects: Yes. [Please contact Glasgow Museums for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>	 	

Collection: Summerlee Museum/Accession no.: T.1984.14.a	Object name: [Break bed lathe]	Updated/by: J. Messner
<p>Manufacturer: Crawhall and Campbell</p> <p>Description: Machine tool, 16" centre metal turning lathe, with gap bed and fitted for screw cutting, belt driven, accessories, maker Crawhall & Campbell 1860, colour green.</p> <p>Location: On Loan, Summerlee Heritage</p> <p>Production date: c. 1860</p> <p>Place of production: Glasgow</p> <p>Place of use/Acquired from: Thomas Tait and Co, papermakers, Inverurie</p> <p>Industry: Papermaking</p> <p>Description of operation: [For finishing holes and cutting metal with a cutting tool removing material from end of workpiece.]</p> <p>Technical details: Height 170 cm Width 595 cm Depth 180 cm</p> <p>Classification: Metalworking</p> <p>Type: [Facing and boring lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments Loaned to Summerlee, on display. [The object belongs to a group of maintenance workshop machines within the Summerlee collection that were all acquired from Thomas Tait and Co, papermakers, Inverurie. The object group also includes a travelling head shaping machine and a horizontal planing machine. All of the machines were originally water-powered.]</p>		

Collection: Glasgow Museums/Accession no.: T.1942.36	Object name: Ornamental turning lathe	Updated/by: J. Messner
<p>Manufacturer: Holtzapffel Rose</p> <p>Description: Holtzapffel Rose engine turning lathe with complete outfit of accessories in drawers of cabinet.</p> <p>Location: In storage/GMRC</p> <p>Production date: Unknown</p> <p>Place of production: London, England</p> <p>Place of use/Acquired from: Unknown</p> <p>Industry: [Not specified]</p> <p>Description of operation: [For cutting and turning metal.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [ornamental turning lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: [Not specified]</p> <p>Suitability for student projects: Yes. [Please contact Glasgow Museums for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Glasgow Museums/Accession no.: T.1958.38.d	Object name: Ornamental turning lathe	Updated/by: J. Messner
Manufacturer: Unknown		
Description: Lathe, early Russian ornamental turning lathe, Muriel possibly, 18th century, possibly. Constructed of wood, iron and brass, dismantled - possibly incomplete.		
Location: In storage/GMRC		
Production date: 18 th century, possibly		
Place of production: Russia (place of manufacture); England, London, South Kensington, Science Museum (place associated)		
Place of use/Acquired from: Donated by Science Museum London		
Industry: [Not specified]		
Description of operation: [For cutting and turning metal.]		
Technical details: Height 152 cm Length 91 cm Width 91 cm		
Classification: Metalworking		
Type: [ornamental turning lathe]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: [Not specified]		
Suitability for student projects: Yes. [Please contact Glasgow Museums for further assessment.]		
Further documentation: [Not specified]		
Comments: [No image available.]		

Collection: Glasgow Museums/Accession no.: T.1981.21	Object name: Cutting machine	Updated/by: J. Messner
Manufacturer: GKN Ltd, Birmingham		
Description: Wood-screw thread cutting machine, type C11A mk 2, serial no. 28.12.70.283.		
Location: In storage/GMRC		
Production date: Unknown		
Place of production: Birmingham, England		
Place of use/Acquired from: Unknown		
Industry: Unknown		
Description of operation: For making metal screws for wood.		
Technical details: No measurements recorded.		
Classification: Metalworking		
Type: type C11A mk 2, serial no. 28.12.70.283		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: [Not specified]		
Suitability for student projects: Yes. [Please contact Glasgow Museums for further assessment.]		
Further documentation: [Not specified]		
Comments: [GKN Ltd, Birmingham, specialised in the manufacture of wood-screws.]		

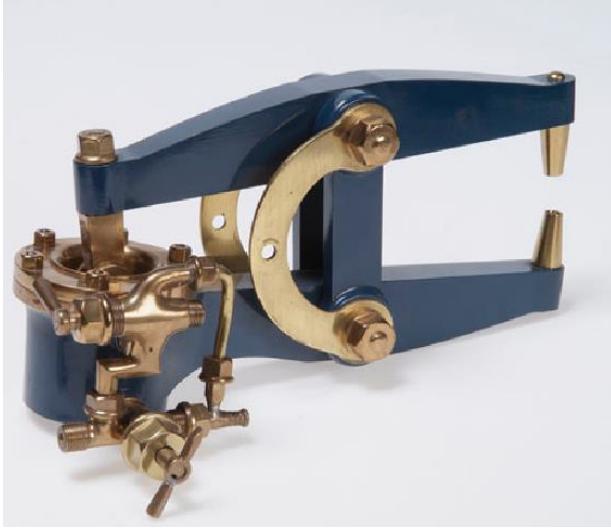
Collection: Glasgow Museums/Accession no.: 1915.51.i	Object name: Parallel grinder [attachment]	Updated/by: J. Messner
<p>Manufacturer: Andrew MacGregor</p> <p>Description: Parallel grinder to fit in tool post of lathe, from a collection of steel work</p> <p>Location: In storage/GMRC</p> <p>Production date: Unknown</p> <p>Place of production: Unknown</p> <p>Place of use/Acquired from: Unknown</p> <p>Industry: [Not specified]</p> <p>Description of operation: [Not specified]</p> <p>Technical details: Weight 2.8kg Length 12 cm Width 13 cm</p> <p>Classification: Metalworking</p> <p>Type: [parallel grinder]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: part</p> <p>Suitability for student projects: Yes. [Please contact Glasgow Museums for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Glasgow Museums/Accession no.: T.1984.14.b	Object name: [Horizontal] planing machine	Updated/by: J. Messner
<p>Manufacturer: Crawhall and Campbell</p> <p>Description: Machine tool, planing machine by Crawhall & Campbell 1863, belt driven with automatic table reversing mechanism, colour green</p> <p>Location: On Loan, Summerlee Heritage</p> <p>Production date: 1863</p> <p>Place of production: Glasgow</p> <p>Place of use/Acquired from: Thomas Tait and Co, papermakers, Inverurie</p> <p>Industry: Papermaking</p> <p>Description of operation: [For producing plane surfaces by removing material in a linear motion.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [horizontal]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments Loaned to Summerlee, on display. [The object belongs to a group of maintenance workshop machines within the Summerlee collection that were all acquired from Thomas Tait and Co, papermakers, Inverurie. The object group also includes a travelling head shaping machine and a break bed lathe. All of the machines were originally water-powered.]</p>		

Collection: Glasgow Museums/ Accession no.: TEMP.19627	Object name: Small [press]	Updated/by: J. Messner
Manufacturer: C E & S Ld		
Description: Small [press] possibly clamp or press. Stamped 'C E & S Ld'.		
Location: In storage/GMRC		
Production date: Unknown		
Place of production: [Not specified]		
Place of use/Acquired from: [Not specified]		
Industry: Unknown		
Description of operation: [For drilling holes in metal.]		
Technical details: Weight 1851g Height 19 cm Length 70cm Width 17 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: Hand operated		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: [Not specified. Please contact Glasgow Museums for further assessment.]		
Suitability for student projects: Yes.		
Further documentation: [Not specified]		
Comments: /		

Collection: Glasgow Museums/Accession no.: T.1984.14.d	Object name: Shearing machine	Updated/by: J. Messner
Manufacturer: J Fleming & Co		
Description: Machine tool, shearing machine by J Fleming & Co, Calton Foundry, belt driven		
Location: In storage/GMRC		
Production date: Unknown		
Place of production: Glasgow		
Place of use/Acquired from: Thomas Tait & Sons Ltd (donated by)		
Industry: Papermaking		
Description of operation:		
Technical details: No measurements recorded in file.		
Classification: Metalworking		
Type: [shearing machine]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: [Not specified]		
Condition/Completeness: [Not specified. Please contact Glasgow Museums for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: /		

Collection: Glasgow Museums/Accession no.: T.1984.14.c	Object name: Travelling head shaping machine	Updated/by: J. Messner
Manufacturer: Crawhall and Campbell		
Description: Machine tool, shaping machine by Crawhall & Campbell, 1868, belt driven, colour green		
Location: On Loan, Summerlee Heritage		
Production date: 1868		
Place of production: Glasgow		
Place of use/Acquired from: Thomas Tait and Co, papermakers, Inverurie		
Industry: Papermaking		
Description of operation: [For accurately producing flat surfaces.]		
Technical details: [Not specified]		
Classification: Metalworking		
Type: [travelling head]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments Loaned to Summerlee, on display. [The object belongs to a group of maintenance workshop machines within the Summerlee collection that were all acquired from Thomas Tait and Co, papermakers, Inverurie. The object group also includes a horizontal planing machine and a break bed lathe . All of the machines were originally water-powered.]		

Collection: Glasgow Museums/Accession no.: TEMP.11422	Object name: Hydraulic riveter model	Updated/by: J. Messner
Manufacturer: Unknown		
Description: Model of hydraulic driven rivetter. Two horizontal beams linked by central columns, with operating mechanism. Bright metal and blue paint.		
Location: In storage/GMRC		
Production date: Unknown		
Place of production: Unknown		
Place of use/Acquired from: Unknown		
Industry: Structural Engineering/Shipbuilding		
Description of operation: [For fastening together metal plates to form a permanent joint, widely used in shipbuilding and boilermaking.]		
Technical details:		
Weight 5112 g		
Height 13 cm		
Length 150 cm		
Width 27 cm		
Classification: Metalworking		
Type: [hydraulic]		
Drive: hydraulic drive		
Attachments: [Not specified]		
Features: [Not specified]		
Condition/Completeness: [Fair. Please contact Glasgow Museums for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: /		

Collection: Glasgow Museums/ Accession no.: T.1976.31	Object name: Machine Model	Updated/by: J. Messner
Manufacturer: Lyall Brothers		
Description: Model of machine for cutting oval holes in plate metal, made by Archibald Lyall, partner in Lyall Brothers, Rivetmakers, Kinning Park, Glasgow, circa 1914		
Location: In storage/GMRC		
Production date: 1914		
Place of production: Kinning Park, Glasgow		
Place of use/Acquired from: Unknown		
Industry: [Not specified]		
Description of operation: [For cutting oval holes in plate metal.]		
Technical details: Weight 1680g Height 12 cm Length 15 cm Width 20 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: [Not specified]		
Condition/Completeness: [Not specified. Please contact Glasgow Museums for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: /		

Collection: Glasgow Museums/Accession no.: 1881.71	Object name: Model of portable riveter	Updated/by: J. Messner
<p>Manufacturer: William Arrol and Co.</p> <p>Description: Model of portable rivetter with runner, traveller, hydraulic lift pump accumulator and appendages.</p> <p>Location: In storage/GMRC</p> <p>Production date: Unknown</p> <p>Place of production: not listed</p> <p>Place of use: unknown</p> <p>Industry: [Structural Engineering/Shipbuilding]</p> <p>Description of operation: [For fastening together metal plates to form a permanent joint, widely used in shipbuilding and boilermaking.]</p> <p>Technical details: Weight 5.36 kg Height 13 cm Length 20 cm Width 250 cm</p> <p>Classification: Metalworking</p> <p>Type: [portable]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: Complete as model.</p> <p>Suitability for student projects: Yes, for study of model. [Please contact Glasgow Museums for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Glasgow Museums/Accession no.: 1.1891	Object name: Working model of Rigby's Patent, 2 ton steam hammer	Updated/by: J. Messner
Manufacturer: Glen & Ross Engineers		
Description: Working model of Rigby's Patent, 2 ton steam hammer. Patented in 1854. No. 866.		
Location: In storage/GMRC		
Production date: Unknown		
Place of production: Glasgow		
Place of use/Acquired from: Unknown		
Industry: Unknown		
Description of operation: [For forging and shaping metal.]		
Technical details: Weight 14.6 kg Height 104 cm Length 71 cm Width 33 cm		
Classification: Forging tool		
Type: [Rigby's patent steam hammer]		
Drive: steam driven		
Attachments: [Not specified]		
Features: [Not specified]		
Condition/Completeness: Complete as model.		
Suitability for student projects: Yes, for study of model. [Please contact Glasgow Museums for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: Glasgow Museums/ Accession no.: T.1933.6.1	Object name: Treadle lathe	Updated/by: J. Messner
Manufacturer: Unknown Description: Small treadle lathe for hand turning. Mounted on a wooden base. Location: In storage/GMRC Production date: Unknown Place of production: unknown Place of use/Acquired from: Donated by The Institution of Engineers. Industry: [Education] Description of operation: [For turning wood.] Technical details: Weight 4174g Height 17 cm Length 40 cm Width 14 cm Classification: Woodworking Type: belt driven Drive: [treadle lathe] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified] Suitability for student projects: Yes. [Please contact Glasgow Museums for further assessment.] Further documentation: [Not specified] Comments: No evidence for method of drive.		

Collection: Highland Folk Museum/Accession no.: (Working Collection)	Object name: Combined drill, lathe and circular saw	Updated/by: J. O'Sullivan
Manufacturer: Alexander McIntyre	Description: Large treadle operated metal lathe mechanism, adapted to accommodate a circular saw and a pillar drill. These were adapted by the maker.	
Location: On display in Clockmaker's Workshop		
Production date: c.1940s		
Place of production: Rose Street, Nairn		
Place of use/Acquired from: Alexander McIntyre, Rose Street, Nairn		
Industry: Clockmakers and Bicycle Repairs.		
Description of operation: [For drilling and cutting metal.]		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: Circular saw, pillar drill		
Features: [Not specified]		
Condition/Completeness: Complete		
Suitability for student projects: Very suitable- the object is unique, and hand-adapted by the maker and user, inside the very workshop that it is now displayed (the whole building and its interior were moved from Nairn to Newtonmore.)		
Further documentation: [Not specified]		
Comments: /		

Collection: Highland Folk Museum/Accession no.: (Working Collection)	Object name: Morticing Machine	Updated/by: J. O'Sullivan
Manufacturer: Unknown		
Description: Hand operated morticing machine		
Location: On display in Joiner's Workshop		
Production date: 1901		
Place of production: Unknown		
Place of use: King Street, Kingussie, Inverness-shire		
Description of operation: [For cutting holes in wood.]		
Industry: Joinery		
Classification: Woodworking		
Type: [Not specified]		
Drive: [hand operated]		
Attachments: Circular saw, pillar drill		
Features: [Not specified]		
Condition/Completeness: Mostly Complete.		
Suitability for student projects: Very little information about this object, although it is in working order and may be suitable.		
Further documentation: None		
Comments: /		

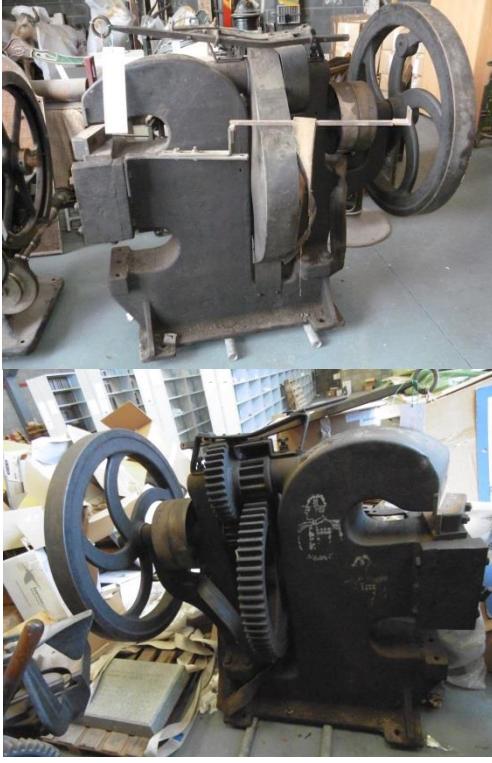
Collection: Highland Folk Museum/Accession no.: (Working collection)	Object name: Band saw	Updated/by: J. O'Sullivan
Manufacturer: Alex Mathieson and Son/ Glasgow/ Saracen Tool Works'		
Description: Large belt driven band saw		
Location: On display in Joiner's Workshop		
Production date: [Unknown]		
Place of production: Saracen Tools Works, Glasgow		
Place of use/Acquired from: D. Fraser & Co., Joiners, King Street, Kingussie		
Industry: Joinery		
Description of operation: [For cutting wood.]		
Classification: Woodworking		
Type: [band saw]		
Drive: : [Not specified]		
Attachments: [Not specified]		
Features: : [Not specified]		
Condition/Completeness: Complete		
Suitability for student projects: Quite suitable, although there is little associated documentation.		
Further documentation: None		
Comments: /		

Collection: Highland Folk Museum/Accession no.: (Working Collection)	Object name: Circular Saw	Updated/by: J. O'Sullivan
Manufacturer: Unknown Description: Belt driven circular saw, run from belt drive attached to Lister petrol engine on floor below. Location: On display in Joiner's Workshop Production date: Unknown Place of production: Unknown Place of use/Acquired from: King Street, Kingussie Industry: Joinery Description of operation: [For cutting wood.] Classification: Woodworking Type: [circular saw] Drive: Belt Drive Attachments: [Not specified] Features: Plaque reads 'Supplied by Alexander Guild, Aberdeen'. Condition/Completeness: Complete Suitability for student projects: Suitable, although little is known. Further documentation: None Comments: /		

Collection: Highland Folk Museum/Accession no.: (Working Collection)	Object name: 'New Jones' saw	Updated/by: J. O'Sullivan
Manufacturer: Alexander McIntyre Description: Reciprocating hand saw adapted from sewing machine by McIntyre, c. 1930s. Location: On display in Clockmaker's Workshop Production date: 1930s Place of production: Rose Street, Nairn Place of use: Rose Street, Nairn Industry: Bicycle repairs/clockmaker Description of operation: Saw reciprocated by hand turning wheel originally used on sewing machine. Classification: Woodworking Type: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: Complete/ Working Suitability for student projects: Very suitable, it is unique. Further documentation: Full archive of hand drawn designs for machine. Comments: /		

Collection: ICE Scotland Museum/Accession no.: 2013/019	Object name: Hydraulic Riveting Machine	Updated/by: D. McGuigan
Manufacturer: Unknown (possibly William Arrol and Co., Dalmarnock, Glasgow)		
Description: A hydraulic riveting machine designed by William Arrol for use during the construction of the Forth Bridge.		
Location: The Institution of Civil Engineers Scotland Museum at Heriot-Watt University.		
Production date: c.1887		
Place of production: Unknown.		
Place of use/Acquired from: Forth Bridge.		
Industry: Erection of Steelworks.		
Description of operation: Using hydraulic pressure to close rivets as part of the construction of the Forth Bridge.		
Technical details: Weight: 220 kg Height: 560 mm Length: 880 mm Width: 320 mm		
Classification: Metalworking		
Type: [hydraulic] Drive: [Not specified] Attachments: [Not specified] Features: /		
Condition/Completeness: The condition is excellent and the item is complete (but excludes valve and hoses).		
Suitability for student projects: Not suitable.		
Further documentation: [Not specified. Please contact the ICE Scotland Museum for further assessment.]		
Comments: [Extract from object description on display: "The riveter displayed represents a 'jointed' machine [...] based on a double lever arrangement with dollies at the end of the two arms. These are opened and closed by applying the hydraulic pressure at the other end of the arms to form a rivet head. [...]The jointed riveting machines were designed to be suspended from a crane for use either vertically or horizontally. [...]"]		

Collection: McLean Museum & Art Gallery/Accession no.: 1977.272	Object name: Horizontal Gear Cutting Machine	Updated/by: 25/03/2013/G.A. Woods
<p>Manufacturer: John Lang & Sons Ltd.</p> <p>Description: Belt driven horizontal gear cutting machine.</p> <p>Location: In storage</p> <p>Production date: 1890</p> <p>Place of production: Johnstone</p> <p>Place of use/Acquired from: Kingston Store of Gourock Ropeworks Co. Ltd./Inverclyde/Port Glasgow</p> <p>Industry: Rope Manufacture</p> <p>Description of operation: [For gear cutting operations to produce a gear.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [horizontal]</p> <p>Drive: Belt driven</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Fair.</p> <p>Suitability for student projects: [Suitable for e.g. restoration project to bring back to working condition. Please contact the McLean Museum for further assessment.]</p> <p>Further documentation: McLean Museum holds large collection of Gourock Ropeworks Co. including additional photographs and product brochures.]</p> <p>Comments: Came from Machine Shop from Gourock Ropeworks, 92 Bay Street, Port Glasgow.</p>		

Collection: McLean Museum & Art Gallery/Accession no.: 1977.274	Object name: Shearing Machine	Updated/by: 25/03/2013/G.A. Woods
<p>Manufacturer: Craig & Donald Ltd.</p> <p>Description: Belt driven shearing machine</p> <p>Location: In storage</p> <p>Production date: 1906</p> <p>Place of production: Johnstone, Renfrewshire</p> <p>Place of use/Acquired from: Kingston Store of Gourock Ropeworks So. Ltd./Inverclyde/Port Glasgow</p> <p>Industry: Rope Manufacture</p> <p>Description of operation: [For shearing sheets from metal.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: Belt driven</p> <p>Attachments: [Not specified]</p> <p>Features: 8 inch blades</p> <p>Condition/Completeness: [Incomplete. Belt and parts missing]</p> <p>Suitability for student projects: [Currently not suitable due to insufficient assessment. Please contact the McLean Museum for further information.]</p> <p>Further documentation: McLean Museum holds large collection of Gourock Ropeworks Co. including additional photographs and product brochures.]</p> <p>Comments: Came from Machine Shop from Gourock Ropeworks, 92 Bay Street, Port Glasgow.</p>		

Collection: NMM/Accession no.: NGSMM2004.0088	Object name: Pillar Drill	Updated/by: I.L.-Bapty
Manufacturer: [Unknown]	Description: Vertical pillar drill, grey, on metal base; main section stems upwards from base, curving 90 degrees at top, with a lower protruding arm, which is parallel to the above; between the 2 'arms' is a vertical drill bit with several levers and handles; at the base of the main trunk is an attachment with a hole, to accommodate the drill when it is lowered; to the side of the main trunk is a thinner, vertical version, which has knobs and levers, whilst there is a horizontal tiered attachment at the base and top.	
Location: In storage	Production date: 1930s	
Place of production: [Unknown]	Place of use/Acquired from: Possibly used in the coal washing plant at Lady Victoria Colliery, Midlothian	
Industry: Coal Mining	Description of operation: Drill used for boring holes in steel.	
Technical details: Height approx. 200cm Length 130cm Width 52cm (at widest part)		
Classification: Metalworking		
Type: [pillar drill]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: [Not specified]		
Condition/Completeness: Condition poor – rusty and dirty.		
Suitability for student projects: Not suitable.		
Further documentation: [Not specified]		
Comments: /		

Collection: NMM/Accession no.: NGSMM1987.0239	Object name: Steam Hammer	Updated/by: I.L.-Bapty
Manufacturer: [Unknown]	<p>Description: Black rectangular metal base with red perpendicular + slightly curved shaft forming the back of the object. Top of shaft hammer head attached. Hammer head grey tube with head inside it, extended piece fits into base. Platform underneath to hammer against.</p> <p>Production date: [Unknown]</p>	
Location: In storage		
Place of production: [Unknown]	<p>Place of use/Acquired from: Whitrigg Colliery, West Lothian</p> <p>Industry: Coal Mining</p> <p>Description of operation: [For forging and shaping metal.]</p>	
Technical details: Diameter 87 cm Height 281 cm Length 160 cm		
Classification: Metalworking	<p>Type: [steam hammer]</p> <p>Drive: [Driven by steam]</p>	
Attachments: [Not specified]		
Features: [Not specified]	<p>Condition/Completeness: Dusty and dirty otherwise good.</p> <p>Suitability for student projects: [Not specified. Please contact NMM for further assessment.]</p>	
Further documentation: [Not specified]		
Comments: /		

Collection: NMM/Accession no.: NGSMM1987.0241	Object name: Manual Punch	Updated/by: I.L.-Bapty
<p>Manufacturer: Alex Mathieson & Sons</p> <p>Description: Black metal base with back perpendicular to it. Punch section lowers down from top, operated with lever with handle at one end weight at other. Number applied to working surface.</p> <p>Location: In storage</p> <p>Production date: [Unknown]</p> <p>Place of production: Saracen Tool Works, Glasgow</p> <p>Place of use/Acquired from: [Not specified]</p> <p>Industry: Coal Mining</p> <p>Description of operation: [For punching holes in metal.]</p> <p>Technical details: Height 1m 60 Length 1m 30 cm Width 68 cm</p> <p>Classification:</p> <p>Type: [Not specified]</p> <p>Drive: [Manually driven]</p> <p>Attachments: [Not specified]</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: Condition- some dirt and dust, otherwise good.</p> <p>Suitability for student projects: [Not specified. Please contact NMM for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: NMS/Accession no.: T.1995.82	Object name: Pillar drill	Updated/by: 2013-10-23/K. Stauberma
Manufacturer: Mitchell, Graham & Son		
Description: Pillar drill, stands on bed plate, belt driven from pulleys, with adjustable cast iron work plate below, by Mitchell, Graham & Son, Engineers, 46 Buccleuch Street, Edinburgh.		
Location: In storage		
Production date: [Unknown]		
Place of production: Mitchell, Graham & Son, 46 Buccleuch Street, Edinburgh		
Place of use/Acquired from: Donation		
Industry: [Not specified]		
Description of operation: [For boring holes in metal with fixed drilling device mounted on stand.]		
Technical details: Weight 462 kg Height 2040 mm Length 800 mm Width 1260 mm Depth 550 mm		
Classification: Metalworking		
Type: [Not specified]		
Drive: Belt driven		
Attachments: [Not specified]		
Features: Adjustable circular cast iron work plate below drill.		
Condition/Completeness: Very good. Corrosion: Even corrosion on top of base work surface. Dirt: Belt drive pulleys, drive shafts, spindle and surrounding surfaces are covered by a thick layer of dried oil/ grease and dust; bird dropping on table; swarf in slots of table. Small drive belt is brittle and cracked; belt drive pulleys are coated with wax-oil; mould on large drive belt.		
Suitability for student projects: [Suitable. Please contact the NMS Engineering Conservation Department for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: NMS/Accession no.: T.1995.83	Object name: Pillar drill	Updated/by: 2013-10-23/K. Staubermann
<p>Manufacturer: Silvaflame Co. Ltd (Maker of guard)/Higgs Motors (Maker of motor)/Auto Memota (Maker of switch box)</p>		
<p>Description: Pillar drill, painted light blue, with a cast iron base and column, includes a guard, motor, and switch box, sold by John Wilkinson Machinery and Tools, Edinburgh.</p>		
<p>Location: In storage</p>		
<p>Production date: [Unknown]</p>		
<p>Place of production: Walsall, Staffordshire, England/ Birmingham, USA, Warwickshire, England</p>		
<p>Place of use/Acquired from: Donation</p>		
<p>Industry: [Not specified]</p>		
<p>Description of operation: [For boring holes in metal with fixed drilling device mounted on a bench or stand.]</p>		
<p>Technical details: Height 1550 mm Length 800 mm Width 560 mm</p>		
<p>Classification: Metalworking</p>		
<p>Type: [Not specified]</p>		
<p>Drive: Electric motor</p>		
<p>Attachments: Cast iron base and column, includes a guard, motor, switch box.</p>		
<p>Features: Drill end protected by 'cleervue' guard made by the Silvaflame Co. Ltd., Forest Lane, Walsall, Staffs. Electric motor behind drill has plate marked 'HIGGS MOTORS / MACHINE NO. 32773 / etc / BIRMINGHAM.' Serial number 22-2952. Drill made in USA. Switch box by 'AUTO / MEMOTA.' Drill retailed by 'John Wilkinson / MACHINERY & TOOLS LTD. / 310, LEITH WALK / EDINBURGH.' Size: 800mm x 560mm x 1550mm high.</p>		
<p>Condition/Completeness: [Not specified]</p>		
<p>Suitability for student projects: [Not specified]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1972.82	Object name: [Vertical]drilling machine	Updated/by: 2008-05-02/K. Grant
<p>Manufacturer: Sigourney Tool Co.</p> <p>Description: Vertical drilling machine, c. 1900-10. Manufactured by "THE SIGOURNEY TOOL CO. HARTFORD. CONN. U.S.A." (name cast in circular base). This pedestal mounted drilling machine was belt driven through an integral 3-speed countershaft. 3/8 inch capacity Jacobs chuck No. 2A and adjustable table. Also other accessories.</p>		
<p>Location: In storage</p>		
<p>Production date: c. 1900-1910</p>		
<p>Place of production: Hartford, Connecticut, USA</p>		
<p>Place of use/Acquired from: Physics Department, University of Edinburgh, Infirmary Street, Edinburgh</p>		
<p>Industry: Education</p>		
<p>Description of operation: [For boring holes in metal.]</p>		
<p>Technical details: Height 73.00" Width 16.00" Depth 32.00"</p>		
<p>Classification: Metalworking</p>		
<p>Type: [Not specified]</p>		
<p>Drive: Belt driven through an integral 3-speed countershaft.</p>		
<p>Attachments: [Not specified]</p>		
<p>Features: /</p>		
<p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p>		
<p>Suitability for student projects: [Not specified]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [Currently no image available.]</p>		

Accession Number: T.1985.94.1	Object name: Steam hammer	Updated/by: 2015-07-23/D. Cox
<p>Manufacturer: Davis and Primrose</p> <p>Description: Steam hammer, cross-head type, by Davis and Primrose of Leith, Edinburgh, Midlothian.</p> <p>Location: West of Scotland Store, Coatbridge</p> <p>Production date: c. 1890</p> <p>Place of production: Leith, Edinburgh, Midlothian, Scotland</p> <p>Place of use/Acquired from: Broomend Mills (Inverurie paper Mills), Inverurie, Aberdeenshire, Scotland/Messrs Thomas Tait and Sons Ltd</p> <p>Industry: Papermaking</p> <p>Description of operation: [For forging and shaping metal.] Twin parallel standards, set so that a bar can pass through.</p> <p>Technical details: Height 84.00" Length 24.00" Width 30.00"</p> <p>Classification: Metalworking</p> <p>Type: Cross-head type</p> <p>Drive: [Not specified]</p> <p>Attachments: Non-original grinding attachment</p> <p>Features: /</p> <p>Condition/Completeness: Unstable. Please contact NMS Engineering Conservation Department for further assessment.</p> <p>Suitability for student projects: Not suitable</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.] Comprising various parts. Record split as follows to accommodate separate locations: T.1985.94.1 - Hammer; T.1985.94.2 - Lubricator; T.1985.94.3 Anvil; T.1985.94.4 - Crate of tools; T.1985.94.5 unidentified part.</p>		

Collection: NMS/Accession no.: T.1983.174 A	Object name: Cylindrical grinding machine	Updated/by: 2010-01-22/Y. Hodgson
<p>Manufacturer: L. Sterne & Co.</p> <p>Location: On loan at Summerlee Museum of Scottish Industrial Life, Coatbridge</p> <p>Description: Cylindrical grinding machine by L. Sterne and Co. of Glasgow, c. 1890</p> <p>Production date: c. 1890</p> <p>Place of production: Glasgow, Scotland</p> <p>Place of use/Acquired from: W. Dickie Tillicoultry, Clackmannanshire</p> <p>Industry: Amateurs workshop</p> <p>Description of operation: [For finishing work surfaces.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: B. Countershaft, with belt pulleys and bearings.</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no: T.1995.110	Object name: Surface grinder	Updated/by: 2013-10-23/K. Stauberma
Manufacturer: Churchill Machine Tools Co. Ltd		
Description: Churchill grinder, with pale blue base and column, leather drive belts, and motor, used by Ferranti Ltd, Edinburgh, by Churchill Machine Tools Co. Ltd, Manchester, England, c. 1941.		
Location: In storage		
Production date: 1941		
Place of production: Manchester, England		
Place of use/Acquired from: Ferranti Ltd, Edinburgh		
Industry: General Engineering		
Description of operation: [For finishing work surfaces.]		
Technical details: Height 1970 mm Length 1205 mm Width 1100 mm		
Classification: Metalworking		
Type: [precision grinder]		
Drive: Driven by electric motor made by the British Thomson-Houston Co. Ltd., Rugby, England.		
Attachments: Pale blue base and column, leather drive belts.		
Features: /		
Condition/Completeness: One leg broken. [Please contact the NMS Engineering Conservation Department.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: [Currently no image available.] Probably a surface grinder.		

Accession Number: T.1981.103	Object name: Grinding machine	Updated/by: 2006-03-30/R. J. Brown
<p>Manufacturer: [Unknown]</p> <p>Description: Grinding machine</p> <p>Location: In storage</p> <p>Production date: [Unknown]</p> <p>Place of production: [Unknown]</p> <p>Place of use/Acquired from: British Steel</p> <p>Industry: Steel</p> <p>Description of operation: [For finishing work surfaces.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1995.69	Object name: Grinding machine	Updated/by: 2009-03-01/D. Stillwell
<p>Manufacturer: Brown & Sharpe MFG. Co</p> <p>Description: Grinding machine. Enclosed rectangular cast iron platform, supporting grinding tower and work bench. With two vertical grinding wheels and standard lamp. Body painted pale blue. Cast into side are the words 'BROWN & SHARPE MFG. CO. / PROVIDENCE, R.I., U.S.A.</p>		
<p>Location: In storage</p>		
<p>Production date: [Unknown]</p>		
<p>Place of production: Providence, Rhode Island, USA</p>		
<p>Place of use/Acquired from: Donation</p>		
<p>Industry: [Not specified]</p>		
<p>Description of operation: [For finishing work surfaces.]</p>		
<p>Technical details: Height 1430 mm Length 1240 mm</p>		
<p>Classification: Metalworking</p>		
<p>Type: [Not specified]</p>		
<p>Drive: [Not specified]</p>		
<p>Attachments: Two vertical grinding wheels and standard lamp</p>		
<p>Features: /</p>		
<p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p>		
<p>Suitability for student projects: [Not specified]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1980.4	Object name: Brass finisher's lathe	Updated/by: 2014-03-03/K. Stauberma
Manufacturer: John Lang & Sons		
<p>Description: Brass-finisher's lathe. Made c.1900 by John Lang & Sons, Johnstone, Renfrewshire. Centre height 7 inches. Equipped with compound slide rest, tailstock and centre, and top tool post (for screw-cutting). Finished in grey paint and bright metal. Bears a cast brass plate bearing the number 75, probably the user's plant inventory number.</p>		
<p>Location: In storage</p> <p>Production date: c. 1900</p> <p>Place of production: Johnstone, Renfrewshire</p> <p>Place of use/Acquired from: Wickman-Lang Ltd, Mary Street Johnstone</p> <p>Industry: Engineering</p> <p>Description of operation: [For working, turning and screwing brass materials.]</p> <p>Technical details: Weight 300 kg Height 1535 mm Width 1830 mm Depth 910 mm</p> <p>Classification: Metalworking</p> <p>Type: [brass-finisher's lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: Slide rest, tailstock and centre, top tool post for screw-cutting.</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: Four additional photographs.</p> <p>Comments: Johnstone became a leading centre of machine-tool manufacture in the 19th century. A wide range of tools was made, but Langs specialised in lathes, in which they developed a very high reputation [info copied over from SCRAN].</p>		



Collection: NMS/Accession no.: T.1984.213	Object name: Brass finisher's lathe	Updated/by: 2006-03-30/R. J. Brown
<p>Manufacturer: Crawhall & Campbell</p> <p>Description: Brass finisher's lathe by Crawhall and Campbell of Glasgow, c. 1868.</p> <p>Location: In storage</p> <p>Production date: c. 1868</p> <p>Place of production: Glasgow</p> <p>Place of use/Acquired from: Scottish Society for the Preservation of Historic Machinery/Glover's (previous owner)</p> <p>Industry: [Brass finishing. Came from Bridgeton Brass Foundry.]</p> <p>Description of operation: [For working, turning and screwing brass materials.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [brass-finisher's lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.].</p>		

Collection: NMS/Accession no.: T.1972.81	Object name: Bench centre lathe	Updated/by: 2014-06-09/K. Grant
Manufacturer: Lorch Schmidt & Co.		
Description: Small 3-inch bench centre lathe, no screw, with hollow spindle, saddle and graduated compound tool rest, tail stock and other accessories.		
Location: In storage		
Production date: c. 1900-1910		
Place of production: Frankfurt am Main, Germany		
Place of use/Acquired from: Physics Department, University of Edinburgh, Infirmary Street, Edinburgh.		
Industry: Education		
Description of operation: [For manufacturing cylindrical shapes from metal.]		
Technical details: Weight 32 kg Height 315 mm Length 975 mm Width 400 mm		
Classification: Metalworking		
Type: Precision machine tool		
Drive: Belt driven through wall-mounted counter shaft.		
Attachments: With accessories.		
Features: /		
Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: Lorch Schmidt & Co. was a German company renowned for its wide range of precision lathes and other high-quality watch-making machines and tools.		



Collection: NMS/Accession no.: T.1972.80	Object name: Centre lathe	Updated/by: 2014-06-09/K. Grant
Manufacturer: Lorch Schmidt & Co.		
Description: 5-inch screw-cutting centre lathe with hollow spindle, back-gear cross-saddle and graduated compound tool rest, tail-stock and other accessories.		
Location: In storage		
Production date: c. 1900-1910		
Place of production: Frankfurt am Main, Germany		
Place of use/Acquired from: Physics Department, University of Edinburgh, Infirmary Street, Edinburgh		
Industry: Education		
Description of operation: [For manufacturing cylindrical shapes from metal.]		
Technical details: Height 48.00" Length 66.00" Width 32.00"		
Classification: Metalworking		
Type: Precision machine tool		
Drive: Belt driven through wall-mounted countershaft.		
Attachments: With accessories.		
Features: /		
Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: Lorch Schmidt & Co. was a German company renowned for its wide range of precision lathes and other high-quality watch-making machines and tools.		

Collection: NMS/Accession no.: T.1984.212	Object name: Gap-bed lathe	Updated/by: 2014-02-05/E. Cox
<p>Manufacturer: Dempster, Moore & Co.</p> <p>Description: Engineer's gap-bed lathe by Dempster Moore of Glasgow, c. 1900.</p> <p>Location: In storage</p> <p>Production date: c. 1900</p> <p>Place of production: Glasgow</p> <p>Place of use/Acquired from: Scottish Society for the Preservation of Historic Machinery</p> <p>Industry: Engineering/Shipbuilding</p> <p>Description of operation: [For turning metal in gap-bed of lathe.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [gap-bed lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Accession Number:	Object name:	Updated/by:
T.2012.92.1-4	[Gap-bed] Lathe	2012-11-02/K. Staubermann
Manufacturer: Drummond Brothers Ltd.		
Description: Finisher's lathe with 36 parts, made by Drummond Brothers Limited, Guildford, 1906. Accompanied with 42 tools, a stand made by Myford Engineering Company, and electric motor made by Higgs Motors. Used by former Engineer Curator, James L. Wood.		
Location: In storage		
Production date: 1906		
Place of production: Guildford, Surrey, England		
Place of use/Acquired from: James L. Wood (NMS); Curator (Engineering and Industry), Department of Science, Technology and Working Life, National Museums of Scotland (Royal Scottish Museum), Chambers Street, Edinburgh		
Industry: Museum workshop/restoration		
Description of operation: [For turning and cutting metal.]		
Technical details: Height 353 mm Width 970 mm Depth 245 mm		
Classification: Metalworking		
Type: [gap-bed lathe] Drive: [Not specified]		
Attachments: Accompanied with 42 tools, a stand made by Myford Engineering Company, and electric motor made by Higgs Motors.		
Features: /		
Condition/Completeness: Good.		
Suitability for student projects: [Suitable. Please contact NMS Engineering Conservation Department for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: NMS/Accession no.: T.1980.79	Object name: Bench lathe	Updated/by: [Not specified]
<p>Manufacturer: Drummond Brothers Ltd.</p>		
<p>Description: Drummond round bar-bed screw-cutting bench lathe, centre height 4 inches.</p>		
<p>Location: In storage</p>		
<p>Production date: [Unknown]</p>		
<p>Place of production: Guildford, Surrey, England</p>		
<p>Place of use/Acquired from: Prof. J. Greig, Kirriemuir</p>		
<p>Industry: Amateurs workshop</p>		
<p>Description of operation: [For screw-cutting and turning metal.]</p>		
<p>Technical details: [Not specified]</p>		
<p>Classification: Metalworking</p>		
<p>Type: [screw-cutting lathe]</p>		
<p>Drive: [Not specified]</p>		
<p>Attachments: With accessories.</p>		
<p>Features: /</p>		
<p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p>		
<p>Suitability for student projects: [Not specified]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1984.211	Object name: Engineer's lathe	Updated/by: 2015-06-24/K. J. Mercer
Manufacturer: Bradford Machine Tool Co.		
Description: Engineer's lathe by the Bradford Machine Tool Co. of Cincinnati, U.S.A., c. 1906, and possibly used at the Argyll Works, Alexandria		
Location: In storage		
Production date: c. 1906		
Place of production: Cincinnati, USA		
Place of use/Acquired from: Supposed to have been used at the Argyll Works, Alexandria/ Scottish Society for the Preservation of Historic Machinery		
Industry: [Motor car manufacture]		
Description of operation: Lathe for screw-cutting metal.		
Technical details: [Not specified]		
Classification: Precision metalworking		
Type: [screw-cutting lathe]		
Drive: Belt driven		
Attachments: [Not specified]		
Features: Not specified		
Condition: Bad. Generally corroded, from surface corrosion to deep pitting. Deeper pitting on upper surfaces and inside subframe. Paint about 20% missing; flaking in many areas; accession number painted in big white letters on front. Dust and debris on upper horizontal surfaces and in crevices; grey substance on upper painted surfaces. Object in 19 components including transmission parts. Most moving parts are seized. Two cast iron components broken, with one broken part missing. Flexible cable duct on motor distorted at one end.		
Suitability for student projects: Restoration in progress. [Please contact the NMS Engineering Conservation Department for further assessment.]		
Further documentation: Additional images		
Comments: /		



S/Accession no.:	Object name:	Updated/by:
T.1993.63	Engineer's lathe	[Not specified]
Manufacturer: John Lang & Sons		
Description: Engineer's lathe by John Lang & Sons, Johnstone, c. 1916. Fitted with Lang's patent variable speed headstock.		
Location: On display		
Production date: c. 1916		
Place of production: Johnstone, Renfrewshire		
Place of use/Acquired from: Simon Doncaster, Barlow, Sheffield		
Industry: Amateurs workshop		
Description of operation: [For cutting and turning metal.]		
Technical details:		
[Not specified]		
Classification: Metalworking		
Type: [screw-cutting lathe]		
Drive: [Not specified]		
Attachments: Variable speed headstock		
Features: /		
Condition: Good.		
Suitability for student projects: [Suitable. Please contact NMS Engineering Conservation Department for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: NMS/Accession no.: T.1968.64	Object name: Lathe / tool	Updated/by: 2009-03-01/D. Stillwell
<p>Manufacturer: [Unknown]</p> <p>Description: Engineer's lathe for metal turning made in 1823, with a collection of tools.</p> <p>Location: In storage</p> <p>Production date: 1823</p> <p>Place of production: [Unknown]</p> <p>Place of use/Acquired from: Thos. J. Wright, Annan, Dumfriesshire</p> <p>Industry: Engineering</p> <p>Description of operation: Used for metal turning consisting of three main components which were bolted to a wooden bench (not included).</p> <p>Technical details: Height 8.75"</p> <p>Classification: Metalworking</p> <p>Type: [screw-cutting lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: With collection of tools.</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1990.46	Object name: Sang Lathe	Updated/by: 2013-11-04/T. Burge
Manufacturer: [Unknown]		
Description: Sang Lathe. Lathe fitted with back geared, screw cutting, overhead gear for driving milling cutter. Originally it is likely that this was operated by treadle, which is now missing. Signed 'E.E. Sang' along with an inscription in Arabic. Believed to have been used by Edward Sang of Edinburgh (1805-1891), mathematician, teacher, surveyor, civil engineer and actuary.		
Location: In storage		
Production date: 1860		
Place of production: [Unknown]		
Place of use/Acquired from: Possibly used by Edward Sang of Edinburgh (1805-1891). Acquired from Keith Wilkinson, Edinburgh.		
Industry: [Possibly private workshop]		
Description of operation: [For screw-cutting and turning metal.]		
Technical details: Weight 327 kg Height 2235 mm Width 1397 mm Depth 813 mm		
Classification: Metalworking		
Type: [screw-cutting lathe] Drive: Likely operated by treadle. Attachments: [Not specified] Features: /		
Condition: Good. Surface corrosion on all uncoated surface. Very dusty, partly dried lubricant. Outer rim of large pulley wheel on vertical attachment broken. One separate gear wheel has a cracked sleeve.		
Suitability for student projects: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]		
Further documentation: [Not specified]		
Comments: Sang made important contributions to the development of toothed gearing.		

Collection: NMS/Accession no.: T.1980.298	Object name: Screw-cutting lathe	Updated/by: 2007-01-16/S. Bell
<p>Manufacturer: Holbrook Machine Tool Co.</p> <p>Description: Holbrook screw-cutting lathe</p> <p>Location: In storage</p> <p>Production date: [Unknown]</p> <p>Place of production: London, England</p> <p>Place of use/Acquired from: Ealing Beck Ltd, Watford</p> <p>Industry: Optical manufacture</p> <p>Description of operation: [For cutting and turning metal.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [screw-cutting lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1972.210	Object name: Treadle screw-cutting lathe	Updated/by: 2006-03-30/R. J. Brown
<p>Manufacturer: Unknown</p> <p>Description: Treadle screw-cutting, metal-working lathe with a box of accessories. Back-geared, screw-cutting, metal working lathe. Tumbler reverse gear for lead-screw. Gap bed with removeable plug. Painted green. No maker name visible. With box of accessories, chucks, change wheels etc.</p>		
<p>Location: In storage</p>		
<p>Production date: Unknown</p>		
<p>Place of production: Unknown</p>		
<p>Place of use/Acquired from: A. Nimmo, Madiston</p>		
<p>Industry: Amateurs workshop</p>		
<p>Description of operation: [For cutting and turning metal.]</p>		
<p>Technical details: Height 44.00" Length 56.00" Width 26.00"</p>		
<p>Classification: Metalworking</p>		
<p>Type: [screw-cutting lathe]</p>		
<p>Drive: [treadle operated]</p>		
<p>Attachments: Box of accessories</p>		
<p>Features: /</p>		
<p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p>		
<p>Suitability for student projects: [Not specified]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1974.285	Object name: Turning lathe, geometric	Updated/by: 2014-06-09/K. Grant
<p>Manufacturer: Holtzapffel & Co.</p> <p>Description: Geometric turning lathe manufactured by Chas. Holtzapffel.</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: London, England</p> <p>Place of use/Acquired from: Farr, James H., 1979 (d.); Veteran and Vintage Cars, Fox Covert Grove, Clermiston Mains, Edinburgh</p> <p>Industry: [Ornamental turning]</p> <p>Description of operation: [Used for making ornamental patterns on metal plates.]</p> <p>Technical details: Weight 247 kg</p> <p>Classification: Metalworking</p> <p>Type: Precision machine tool</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: Holtzapffel & Co. was a tool and lathe making company in London, founded by German immigrant, John Jacob Holtzapffel in 1793. The firm specialized in lathes for ornamental turning, something that was a popular leisure occupation for gentlemen at that time. Many ornamental lathes were bought by the aristocracy, and those made by Holtzapffel & Co. were considered the best.</p>		



Collection: NMS/Accession no.: W.1994.65	Object name: Blacksmith's Lathe	Updated/by: E. Edwards
<p>Manufacturer: Not known</p> <p>Description: Blacksmith's lathe</p> <p>Location: Store 4/5 National Museum of Rural Life, East Kilbride.</p> <p>Production date: currently not known</p> <p>Place of production: Not known</p> <p>Place of use/Acquired from: Gift from Balinluig near Dunkeld in 1994.</p> <p>Industry: [Forging]/Blacksmithing</p> <p>Description of operation:</p> <p>Technical details: Diameter (of driving wheel) 170 cm Height 110 cm Length 360 cm Width 80 cm</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact the NMS Scottish History & Archaeology Department for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: No image available</p>		

Collection: NMS/Accession no.: T.1892.563	Object name: Lathe, engraving / tool, engraver's / mould / impression, wax	Updated/by: 2015-06-02/K. Grant
Manufacturer: [Unknown]		
Description: Lathe for seal engraving, set of engraver's tools, mould for casting lead chucks and 53 wax impressions of seals in a frame		
Location: In storage		
Production date: [Unknown]		
Place of production: [Unknown]		
Place of use/Acquired from: Laurence Butters, Edinburgh		
Industry: Amateurs workshop		
Description of operation: [For engraving various materials.]		
Technical details: Height 52.00" Length 32.00" Width 22.50"		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: Set of engraver's tools, mould for casting lead chucks and 53 wax impressions of seals in a frame.		
Features: /		
Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: Eleven items found, including thirty wax seals in a box and four blocks containing 78, 105, 46 and 36 engraver's tools.		

Collection: NMS/Accession no.: W.1999.210.1	Object name: Lathe, herring barrel	Updated/by: E. Edwards
Manufacturer: A.Wilson		
Description: Original description states Barrel-cutting machine made by A. Wilson of Aberdeen. WF note, 18.7.99: Herring barrel lathe from Peterhead.		
Location: Currently in off-site, inaccessible storage in Bo'ness, West Lothian		
Production date: Currently not known		
Place of production: Aberdeen		
Place of use/Acquired from: Not known		
Industry: Barrel Making/Fishing industry		
Description of operation: [Used for turning and cutting metal for making barrel-rings.]		
Technical details: Diameter (of driving wheel) 170 cm Height 131 cm Length 230 cm Width 90 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: [Not specified. Please contact the NMS Scottish History & Archaeology Department for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: No image available.		

Collection: NMS/Accession no.:	Object name:	Updated/by:
T.1967.148	Treadle lathe	2008-05-02/K. Grant
Manufacturer: Possibly Scottish maker		
Description: Instrument maker's thirty-inch treadle lathe made in the nineteenth century and possibly Scottish. Equipped with accessories of various dates.		
Location: In storage		
Production date: 19 th century		
Place of production: [Unknown]		
Place of use/Acquired from: G.F. Hutchison of G. Hutchison & Sons, 18 Forrest Road, Edinburgh		
Industry: Instrument making		
Description of operation: [For turning and cutting metal.]		
Technical details: Height 46.00" Length 51.00" Width 32.00"		
Classification: Metalworking		
Type: [treadle lathe]		
Drive: Foot operated treadle drive through leather belt.		
Attachments: 4 jaw independent chuck		
Features: /		
Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: Tray of eleven parts at NMCC. At least 3 in a box.		

Collection: NMS/Accession no.: T.1984.214	Object name: Lathe, shafting	Updated/by: 2009-05-12/R. J. Brown
<p>Manufacturer: Crow, Harvey & Co.</p> <p>Description: Shafting lathe fitted with a non-original grinding attachment, by Harvey of Glasgow, c. 1890.</p> <p>Location: On loan at Scottish Maritime Museum, Irvine</p> <p>Production date: c. 1890</p> <p>Place of production: Glasgow</p> <p>Place of use/Acquired from: Scottish Society for the Preservation of Historic Machinery</p> <p>Industry: [Not specified]</p> <p>Description of operation: [For turning shafts.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [shafting lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: Non-original grinding attachment</p> <p>Features: /</p> <p>Condition: Unstable. [Please contact the NMS Engineering Conservation Department.]</p> <p>Suitability for student projects: Not suitable. Restoration required.</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: H.QJ 57	Object name: Lathe, treadle	Updated/by: E. Edwards
Manufacturer: [Unknown]		
Description: Treadle lathe		
Location: Currently in off-site, inaccessible storage in Bo'ness, West Lothian		
Production date: Currently unknown		
Place of production: [Not specified]		
Place of use/Acquired from: Purchase from G & J Lewis, Jewellers (pos. Edinburgh).		
Industry: Probably jewellery making		
Description of operation: [For turning and cutting metal.]		
Technical details: [Not specified]		
Classification: Metalworking		
Type: [treadle lathe]		
Drive: [treadle operated]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: [Not specified. Please contact the NMS Scottish History & Archaeology Department for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: No image available.		

Collection: NMS/Accession no.: T.1978.66	Object name: Lathe, treadle	Updated/by: 2009-03-01/D. Stillwell
<p>Manufacturer: London Lathe & Tool Co.</p> <p>Description: Treadle lathe by the London Lathe & Tool Co., 37 Pomeroy Street, London. Screw-cutting, back-geared and has overhead gear for driving milling cutter.</p>		
<p>Location: In storage</p>		
<p>Production date: 19th century</p>		
<p>Place of production: London, England</p>		
<p>Place of use/Acquired from: R.L. Scarlett, Edinburgh</p>		
<p>Industry: Amateurs workshop</p>		
<p>Description of operation: Screw-cutting, back-geared.</p>		
<p>Technical details: Height 1930 mm Width 710 mm</p>		
<p>Classification: Metalworking</p>		
<p>Type: [treadle lathe]</p>		
<p>Drive: [treadle operated]</p>		
<p>Attachments: Overhead gear for driving milling cutter.</p>		
<p>Features: /</p>		
<p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department.]</p>		
<p>Suitability for student projects: [Not specified]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: W.QIB 279	Object name: Lathe, treadle, Blacksmith's	Updated/by: E. Edwards
<p>Manufacturer: Not known</p> <p>Description: Blacksmith's treadle lathe</p> <p>Location: Currently in off-site, inaccessible storage in Bo'ness, West Lothian</p> <p>Production date: Currently not known</p> <p>Place of production: Not known</p> <p>Place of use/Acquired from: Gift. Used at Kingston Smiddy, East Lothian</p> <p>Industry: [Forging]/Blacksmithing</p> <p>Description of operation: For turning and cutting metal.</p>		
<p>Technical details: [Not specified]</p>		
<p>Classification: Metalworking</p>		
<p>Type: [treadle lathe]</p>		
<p>Drive: [treadle operated]</p>		
<p>Attachments: [Not specified]</p>		
<p>Features: /</p>		
<p>Condition/Completeness: [Not specified. Please contact the NMS Scottish History & Archaeology Department for further assessment.]</p>		
<p>Suitability for student projects: [Not specified]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: No image available.</p>		

Collection: NMS/Accession no.: T.1972.83	Object name: [Horizontal] milling machine	Updated/by: 2009-03-01/D. Stillwell
<p>Manufacturer: Unknown</p> <p>Description: Horizontal milling machine with spare arbors and collars made about 1900 – 1910. No maker's name. Belt driven through a 3-speed countershaft mounted on wall. Arbor working length 6 in. and maximum cutter radius of 4 in. (with arbor steady in position). Work table with self-feed 4-speed round-belt drive. Also spare arbors and collars.</p>		
<p>Location: In storage</p>		
<p>Production date: c. 1900-1910</p>		
<p>Place of production: Unknown</p>		
<p>Place of use/Acquired from: Physics Department, University of Edinburgh, Infirmary Street, Edinburgh</p>		
<p>Industry: Education</p>		
<p>Description of operation: [For cutting and removing material from a workpiece.]</p>		
<p>Technical details: Height : 55.00" Width 27.00" Depth 26.00"</p>		
<p>Classification: Metalworking</p>		
<p>Type: [Not specified]</p>		
<p>Drive: Belt driven through a 3-speed countershaft mounted on wall.</p>		
<p>Attachments: Spare arbors and collars.</p>		
<p>Features: /</p>		
<p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p>		
<p>Suitability for student projects: [Not specified]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1969.34	Object name: [Vertical] milling machine	Updated/by: 2014-08-12/R. McDaid
Manufacturer: Ferranti & Co.		
Description: Ferranti numerically controlled horizontal milling machine, the first machine of this type to be built. The normal manual controls on a model CE machine of Kearney & Trecker, Milwaukee have been replaced by Servomotors controlled by the output from the Control Unit. (1969.34A). This output is derived from a magnetic tape on which has been recorded the program for the milling machine.		
Location: In storage		
Production date: c. 1960		
Place of production: Edinburgh		
Acquired from: Messrs Ferranti Ltd, Crewe Toll, Ferry Road, Edinburgh		
Association: Kearney & Trecker; Milwaukee, Wisconsin, USA		
Industry: Precision Engineering		
Description of operation: [For cutting and removing material from a workpiece.]		
Technical details: Weight 2.0 tons Height 1540 mm Length 1040 mm Width 1000 mm		
Classification: Metalworking Type: [Not specified] Drive: Electrically driven Attachments: With control unit. Features: /		
Condition/Completeness: Object is in a poor unstable condition. The machine's working surfaces are of particular concern as these areas are heavily corroded. The machine's painted surfaces are covered in old oil residue and stains. Various plastics to internals of the electrical box are presumed asbestos. Re-survey recommended with previous survey. Consolidation of exposed areas and management to minimise disturbance recommended. Contact NMS Engineering Conservation Department for further assessment.		
Suitability for student projects: [Currently not suitable due to unstable condition.] Further documentation: Additional images on AdLib database.		
Comments: /		

Collection: NMS/Accession no.:T.1984.43	Object name: Hull model cutting machine	Updated/by: [Not specified]
Manufacturer: John McDowall & Sons, Johnstone		
Description: Hull model cutting machine invented by William Froude.		
Location: On loan at Scottish Maritime Museum, Denny Ship Model Experiment, Dumbarton		
Production date: 1884		
Place of production: Johnstone		
Place of use/Acquired from: Denny Ship Model Testing Tank at shipyard of William Denny & Bros., Dumbarton		
Date of use: 1884-present		
Industry: Shipbuilding		
Description of operation: Used to shape the wax model hulls which were to be tested at the Denny Ship Model Experiment Tank.		
Technical details: [Not specified]		
Classification: Wax-shaping		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Complete. Excellent condition.		
Suitability for student projects: Not suitable.		
Further documentation: [Not specified]		
Comments: /		

Collection: NMS/Accession Number: T.1984.216	Object name: Double column planing machine	Updated/by: 2013-10-23/E. Cox
<p>Manufacturer: Smith & Coventry</p> <p>Description: Double Column Planing Machine. By Smith & Coventry. 6 ft capacity.</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: Salford, England</p> <p>Place of use/Acquired from: Scottish Society for the Preservation of Historic Machinery</p> <p>Industry: Shipbuilding/Engineering</p> <p>Description of operation: [For producing plane surfaces by removing material in a linear motion.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: Smith and Coventry of Gresley Ironworks, Ordsal Lane, Salford (Manchester) were makers of machine tools.</p>		

Collection: NMS/Accession no.: T.1983.24	Object name: Plate edge planing machine	Updated/by: 2009-05-12/R. J. Brown
Manufacturer: Thomas Shanks & Co., Johnstone		
Description: Plate edge planing machine by Thomas Shanks and Co. of Johnstone, c. 1900, and used at the works of A. F. Craig and Co. of Paisley.		
Location: On loan to the Scottish Maritime Museum, Irvine		
Production date: c.1900		
Place of production: Johnstone		
Place of use/Acquired from: Used at the works of A. F. Craig, Paisley. Purchased from Noble Promoters International Ltd, Springfield House, 1st Floor, Block C, Tyssen Street, Dalston, London E8 2LY.		
Industry: A. F. Craig were producers of steam engines, sugar refining machinery, centrifugal machinery, oil plant, gas plant, hoists, chemical machinery, bleaching and dyeing machinery at their works in Paisley. (This info has been copied from SCRAN.)		
Description of operation: [For producing plane surfaces by removing material in a linear motion and cutting the edges of large plates.]		
Technical details:		
Weight 7 tons		
Height 244 cm		
Length 762 cm		
Width 244 cm		
Classification: Metalworking		
Type: [plate edge planing machine]		
Drive: Belt driven		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: [Fair, but incomplete. Overhead belt system not in operating state.]		
Suitability for student projects: [Suitable for e.g. restoration of overhead belt system.]		
Further documentation: Condition report 2009.		
Comments: /		

Collection: NMS/Accession no.: T.2000.95	Object name: Joggling press	Updated/by: K. Grant
Manufacturer: Hugh Smith & Co.		
Description: Joggling hydraulic powered press, used to press a joggling edge to steel ships' plates for flush-sided hulls, by Hugh Smith and Co., Glasgow, c. 1904 – Heavy duty press designed probably for operation by water hydraulics but later converted to oil hydraulics. Lambie's Patent probably refers to one of several patents describing tools to be used in pressing a joggled edge to steel ship's plates, resulting in flush-sided ships' hulls with fewer rivets. – from AdLib's Original Description field.		
Location: Outdoor exhibit		
Production date: 1916		
Place of production: Glasgow		
Place of use/Acquired from: Brys & Gylsen Ltd., River Clyde Shipbuilding Works, Whiteinch (1916-1983). Acquired from Chris Taylor, Taylor Steels, Solihull, West Midlands.		
Industry: Shipbuilding / Boilermaking		
Description of operation: To joggle or bend the edges of plates and frames to form the finished hull. Commonly also used as a punch for manholes and portholes. When used with the large 'flanging blocks' or dies, it would be used to form parts of boilers.		
Technical details: Height 289.5 cm Length 289.5 cm Width 152.4 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Incomplete. Fair condition.		
Suitability for student projects: Not suitable.		
Further documentation: [Not specified]		

Comments: The joggling press is a very rare survivor of the type of heavy machine tool once used in the shipbuilding yards of the Clyde. It was made by Hugh Smith & Co. of Possil Park, Glasgow, to Lambie's Patent, Machine No 10054, made c. 1904. I haven't tracked down the patent yet (and will have to travel at least to Glasgow for this) but Hugh Smith & Co. specialised in hydraulic presses and rolls for the shipbuilding industry and were regular advertisers in *The Engineer* at the end of the 19th century. The press would be designed to work from water pressure in one of the five cities which had hydraulic pressure mains systems, or a yard which had its own hydraulic station. This press has been converted to oil hydraulics, but could easily be returned to original condition. Such presses were used in the days of riveted construction. Before its introduction, adjacent plates were riveted together with a separate strip of steel and two lines of rivets; these presses bend two inches or so of the plate edge to produce an overlapping seam with one row of rivets. Nothing like this is preserved in Scotland, and I know of only one preserved large item of shipyard machinery, a set of plate rolls, by Hugh Smith & Co., at Chatham Historic Dockyard. [Info from justification for acquisition by a former curator - you may find some useful info [here](#)]

Collection: NMS/Accession no.: T.1984.219	Object name: Punching and shearing machine	Updated/by: K. Grant
<p>Manufacturer: JBA McKinnel, Dumfries</p> <p>Description: Hand-operated punching and shearing machine. Large gearwheel driven by large flywheel in cast iron frame. Shearing / punch mechanism.</p> <p>Location: On loan at Scottish Maritime Museum, Irvine</p> <p>Production date: c. 1870</p> <p>Place of production: Dumfries</p> <p>Place of use/Acquired from: Blacksmith's workshop, Newbridge, Moffat. Netwee 1870-1973. Acquired from the Scottish Society for the Preservation of Historic Machinery in 1984.</p> <p>Industry: Shipbuilding</p> <p>Description of operation: Early iron shipbuilders and metalworkers used man-power to manipulate metal, as this hand-powered punch and shear shows. With the change from wooden to iron ship construction, plates had to be punched or drilled, cut to size and shape, curved appropriately, and riveted together. Tools capable of these functions were developed, and the first of these were powered by hand.</p> <p>This punch and shear was originally used to cut through iron. As plates got thicker and ships larger, machine tools which could manipulate metal quickly, powerfully, and economically were developed.</p> <p>Technical details: Height 210 cm Length 160 cm Width 123 cm</p> <p>Classification: Metalworking</p> <p>Type: [Not specified] Drive: Manually driven Attachments: / Features: /</p> <p>Condition/Completeness: Complete. Good condition.</p> <p>Suitability for student projects: Not suitable.</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: NMS/Accession no.: T.1981.101	Object name: Riveting machine	Updated/by: 2015-06-02/K. Grant
<p>Manufacturer: Sir William Arrol & Co Ltd.</p> <p>Description: Riveting machine made by Sir William Arrol & Co Ltd of Glasgow</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: Dalmarnock Iron Works, Glasgow</p> <p>Place of use/Acquired from: British Steel/[Dalzell Steel Works]</p> <p>Industry: Steel</p> <p>Description of operation: [For fastening together metal plates to form a permanent joint, widely used in shipbuilding and boilermaking.]</p> <p>Technical details: Weight 1105 kg Height 1150 mm Width 800 mm Depth 1570 mm</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Fair. Please contact NMS Engineering Conservation Department for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1981.102	Object name: Riveting machine	Updated/by: [Not specified]
Manufacturer: possibly Henry Berry & Co. Ltd., Leeds		
Description: Riveting machine. Berry ("written in pencil" on AdLib database). [Berry may mean Henry Berry & Co. Ltd., Leeds", as they were machine tools (including riveting machines) manufacturers]		
Location: No location		
Production date: Unknown		
Place of production: Unknown		
Place of use/Acquired from: No info (place of use). Purchased from British Steel in 1981.		
Industry: Steel		
Description of operation: [For fastening together metal plates to form a permanent joint, widely used in shipbuilding and boilermaking.]		
Technical details: [Not specified]		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: [Not specified]		
Condition/Completeness: [Not specified]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: [No image available.]		

Collection: NMS/Accession no.: T.1981.44	Object name: Shaping machine, hand-operated	Updated/by: 2009-03-01/D. Stillwell
Manufacturer: Possibly George Adams, The Pittler Company		
Description: Hand-operated shaping machine for bench mounting made about 1910		
Location: In storage		
Production date: 1910		
Place of production: London, England		
Place of use/Acquired from: MacDonald, Ian, 1981 - 1997 (fl.), 3 Featherhall Crescent North, Edinburgh		
Industry: [Not specified]		
Description of operation: Used for bench mounting.		
Technical details: Weight 139 kg Height 1365 mm Width 830 mm Depth 610 mm		
Classification: Metalworking		
Type: [Not specified]		
Drive: Hand-operated		
Attachments: [Not specified]		
Features: Bears a cast brass plate - "144 High Holborn / George Adams / The Pittler Co. London" 1905-1915.		
Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: /		

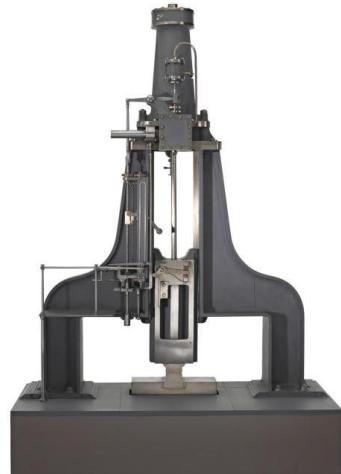
Collection: NMS/Accession no.: T.2006.25	Object name: Shaping machine	Updated/by: 2009-03-01/D. Stillwell
Manufacturer: Rhodes Manufacturing Co.		
Description: Pale blue painted shaping machine with slotting head and electric motor by Normand Electrical CO. Ltd, London, started by STARTET, by the Rhodes Manufacturing Co., Hartford Connecticut, USA, c. 1960s.		
Location: In storage		
Production date: c. 1960s		
Place of production: Hartford, Connecticut, USA		
Place of use/Acquired from: Formerly used at NMS Workshop, perhaps Joiners' Workshop, presumably until c. 1987 transferred to Department of Science and Technology.		
Industry: Museum restoration/conservation		
Description of operation: [For accurately producing flat surfaces.]		
Technical details: Weight 308 kg Height 1350 mm Length 940 mm Width 380 mm		
Classification: possibly woodworking		
Type: [Not specified]		
Drive: Electric motor		
Attachments: Slotted head		
Features: Conical weight marked (stamped) 'W.C. & 9'.		
Condition/Completeness: Corroded and dirty and partly dismantled.		
Suitability for student projects: Unlikely		
Further documentation: Not specified		
Comments: [Currently no image available.]		

Collection: NMS/Accession no.: T.2006.158	Object name: Shaping machine	Updated/by: 2014-08-11/K. Stauberma
<p>Manufacturer: Denbigh Machine Tools</p> <p>Description: Grey-blue painted steel shaping machine, with cuboid plinth. Driven by electric motor. Adjustable jaws and cutting head on top. Extendable electric lamp at side.</p>		
<p>Location: In storage</p>		
<p>Production date: 20th century</p>		
<p>Place of production: Halifax, Yorkshire, England</p>		
<p>Place of us/Acquired from: National Museums of Scotland, Joiners Shop</p>		
<p>Industry: Museum restoration/conservation</p>		
<p>Description of operation: [For accurately producing flat surfaces.]</p>		
<p>Technical details: Weight 253 kg Height 1370 mm Length 940 mm Width 600 mm</p>		
<p>Classification: Metalworking</p>		
<p>Type: [Not specified]</p>		
<p>Drive: Electric motor</p>		
<p>Attachments: With adjustable jaws, cutting head on top and extendable electric lamp by Memlite at side.</p>		
<p>Features: /</p>		
<p>Condition/Completeness: Some dust and dirt on painted surfaces.</p>		
<p>Suitability for student projects: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1880.58.1	Object name: Double acting steam hammer (Rigby)	Updated/by: 1998-11-21/K. Staubermann
<p>Manufacturer: Made by model maker in museum workshop.</p> <p>Description: Model of a 40 cwt. Rigby's patent double acting steam hammer, scale 2 inches to 1 foot, made from drawings lent by Messrs Glen and Ross, c. 1875.</p> <p>Location: On display</p> <p>Production date: 1880</p> <p>Place of production: Edinburgh Museum of Science and Art, Workshop</p> <p>Place of use/Acquired from: Made in the museum.</p> <p>Industry: Museum restoration/conservation</p> <p>Description of operation: [For forging and shaping metal.]</p> <p>Technical details: Height 1240 mm Length 935 mm Width 440 mm</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: Developed by William Rigby at Parkhead Forge, Glasgow. [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1870.53.11	Object name: Steam-hammer (improved / model)	Updated/by: 2013-11-07/M. Loftus
Manufacturer: Industrial Museum of Scotland		
Description: One of a collection of models made in the Museum workshop, 1868 - 70 - a model of a 2 1/2 ton steam-hammer showing the improvements introduced by Robert Wilson of Nasmyth, Wilson and Co., Manchester. This model represents the Steam Hammer with the balanced slide valve and all the later improvements introduced by Mr Robert Wilson of Messrs Nasmyth, Wilson and Co., Manchester. Scale = 1/6 of real size.		
Location: In storage		
Production date: 1869		
Place of production: Edinburgh, Museum workshop		
Place of use/Acquired from: Industrial Museum of Scotland		
Industry: Museum restoration/conservation		
Description of operation: [For forging and shaping metal.]		
Technical details: Height 1445 mm Width 905 mm Depth 395 mm		
Classification: Metalworking		
Type: [double column, cross-head type]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Layer of dust. Light surface corrosion to bare metal parts. Three chalked on accession numbers, one very large at front of object. Base has many areas of plaster render loss and many unstable areas. The black foundation surface finish also has areas of loss and instability. There has been substantial movement / shrinkage to wooden sub frame on proper right front, resulting in large crack opening up between blocks approximately 300mm in length, 4mm at its widest.		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: The balanced slide valve introduced in 1856, enabled the steam hammer to be worked by hand. Other improvements to the hammer by Wilson include the self-action motion, which was patented in 1843, and the double-acting hand-gear motion in 1861, which increased the intensity of the hammer blow.		

Collection: NMS/Accession no.: T.1870.53.13	Object name: Steam-hammer / model	Updated/by: 2013-12-17/K. Staubermann
Manufacturer: Made in museum by model maker.		
Description: Model of James Nasmyth's steam-hammer with Robert Wilson's self-acting motion introduced in 1843. One of models made in Museum Workshop, 1868 - 1870. - Made during Year 1870. - 13. Model of Nasmyth's Steam Hammer with R. Wilson's Self-acting motion introduced in 1843. The scale is one sixth of a hammer whose falling weight is 5 tons.		
Location: In storage		
Production date: 1870		
Place of production: Industrial Museum of Scotland, Museum workshop		
Place of use/Acquired from: Made in museum.		
Industry: Museum restoration/conservation		
Description of operation: [For forging and shaping metal.]		
Technical details: Weight 2 kg Height 1710 mm Length 1210 mm Width 1000 mm		
Classification: Metalworking		
Type: [cross-head type] Drive: [Not specified] Attachments: [Not specified]		
Features: Additional component (Accession number: T.1870.53.12): A model of a collection of models made in the Museum workshop between 1868 - 70 showing a section of the cylinder of the steam hammer model.		
Condition/Completeness: Dirty and dusty with some staining and a number of large cracks in the wood which pose a structural risk as well as an aesthetic weakness.		
Suitability for student projects: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]		
Further documentation: [Not specified]		
Comments: Wilson's 1843 improvement enabled the height of the hammer-block to be varied, and allowed the operator to control the power of the hammer blow. The user could use the hammer to employ a force that ranged from a tap to the heaviest blow the hammer could produce.		



Collection: NMS/Accession no.: T.2009.191	Object name: Pillar drill	Updated/by: 2009-10-22/K. Grant
Manufacturer: Multico Description: Multico [floor] pillar drill used in the workshop of Charles Millar, Edinburgh. Location: In storage Production date: c. 1970s Place of production: Unknown Place of use/Acquired from: Workshop of Charlie Millar, Edinburgh Industry: Joiner's/Carpentry workshop Description of operation: [For drilling holes in wood.]		Technical details: Weight 183 kg Classification: Woodworking Type: [pillar drill] Drive: Not specified Attachments: Not specified Features: / Condition/Completeness: Fair. [Please contact the NMS Engineering Conservation Department for further assessment.] Suitability for student projects: Suitable Further documentation: Not specified Comments: /

Collection: NMS/Accession no.: T.2008.115.1	Object name: Guillotine	Updated/by: 2008-06-25/K. Grant
Manufacturer: American-made		
Description: Guillotine machine, iron, used in Ian Duncan's Edinburgh joiner's workshop, American, late 19th - early 20th century		
Location: In storage		
Production date: late 19th - early 20th century		
Place of production: Unknown		
Place of use/Acquired from: Used in Ian Duncan's Edinburgh joiner's workshop, Edinburgh		
Industry: Museum restoration/conservation		
Description of operation: [For cutting and shearing sheets from wood.]		
Technical details: Height 1000 mm Width 800 mm Depth 450 mm		
Classification: Woodworking		
Type: [Not specified] Drive: [Not specified]		
Attachments: With stand [separate accession number: T.2008.115.2].		
Features: /		
Condition/Completeness: Fair. [Please contact the NMS Engineering Conservation Department for further assessment.]		
Suitability for student projects: Suitable.		
Further documentation: Brief history of Ian Duncan's joiner's workshop is included in the object file for reference.		
Comments: [The machine] was purchased from an Edinburgh company which went into liquidation. The machine was given to the NMS on the retirement of Ian Duncan (joiner's workshop dissolved at the same time - 2008). Ian Duncan is a joiner from Edinburgh in whose workshop this machine was used.		

Collection: NMS/Accession no.: T.2006.152	Object name: Lathe	Updated/by: 2009-03-01/D. Stillwell
<p>Manufacturer: A. Whitelaw</p> <p>Description: Treadle operated lathe, probably for woodworking, by A. Whitelaw, Edinburgh</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: Edinburgh</p> <p>Place of use/Acquired from: Donation</p> <p>Industry: [Not specified]</p> <p>Description of operation: [For turning and cutting wood.]</p> <p>Technical details: Weight 250 kg Height 1220 mm Width 1220 mm Depth 770 mm</p> <p>Classification: Woodworking</p> <p>Type: [Not specified]</p> <p>Drive: [treadle operated]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Fair. [Please contact the NMS Engineering Conservation Department for further assessment.]</p> <p>Suitability for student projects: Suitable.</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1972.84	Object name: Lathe, woodturning / pedestal	Updated/by: 2012-06-28/S. Hiddleston
<p>Manufacturer: Unknown</p> <p>Description: Seven-inch woodturning centre lathe with a separate pedestal to support the tools. No maker's name.</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: Unknown</p> <p>Place of use/Acquired from: Royal Scottish Museum, Joiners Shop</p> <p>Industry: Joiner's/Carpentry workshop</p> <p>Description of operation: Used for woodturning.</p> <p>Technical details: Height 48.00" Length 55.00" Width 25.00"</p> <p>Classification: Woodworking</p> <p>Type: Pedestal</p> <p>Drive: Belt driven through a 3 speed wall-mounted countershaft.</p> <p>Attachments: Simple head-stock, tail-stock, cross-slide attachment, 2 hand-tool rests with clamps and two face-plates.</p> <p>Features: The large 20 in. face plate is used on the outside of the head-stock</p> <p>Condition/Completeness: Fair.</p> <p>Suitability for student projects: [Possibly. Please contact the NMS Engineering Conservation Department for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: W.RQ 10	Object name: Lathe, woodturning	Updated/by: E. Edwards
Manufacturer: Not known		
Description: [Woodturning lathe]		
Location: Currently in off-site, inaccessible storage in Bo'ness, West Lothian		
Production date: Currently not known		
Place of production: Not known		
Place of use/Acquired from: Gift from in Duns, Scottish Borders, 1964.		
Industry: [Not specified]		
Description of operation: [For turning and cutting wood.]		
Technical details: Height 40 INCHES Length 102 INCHES Width 34 INCHES		
Classification: Woodworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: [Not specified. Please contact the NMS Scottish History & Archaeology Department for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: Wood turning lathe, treadle-driven, complete with its fittings; used by the previous tenant at the farm, who was also a joiner. No image available.		

Collection: NMS/Accession no.: T.1980.78	Object name: Morticing machine, Joiner's	Updated/by: 2009-03-01/D. Stillwell
<p>Manufacturer: Mackay, Barclay & Heys</p> <p>Description: Hand operated joiner's morticing machine by Mackay, Barclay and Heys, of Glasgow.</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: Glasgow</p> <p>Place of use/Acquired from: British Steel Corporation per D. Charman, Glasgow</p> <p>Industry: Joiner's/Carpentry workshop</p> <p>Description of operation: [For cutting holes in wood.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Woodworking</p> <p>Type: [Not specified]</p> <p>Drive: Hand-operated</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Collection: NMS/Accession no.: T.1995.68	Object name: Machine, veneer	Updated/by: 2013-10-23/K. Stauberma
<p>Manufacturer: Unknown</p> <p>Description: Veneer Machine. Used for slicing a very thin sheet from a revolving log. The blades are missing.</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: Unknown</p> <p>Place of use/Acquired from: Donation</p> <p>Industry: [Not specified]</p> <p>Description of operation: Used for slicing thin sheets from wood from log.</p> <p>Technical details: Height 1290 mm Length 5130 mm Width 1830 mm</p> <p>Classification: Woodworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Blades missing.</p> <p>Suitability for student projects: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		



Collection: NMS/Accession no.: T.2004.655	Object name: [Wood engraving machine]	Updated/by: 2014-09-05/R. McDaid
Manufacturer: Moore Description: [Wood engraving machine]: Moore, Minneapolis, Minnesota, USA, c. 1889. Location: In storage Production date: c. 1889 Place of production: Minneapolis, Minnesota, USA Place of use/Acquired from: David Reid Industry: Amateur workshop Description of operation: [For engraving wood.] Technical details: [Not specified] Classification: Woodworking Type: [Not specified] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact NMS Engineering Conservation Department for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified]		

Collection: NMS/Accession no: T.2009.132.1	Object name: Elliott woodworking machine tool	Updated/by: 2014-09-11/R. McDaid
<p>Manufacturer: Dominion Machinery Co. Ltd</p> <p>Description: Elliott woodworking machine tool, metal, used in the workshop of Charlie Millar, Edinburgh, by Dominion Machinery Co. Ltd, Hipperholme, Halifax, 1950s.</p> <p>Location: In storage</p> <p>Production date: Early 1950s</p> <p>Place of production: Hipperholme, Halifax, England</p> <p>Place of use/Acquired from: Used in the workshop of Charlie Millar, Edinburgh</p> <p>Industry: Joiner's/Carpentry workshop</p> <p>Description of operation: [Thicknessing machine]</p> <p>Technical details: Weight 1379 kg Height 1500 mm Width 1300 mm Depth 1400 mm</p> <p>Classification: Woodworking</p> <p>Type: [Not specified] Drive: [Not specified] Attachments: With parts. Features: /</p> <p>Condition/Completeness: Fair.</p> <p>Suitability for student projects: [Suitable. Please contact the NMS Engineering Conservation Department.]</p> <p>Further documentation: Instruction manual by the manufacturer (kept in the object file).</p> <p>Comments: It is an especially attractive machine tool as it documents the transition from home-industry to small-scale industry so crucial for Scotland's business history. It also represents an approach towards machine work which is highly specific for Scotland, the interaction with and adoption of the machine tool (in contrast to automation elsewhere), illustrated by the various parts</p>		

and spares that come with this machine. Moreover, this machine tool is accompanied by instruction manuals which document the use of the machine, and which will be supplemented by an interview with Charles Millar, the now retired user of the machine. The machine is also an ideal candidate for exhibitions as its complex functioning is visible (as opposed to more back-boxed machines), it is aesthetically pleasing and requires little pre-exhibition restoration work. Moreover, it will also be a possible item for international loans for any exhibition covering North British machine tool production and Scottish machine tool use. Finally, it can fundamentally contribute to our research agenda on the making and (i.e.) uses of machine tools with regard of what was specific about Scottish machine tool uses.

Collection: NMS/Accession no.: T.1995.77	Object name: Band saw	Updated/by: 2009-03-01/D. Stillwell
Manufacturer: Alexander Mathieson & Son		
Description: Bandsaw, with a cast iron base plate, saw wheels, and metal table, used by NMS joiners, by Alexander Mathieson & Son, Saracen Tool Works, Glasgow and brass rotary guide by Wilson Brothers, Leeds.		
Location: In storage		
Production date: Unknown		
Place of production: Saracen Tool Works, Glasgow		
Place of use/Acquired from: National Museums of Scotland, Joiners Shop.		
Industry: Joiner's/Carpentry workshop		
Description of operation: [For cutting wood.]		
Technical details: Height 1770 mm Length 1150 mm Width 720 mm		
Classification: Woodworking		
Type: [band saw]		
Drive: [Not specified]		
Attachments: Cast iron base plate, saw wheels, metal table. Brass rotary guide by Wilson Brothers, Leeds.		
Features: With star and crescent trademark on side of column. Brass rotary guide marked 'WILSON / BROS / LEEDS' and 'JACKSON / THE / "ROTARY" / GUIDE.' Rectangular cast iron base plate with four corner bolt holes and arched vertical column which supports two band saw wheels, the lower one of which is joined to twin V-grooved drive wheel. Adjustable smoothed cornered metal work table. Column painted grey and black.		
Condition/Completeness: [Not specified. Please contact the NMS Engineering Conservation Department for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: [Currently no image available.]		

Collection: Paisley Museum/Accession no.: T 361	Object name: Automatic Plane Iron Grinder	Updated/by: J. Pressly
Manufacturer: Thomas White & Sons, Limited		
Description: Top spindle with grinding stone at each end. At one end a tool rest. At the other end a plane knife slide with traverse motion. Moveable belt drive to knife slide mechanism actuated by operating lever at end of machine. Painted grey.		
Location: In storage		
Production date: 1930 - 1939		
Place of production: Paisley, Renfrewshire		
Place of use/Acquired from: [Unknown]		
Industry: [Not specified]		
Description of operation: [For grinding wooden surfaces.]		
Technical details: Height 118 cm Length 120 cm Width 87 cm		
Classification: Metalworking		
Type: [plane iron grinder]		
Drive: Belt driven		
Attachments: [Not specified]		
Features: Nameplate: White, Woodworking Machinery Headquarters, Paisley. Reference No. 66571P		
Condition/Completeness: Fair. Some paint missing. Some rust.		
Suitability for student projects: [Suitable for e.g. restoration project to working condition. Please contact Paisley Museum for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: SFM/Accession no.: ANSFM: 2010.71	Object name: Drill	Updated/by: 14/12/2009/C. Gillies
Manufacturer: Metropolitan Vickers Electrician Co.		
Description: Large, freestanding drill. Made of metal and rubber. Base plate with shaft and drill mechanism.		
Location: In storage		
Production date: 1919-1949		
Place of production: Traffold Park, Manchester, England.		
Place of use (Association): Unknown.		
Industry: Boatbuilding		
Description of operation: [For drilling and reaming holes in wood.]		
Technical details: Height 92 cm Length 62 cm Width 56 cm		
Classification: Woodworking		
Type: Not specified.		
Drive: Electric motor. Motor attached to side.		
Attachments: /		
Features: Inscriptions on plate: "STARLET. CAT/No 35 PS. Volts 440 AL PTO AMP MIN Max 45". This plate on starter motor. Second inscription on plate on motor: "TD 4881. Metropolitan Vickers Elec. Co. Ltd. Manchester, England. A.C. Motor Type BKT 2410. HP ½ AMP. RPM 1425 VOLTS 400/440. CYC 50. PR 3. RATING CONT. CAT No D11558 M3".		
Condition/Completeness: [Not specified. Please contact the Fisheries Museum for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: Metropolitan Vickers was a British heavy industry firm. Formerly British Westing House, it was bought by Vickers who changed the name to Metropolitan Vickers Electrical Equipment Co in 1919. Wide range of electrical equipment included in first catalogue in 1920 with marine specialities in issue of 1924. Firm also known as Metrovick. It was based at Traffold Park, Manchester, and ran until 1949. [Currently no digital image available.]		

Collection: SFM/Accession no.: ANSFM: 2010.52	Object name: Band saw	Updated/by: 02/01/2010/C. Gillies
<p>Manufacturer: John Pickles & Son (Engineers Ltd.)</p>		
<p>Description: Canting band saw (rear end and table cant). Made of metal.</p>		
<p>Production date: 20th century</p>		
<p>Place of production: Hebdenbridge</p>		
<p>Place of use (Association): James Miller's Boatbuilders, St. Monans. Came into the museum when business closed down in 1995/6.</p>		
<p>Industry: Boatbuilding</p>		
<p>Description of operation: [For cutting wood.]</p>		
<p>Technical details: Height 249 cm Length 207 cm Width 107 cm</p>		
<p>Classification: Woodworking</p>		
<p>Type: Contractor starter type DOC 102 Form M82 for use with Motor HP. Volts 400/1 40 Cycles – PH – British Patents MADE IN ENGLAND</p>		
<p>Drive: Belt driven</p>		
<p>Attachments: /</p>		
<p>Features: BT-H Start Stop Reset on motor buttons.</p>		
<p>Condition/Completeness: Good/Incomplete. Missing drive belt (band).</p>		
<p>Suitability for student projects: Limited due to missing drive and character of object. [Possibly suitable for restoration of belt drive system. Please contact the Fisheries Museum for further assessment.]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: Cast logo "Pickles Ransome" superimposed. Separate inscription (on motor) "THE BRITISH THOMSON HOUSTON CO. LTD. RUGBY, ENGLAND. [Currently no digital image available.]</p>		

Collection: SIRC/Accession Number: NN	Object name: Pillar Drill	Updated/by: ARPG Sept 2015
Manufacturer: British Rex Description: 4 speed pillar drill Location: On display Production date: Unknown Place of production: Britain (British Rex) Place of use: Crookston Homes, Glasgow until 1994 Industry: General Engineering Description of operation: Used to drill holes up to 2.5cm in Dia in steel plate etc Technical details: Height 200.00cm Length 40.00cm Width 50.00 cm Classification: Metalworking Type: Pillar Drill press Drive: Belt driven Attachments: None Features: No special features. Condition/Completeness: Fair. Suitability for student projects: [Not specified. Please contact the SIRC for further assessment.] Further documentation: [Not specified] Comments: /		

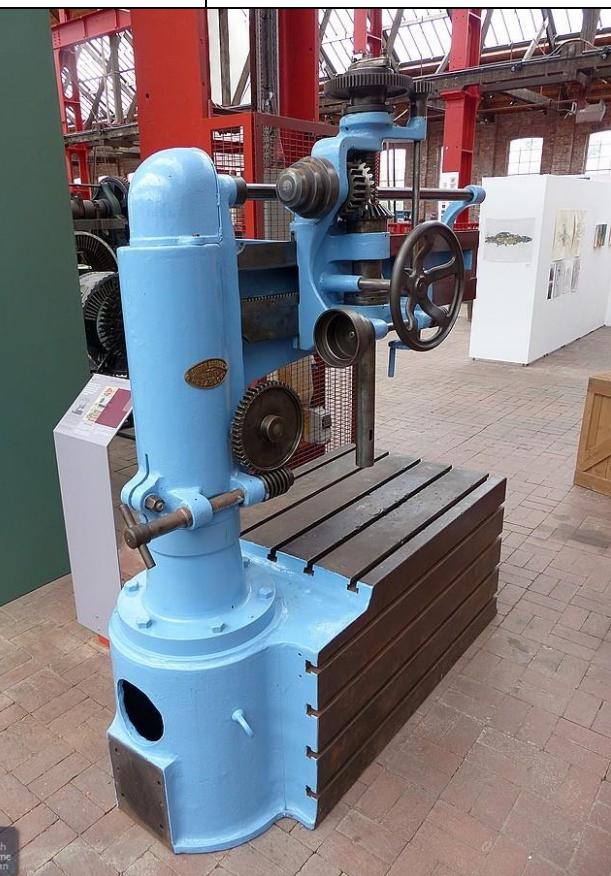
Collection: SIRC/Accession Number: NN	Object name: Radial Drill	Updated/by: ARPG Sept 2015
<p>Manufacturer: George Swift & Co, Halifax</p>		
<p>Description: Radial Drill</p>		
<p>Production date: Not known</p>		
<p>Place of production: Halifax, England</p>		
<p>Place of use: Ayr Harbour Workshops until late 1980's</p>		
<p>Industry: General Engineering</p>		
<p>Description of operation: Slots in the box table enable various work pieces to be bolted in place and then the drilling head could be swung or traversed to reach the hole required.</p>		
<p>Technical details: Height 270.00cm Length 300.00cm Width 110.00cm</p>		
<p>Classification: Metalworking</p>		
<p>Type: Radial Drill</p>		
<p>Drive: Belt driven</p>		
<p>Attachments: None</p>		
<p>Features: No special features</p>		
<p>Condition/Completeness: Appears to be complete – not functional.</p>		
<p>Suitability for student projects: [Yes, e.g. for restoration project in order to bring the machine back to working status.]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: Appears to have been supplied by Loudon Bros., Glasgow.</p>		

Collection: SIRC/Accession no.:	Object name:	Updated/by:
NN	Pneumatic Hammer	ARPG Sept 2015
Manufacturer: Massey		
Description: Pneumatic Hammer		
Location: On display		
Production date: Unknown		
Place of production: England		
Place of use: not known		
Industry: Forging		
Description of operation: The hammer was rated at 240 full blows per minute.		
Technical details: Height 300.00cm Length 100.00cm Width 100.00cm		
Classification: Metalworking		
Type: Most likely used in a forge.		
Drive: Pneumatic		
Attachments: None		
Features: [Not specified]		
Condition/Completeness: Reasonable condition and appears to be complete, but non-operational.		
Suitability for student projects: [Yes, e.g. for restoration project in order to bring the machine back to working status.]		
Further documentation: [Not specified]		
Comments: /		

Collection: SIRC/Accession no.: NN	Object name: Engineers belt driven lathe	Updated/by: ARPG Sept 2015
Manufacturer: Dickson Machine Tool Co. Ltd, Keighley, West Yorkshire		
Description: Engineers belt driven, back geared, screw cutting lathe		
Location: On display		
Production date: Circa 1900		
Place of production: Yorkshire		
Place of use: Ayr Harbour		
Industry: General Engineering		
Description of operation: Used in the production of shafts, piston rings, bearing brasses for large machines.		
Technical details: Height 100.000 cm (at the table level and approx. 180 at the headstock) Length 500.000 cm Width 100.00 cm (at widest point of the base – about 150.00cm at the headstock)		
Classification: Metalworking		
Type: Engineers back geared screw cutting lathe		
Drive: Belt driven		
Attachments: Lead screw and various reduction gears for different feeds and speeds		
Features: [Not specified]		
Condition/Completeness: Good condition and appears to be complete – not operational.		
Suitability for student projects: [Yes, e.g. for restoration project in order to bring the machine back to working status.]		
Further documentation: [Not specified]		
Comments: On the shelves behind are the various gears and attachments.		

Collection: SIRC/Accession no.: NN	Object name: Sliding surface and screw lathe	Updated/by: ARPG Sept 2015
Manufacturer: Le Blond		
Description: Sliding surface and screw cutting lathe		
Location: On display		
Production date: About 1912		
Place of production: Le Blond, USA. This machine was supplied by C.W. Burton Griffiths and Co, London		
Place of use: Not known		
Industry: General Engineering, both production and maintenance		
Description of operation: This machine has 12 spindle speeds, three from the direct belt drive and nine lower speeds from back gearing and friction clutches. A large range of cutting feeds and speeds could be obtained to enable cutting of screw threads of many different types and sizes.		
Technical details: Height 150.000 cm Length 200.000 cm Width 80.000 cm		
Classification: Metalworking		
Type: 14" Lathe Drive: Belt driven Attachments: None		
Features: [Not specified]		
Condition/Completeness: Appears to be complete and in reasonable condition.		
Suitability for student projects: [Suitable. Please contact SIRC for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: SIRC/Accession no.: NN	Object name: Slotting Machine	Updated/by: ARPG Sept 2015
<p>Manufacturer: TC Dill Machine Co</p> <p>Description: Belt driven slotting machine</p> <p>Location: On display</p> <p>Production date: Not known</p> <p>Place of production: Pennsylvania, USA</p> <p>Place of use: Not known</p> <p>Industry: General Engineering</p> <p>Description of operation: The general construction of this machine is a heavy frame in which travels a vertical slide which carries a cutting tool. This tool slices and pares to shape castings and forgings mounted on the machine work table. The table can be moved in various directions all synchronised with the cutting motion to occur immediately after the cutting stroke has happened.</p> <p>Technical details: Height 300.00 cm Length 300.00 cm Width 200.00 cm</p> <p>Classification: Metalworking</p> <p>Type: Slotting machine</p> <p>Drive: Belt drive</p> <p>Attachments: None</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: Machine is complete, but non-operational.</p> <p>Suitability for student projects: [Yes, e.g. for restoration project in order to bring the machine back to working status.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>	 	

Collection: SMM/Accession no.: A/1983/0029	Object name: Radial drill	Updated/by: L. Ross	
Manufacturer: Loudon Brothers Ltd.			
Description: Radial drill with table, pillar and radial arm. Painted blue.			
Location: On display at Linthouse Building.			
Production date: 1930s Place of production: Johnstone			
Place of use/Acquired from: Workshop of Clyde Shipping Company, Glasgow (c. 1930-1980)			
Industry: Fleet maintenance			
Description of operation: Heavyweight drills like this were used for general work in the workshops of many different types of industries. Radial drills make holes in metal plates, and are versatile as the arm is moveable. This is useful as it means that the operator does not need to repositions the workpiece, which is clamped to the table for stability when it is being drilled. In shipyards the process of making holes was usually performed by punches rather than by drills as punching was more economical. Radial drills were commonly found in the workshops of boiler and girder manufacturers. This machine was used in the workshops of Clyde Shipping Company, which had a large fleet of vessels to maintain.			
Technical details: Height 225 cm Length 175 cm Width 81 cm			
Classification: Metalworking			
Type: [Not specified] Drive: [Not specified] Attachments: / Features: /			
Condition/Completeness: Complete. Good conditions. Suitability for student projects: Potential project to return to operation via motor and drive belt and display in a safe way so public is not at risk.			
Further documentation: [Not specified]			
Comments: /			

Collection: SMM/Accession no.: A/1989/0017	Object name: Radial drill	Updated/by: L. Ross
Manufacturer: J. Archdale & Co.		
Description: Archdale drill / radial arm drill. Base plate, table, drill arm, drill on a ratchet. Plant number 527, serial number 1061.		
Location: Offsite storage		
Production date: [Unknown]		
Place of production: Birmingham, England		
Place of use/Acquired from: Clyde Shipping Co., Glasgow (until 1982)		
Industry: Fleet maintenance		
Description of operation: [For boring holes in metal.]		
Technical details: Height 198 cm Length 178 cm Width 64 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: /		
Features: /		
Condition/Completeness: Complete. Poor condition.		
Suitability for student projects: Yes. Restoration / return to working order.		
Further documentation: [Not specified]		
Comments: /		



Collection: SMM/Accession no.: A/1983/0025	Object name: Sensitive pillar drill	Updated/by: L. Ross
Manufacturer: F. Pollard & Co.		
Description: Machine consists of a long tubular column and incorporates the drill and drill plate. Includes anglepoise-type lamp.		
Location: Offsite storage		
Production date: 1920s		
Place of production: Birmingham		
Place of use/Acquired from: A.F. Craig & Co., Paisley (until 1982)		
Industry: Ironfounding/Engineering		
Description of operation: Used for drilling parts for textile machinery.		
Technical details: Height 205 cm Length 80 cm Width 50 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: /		
Features: /		
Condition/Completeness: Complete. Fair condition.		
Suitability for student projects: Yes. Cosmetic restoration or restoration to working order.		
Further documentation: [Not specified]		
Comments: /		

Collection: SMM/Accession no.: A/1989/0033	Object name: Vertical drill	Updated/by: L. Ross
<p>Manufacturer: Denbigh Engineering</p>		
<p>Description: Drill of the cone pulley type, using a flat belt drive and a number 2 morse taper spindle.</p>		
<p>Location: Offsite storage</p>		
<p>Production date: Unknown</p>		
<p>Place of production: Horseley Heath, Tipton, Staffordshire, England</p>		
<p>Place of use/Acquired from: Formerly used in Robertson's Yard at Sandbank.</p>		
<p>Industry: Shipbuilding</p>		
<p>Description of operation: [For boring holes in metal.]</p>		
<p>Technical details: [Not specified]</p>		
<p>Classification: Metalworking</p>		
<p>Type: [Not specified]</p>		
<p>Drive: Cone pulley</p>		
<p>Attachments: /</p>		
<p>Features: /</p>		
<p>Condition/Completeness: [Not specified. Please contact the Scottish Maritime Museum for further assessment.]</p>		
<p>Suitability for student projects: Yes – restoration to working order.</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [Currently no image available.]</p>		

Collection: SMM/Accession no.: A/1984/0040	Object name: Steam hammer	Updated/by: L. Ross
Manufacturer: R.G. Ross & Son		
Description: Rigby patent steam hammer possibly manufactured for the North Eastern Railway. It was later purchased by William Fife & Sons yard in Fairlie which was taken over by the Fairlie Yacht Slip Co. in 1944. The hammer remained on-site until the firm's closure in 1985. Vertical cast iron support with vertical steam cylinder.		
Location: Outdoor exhibit		
Production date: 1905 Place of production: Glasgow		
Place of use/Acquired from: Yard of William Fife & Sons and the Fairlie Yacht Slip Co., Fairlie, between 1905 and 1984.		
Industry: Railway/Shipbuilding		
Description of operation: The steam hammer defined the industrial age. Forges pulsated with the pounding sound of the hammers as they shaped hot metal. They could also be a great show piece: there are stories of visitors' watches surviving unscathed after being put on the anvil by the skilled operators. This hammer was built in 1907 by R.G. Ross & Son at their Greenhead Engine Works in Glasgow.		
Technical details: Height 304.8 cm Length 167.64 cm Width 106.68 cm		
Classification: Metalworking		
Type: [Not specified] Drive: [Not specified] Attachments: / Features: /		
Condition/Completeness: Incomplete. Good condition. Suitability for student projects: Suitable for cosmetic restoration project. Further documentation: [Not specified]		
Comments: Hammer was possibly manufactured for the North Eastern Railway Company before being later purchased by William Fife & Sons. The yard was taken over by Fairlie Yacht Slip Company in 1944. The hammer remained on-site until the firm's closure in 1985.		

Collection: SMM/Accession no.: A/1984/0153	Object name: Steam hammer	Updated/by: L. Ross
Manufacturer: R.G. Ross & Son		
Description: Rigby patent steam hammer. Cast iron vertical frame supporting vertical cylinder. Separate case iron anvil block. Patent number 1513.		
Location: On display in Linthouse Building.		
Production date: 1907 Place of production: Glasgow		
Place of use/Acquired from: Renfrew maintenance works of the Clyde Navigation Trust (1907-1984)		
Industry: Fleet maintenance		
Description of operation: The steam hammer defined the industrial age. Forges pulsated with the pounding sound of the hammers as they shaped hot metal. They could also be a great show piece: there are stories of visitors' watches surviving unscathed after being put on the anvil by the skilled operators. This hammer was built in 1907 by R.G. Ross & Son at their Greenhead Engine Works in Glasgow. It was used to forge replacement parts for the Clyde Navigation Trust's fleet of dredgers and hopper barges at its workshops in Renfrew until the 1980s.		
Technical details: Height 357 cm Length 122 cm Width 108 cm		
Classification: Metalworking		
Type: [Not specified] Drive: [Not specified] Attachments: / Features: /		
Condition/Completeness: Incomplete. Good condition following conservation work in 2013. Suitability for student projects: Not suitable. Further documentation: [Not specified]		
Comments: /		

Collection: SMM/Accession no.: A/1983/002	Object name: Faceplate lathe	Updated/by: L. Ross
Manufacturer: Thomas Shanks & Co.		
Description: Faceplate lathe manufactured by Thomas Shanks & Co. Consists of an iron bed plate with gears driving 5ft 6in diameter faceplate. Painted grey.		
Location: Machine Pits, Linthouse Building		
Production date: c. 1890		
Place of production: Johnstone, Renfrewshire		
Place of use/Acquired from: Ailsa Shipbuilding Co., Troon (Engineering Works), (1890 and 1970)		
Industry: Shipbuilding		
Description of operation: This lathe is part of Ayrshire's shipbuilding history. It was used in the Troon yard of Ailsa Shipbuilding Co. between 1890 and 1970. During its career it turned flat circular surfaces, such as cylinder covers and pistons, in the shipyard's engineering works. The lathe has been described as 'the father of all machine tools'. It was the most common tool in any machine shop and is still vital for manufacture today. This lathe has a large circular faceplate which is fixed to a spindle. The piece being worked on could be clamped to the slots and held firmly in place. It was made by leading manufacturer Thomas Shanks & Co. of Johnstone, who specialised in the heavy-end of the machine tool market.		
Technical details:		
Weight 10 tons		
Height 183 cm		
Length 518 cm		
Width 274 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: Belt driven		
Attachments: /		
Features: /		
Condition/Completeness: Incomplete. Good condition.		
Suitability for student projects: Suitable for general cleaning and painting. Could form a Machine Pits project which involves working with Museum Volunteers to return the overhead belt system to operation.		
Further documentation: [Not specified]		
Comments: /		

Collection: SMM/Accession no.: T.1983.214	Object name: Shafting lathe	Updated/by: L. Ross
Manufacturer: G & A Harvey & Co.		
Description: Shafting lathe fitted with a non-original grinding attachment.		
Location: Machine Pits, Linthouse Building		
Production date: c. 1890		
Place of production: Glasgow		
Place of use/Acquired from: [Unknown]		
Industry: Shipbuilding		
Description of operation: This is a small example of a type of machine which was used to turn and shape long items. In marine engineering works shafting lathes would have turned propeller shafts. As with other machine tools, manufacturers advertised lathes of a standard design which would then be individually adapted to suit a customer's needs. Very often machines would be further altered in the workplace by the operator, who knew how to get the best out of his machine. This lathe was latterly used as a sander, showing how tools could be adapted and re-used, prolonging their life.		
Technical details: [Not specified]		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: Non-original grinding attachment		
Features: /		
Condition/Completeness: Incomplete. Fair condition.		
Suitability for student projects: Suitable for general cleaning and painting. Could form a Mchine Pits project which involves working with Museum Volunteers to return the overhead belt system to operation.		
Further documentation: [Not specified]		
Comments: On loan to the Scottish Maritime Museum from National Museums Scotland.		

Collection: SMM/Accession no.: A/1988/0063	Object name: Treadle lathe	Updated/by: L. Ross
Manufacturer: Drummond Bros. Ltd.		
Description: Foot operated treadle lathe		
Location: On display in Linthouse Building		
Production date: Unknown		
Place of production: Guildford, England		
Place of use/Acquired from: Part of the contents of a former blacksmith's shop and office, possibly Irvine.		
Industry: Blacksmithing		
Description of operation: Used for cutting screw threads.		
Technical details: Height 107 cm Length 91 cm Width 46 cm		
Classification: Metalworking		
Type: Not specified.		
Drive: Foot pedal		
Attachments: /		
Features: /		
Condition/Completeness: Complete. Fair condition.		
Suitability for student projects: Yes. Restoration.		
Further documentation: [Not specified]		
Comments: Used throughout 20 th century – 1988.		

Collection: SMM/Accession no.: A/1983/0018/	Object name: Burning machine	Updated/by: L. Ross
Manufacturer: British Oxygen Company		
Description: British Oxygen Company (BOC) burning machine. Cast iron table with column supporting a double hinged arm with cutting torch attached. No hoses or gauges. Also called Universal Oxygen Cutting Machine.		
Location: Machine Pits, Linthouse Building		
Production date: 1930s		
Place of production: [Not specified]		
Place of use/Acquired from: Henry Robb shipyard, Leith (1930s-1983)		
Industry: Shipbuilding		
Description of operation: This 1930s machine was 'the first flame cutter on the east coast'. As technology progressed, shipyards incorporated new methods into their manufacturing processes. Henry Robb purchased this machine for their Leith shipyard and it is an early example of a type still in use today. Using a combination of acetylene gas and oxygen, this machine quickly cut sheets of metal to shape, the very hot flame was produced by burning acetylene in oxygen and this cut through the sheet. Flame cutting eventually replaced shearing as the preferred methods for cutting metal. A guide was fitted above the machine allowing the swinging arm to follow a pre-determined pattern and cut the shape required. Today machines like this are now controlled by computer. They are very versatile and can cut almost any shape from large steel plate.		
Technical details: Height 259 cm Length 251 cm Width 160 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: /		
Features: /		
Condition/Completeness: Incomplete. Fair condition.		
Suitability for student projects: Not suitable.		
Further documentation: [Not specified]		
Comments: [Machine originally named "Profile Burner" or "Profile Cutter".]		

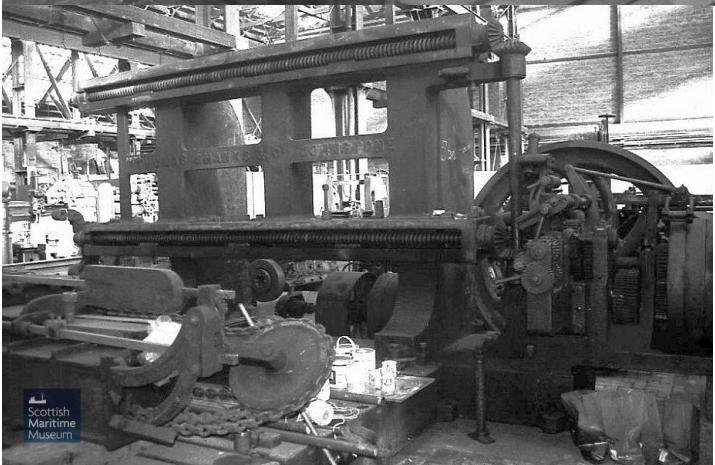
Collection: SMM/Accession no.: A/1983/0074	Object name: Horizontal drilling, boring, milling and tapping machine	Updated/by: L. Ross
Manufacturer: G & A Harvey	Description: Horizontal boring, tapping and milling machine. Bedplate, vertical tool column, rotary geared tool holder, pulleys, shafts, chain-supported counterweight. Black.	
Location: On display in Linthouse Building		
Production date: 1906		
Place of production: Glasgow		
Place of use/Acquired from: Used in the Renfrew maintenance works of the Clyde Navigation Trust. (1906-1984)		
Industry: Fleet maintenance	Description of operation: This machine was multi-functional and designed to bore long holes and mill large castings. Operators knew how to get the most out of these tools, using their senses to gauge their effectiveness. These skills could only be used on the job, and this relationship between man and machine was the most important in the workshop. It was purchased in 1906 from G&A Harvey for use in Clyde Navigation Trust's maintenance shop at Renfrew. It was in operation for 80 years, until the workshop closed in 1984 under Clyde Port Authority's ownership. Tools like this were common in marine engine works, but were also essential for organisations like the Clyde Navigation Trust, which had fleets of vessels to maintain.	
Technical details: Height 458 cm Length 670 cm Width 367 cm		
Classification: Metalworking		
Type: [Not specified] Drive: [Not specified] Attachments: / Features: /		
Condition/Completeness: Incomplete. Fair condition. Suitability for student projects: Suitable for restoration project Further documentation: [Not specified]		
Comments: [This is a very important type of a machine tool and as such also the only one of this kind in a Scottish museum collection.]		

Collection: SMM/Accession no.: T.1984.43	Object name: Hull model cutting machine	Updated/by: L. Ross
Manufacturer: John McDowall & Sons, Johnstone		
Description: Hull model cutting machine invented by William Froude		
Location: Scottish Maritime Museum, Denny Ship Model Experiment, Dumbarton		
Production date: 1884		
Place of production: Johnstone		
Place of use/Acquired from: Denny Ship Model Testing Tank at shipyard of William Denny & Bros., Dumbarton (1884-present)		
Industry: Shipbuilding		
Description of operation: Used to shape the wax model hulls which were to be tested at the Denny Ship Model Experiment Tank.		
Technical details: [Not specified]		
Classification: Wax-shaping		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: /		
Features: /		
Condition/Completeness: Complete. Excellent condition.		
Suitability for student projects: Not suitable.		
Further documentation: [Not specified]		
Comments: [On loan from NMS.]		

Collection: SMM/Inventory no.: 03417	Object name: Nibbler	Updated/by: L. Ross
Manufacturer: Scottish Machine Tool Corporation		
Description: Multi-functional nibbler		
Location: Machine Pits, Linthouse Building		
Production date: post-1937		
Place of production: [Not specified]		
Place of use/Acquired from: Unknown. Used post-1937.		
Industry: [Not specified]		
Description of operation: This machine is extremely versatile and can serve three different functions. At one end the punch can drive holes through steel plate. In the middle a variety of shaped holes allow round or square section pipes or angle iron to be cut. At the other end a nibbler cuts shapes out of metal plates.		
Technical details: [Not specified]		
Classification: Metalworking		
Type: Not specified.		
Drive: [Not specified]		
Attachments: /		
Features: /		
Condition/Completeness: Complete. Fair condition.		
Suitability for student projects: Possibly.		
Further documentation: [Not specified]		
Comments: This tool was made by the Scottish Machine Tool Corporation, which was an amalgamation of some of Scotland's most prolific machine tool companies – James Allan Senior & Sons, G & A Harvey, Loudon Brothers, and Craig & Donald. This machine tool 'super-power' was formed in 1937, with each company retaining its autonomy. This was important as the companies all had their own proud heritage and areas of expertise. [Currently no image available.]		

Collection: SMM/Inventory no.: A/1983/0019	Object name: Pipe threading machine	Updated/by: L. Ross
<p>Manufacturer: Joshua Heap & Co., Toolmakers, Ashton-Under-Lyme</p>		
<p>Location: Offsite storage</p>		
<p>Description: A pipe threading machine made by Joshua Heap & Co.</p>		
<p>Production date: [Unknown]</p>		
<p>Place of production: Ashton-Under-Lyme</p>		
<p>Place of use/Acquired from: British Steel Corporation, Clydebridge plant. (until 1982)</p>		
<p>Industry: Steelmaking</p>		
<p>Description of operation: Used for putting a thread on pipes.</p>		
<p>Technical details: Height 137 cm Length 99 cm Width 92 cm</p>		
<p>Classification: Metalworking</p>		
<p>Type: [Not specified]</p>		
<p>Drive: [Not specified]</p>		
<p>Attachments: /</p>		
<p>Features: /</p>		
<p>Condition/Completeness: Complete. Poor condition.</p>		
<p>Suitability for student projects: Restoration</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [Currently no image available.]</p>		

Collection: SMM/Inventory no.: 03371	Object name: Horizontal planing machine	Updated/by: L. Ross
<p>Manufacturer: Loudon Brothers Ltd.</p> <p>Description: Horizontal planing machine consisting of cast iron frame and bedplate.</p> <p>Location: On display in Linthouse Building.</p> <p>Production date: 1860</p> <p>Place of production: Johnstone</p> <p>Place of use/Acquired from: Engineering workshop of John Kerr & Co., Glasgow.</p> <p>Industry: Engineering</p> <p>Description of operation: In the early 20th century the name 'Loudon' was synonymous with the manufacture of planing machines. The company celebrated planers as 'the very foundation of machine shop success' because of the importance of flat surfaces for all sorts of manufacture. An inaccurate cut by machine often had to be corrected by hand, which wasted time and money. This planing machine proved its reliability during its working life. It was built in 1860 and was still in use in 1989, making it a truly remarkable tool. It machined parts for woodworking machinery at the engineering workshop of John Kerr & Co in Glasgow, and was removed when new regulations meant thata they had to modernise. During the Wars it was used to machine parts for naval landing craft.</p> <p>Technical details: Height 225 cm Length 410 cm Width 220 cm</p> <p>Classification: Metalworking</p> <p>Type: [Not specified] Drive: [Not specified] Attachments: / Features: /</p> <p>Condition/Completeness: Incomplete. Good condition following restoration in 2014. Suitability for student projects: Not suitable. Further documentation: [Not specified]</p> <p>Comments: Used between 1860 and 1989.</p>		

Collection: SMM/Accession no.: A/1983/0003	Object name: Horizontal and vertical planing machine	Updated/by: L. Ross
Manufacturer: Thomas Shanks & Co.		
Description: Horizontal and vertical planing machine. Machine tool consisting of cast iron baseplate with machined channels and vertical iron block with screw drives. Separate tool support/holder with screw drives. Gear drive from pulley wheels.		
Location: On display in Linthouse Building.		
Production date: 1906 Place of production: Johnstone, Renfrewshire		
Place of use/Acquired from: Renfrew maintenance works of the Clyde Navigation Trust.		
Industry: Fleet maintenance		
Description of operation: This machine is also known as a 'wallcreeper'. It was used to accurately create flat surfaces on large pieces of metal, and could plane both horizontal and vertical surfaces without altering the setting of the workpiece.		
Technical details: Height 550 cm Length 530 cm Width 392 cm		
Classification: Metalworking		
Type: Not specified. Drive: [Not specified] Attachments: / Features: /		
Condition/Completeness: Incomplete. Fair condition. Suitability for student projects: Not suitable. Further documentation: [Not specified] Comments: Used between 1906 and 1984.		

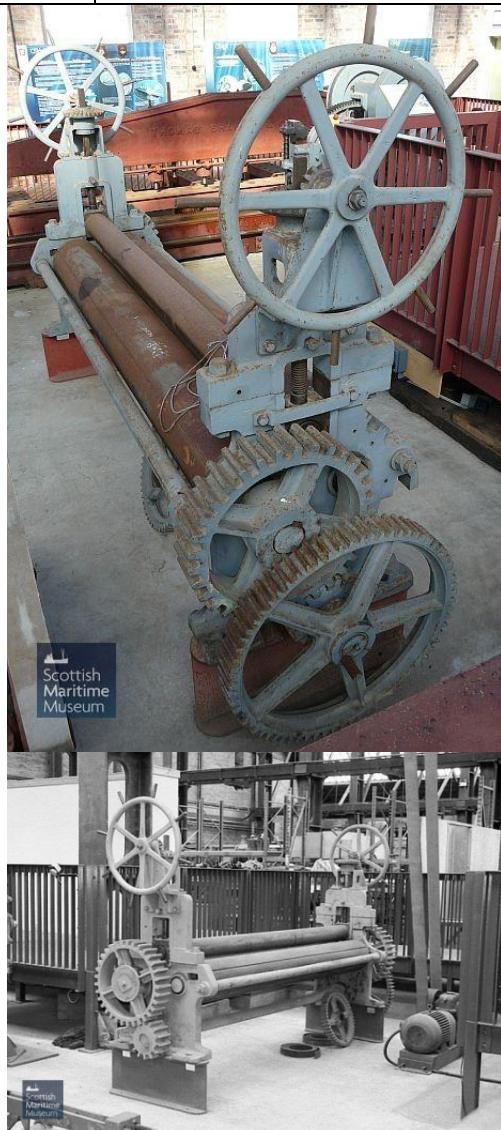
Collection: SMM/Accession no.: A/1983/0012	Object name: Plate edge planing machine	Updated/by: L. Ross
Manufacturer: Thomas Shanks and Co.		
Description: Plate edge planing machine. Cast body with manufacturer details. Bed plate and drive wheel. [On loan from NMS]		
Location: Machine Pits, Linthouse Building		
Production date: c. 1900		
Place of production: Johnstone		
Place of use/Acquired from: Boilermaking department of Works of A.F. Craig & Co., Paisley, between 1900 and 1982.		
Industry: Shipbuilding/Boilermaking		
Description of operation: Used to make vessels watertight by cutting the edges of plates so that they fitted together neatly. On one side of the machine are the supports which held the weight of the plate. The other side features the cutting tool which planed the edge. Once the cutter reached the end a mechanism switched belts, reversing it to make another cut.		
Technical details:		
Weight 7 tons		
Height 244 cm		
Length 762 cm		
Width 244 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: Belt driven		
Attachments: /		
Features: /		
Condition/Completeness: Incomplete. Good condition.		
Suitability for student projects: Suitable for general cleaning and painting. Could form a Machine Pits project which involves working with Museum Volunteers to return the overhead belt system to operation.		
Further documentation: [Not specified]		
Comments: In 1940 the planer was removed from A.F. Craig under the direction of the Admiralty and transferred to Fleming & Ferguson, Paisley. After the War the planer was returned to A.F. Craig where it remained until the closure of the company in 1982.		



Collection: SMM/Accession no.: A/1984/0154	Object name: Frame bending machine	Updated/by: L. Ross
Manufacturer: [Unknown]		
Description: Frame bending machine consists of circular table with two clamp jaws to secure the object. Turns though one quarter radius, sits on a black square base, rotates via a large hand powered turning wheel, which has eight grips round its circumference.		
Location: Scottish Maritime Museum, Irvine, Linthouse Building		
Production date: pre-1940		
Place of production: Fairlie		
Place of use/Acquired from: Fairlie Yacht Slip Co., Fairlie (until 1984)		
Industry: Yachtbuilding		
Description of operation: This frame bending machine is an example of a hand-operated machine used in the Fairlie yard of William Fife & Sons. It was used to bend rather than cut larger pieces of metal for yachts, leading to stronger construction.		
Technical details: Height 130 cm Length 150 cm Width 113 cm		
Classification: Metalworking		
Type: [Not specified] Drive: Hand-operated Attachments: / Features: /		
Condition/Completeness: Complete. Fair condition. Suitability for student projects: Not suitable.		
Further documentation: [Not specified]		
Comments: This machine was invented by William Fife III (1957-1944), who was the third generation of the renowned yachtbuilding family. Fife inherited a legacy which he built on to become one of the premier yacht designers of the day. Fellow boat designer Uffa Fox, who designed the airborne lifeboat wrote to Fife to express his delight about the frame bending machine: "I am sorry that I have not taken a photograph of the machine which bends up floors and thickened angle but will write about it in my book on design as an illustration of the excellent way in which your yachts are built, as it is such things that lift them high above the ordinary level."		

Collection: SMM/Accession no.: T.2000.95	Object name: Joggling press	Updated/by: L. Ross
Manufacturer: Hugh Smith & Co.		
Description: Joggling hydraulic powered press		
Location: Outdoor exhibit		
Production date: 1916		
Place of production: Glasgow		
Place of use/Acquired from: Brys & Gylsen Ltd., River Clyde Shipbuilding Works, Whiteinch (1916-1983)		
Industry: Shipbuilding / Boilermaking		
Description of operation: To joggle or bend the edges of plates and frames to form the finished hull. Commonly also used as a punch for manholes and portholes. When used with the large 'flanging blocks' or dies, it would be used to form parts of boilers.		
Technical details:		
Height 289.5 cm		
Length 289.5 cm		
Width 152.4 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Incomplete. Fair condition.		
Suitability for student projects: Not suitable.		
Further documentation: [Not specified]		
Comments: /		

Collection: SMM/Accession no.: A/1983/035	Object name: Plate Bending Rolls	Updated/by: L. Ross
Manufacturer: [Unknown]		
Location: Machine Pits, Linthouse Building		
Description: Small plate bending rolls (plate mangle) with four rolls and two supporting bars running along length of machine. Two eight-handled wheels mounted at top of machine on either side. Lower down, several gearwheels. Painted overall grey.		
Production date: 1930s		
Place of production: Unknown		
Place of use/Acquired from: Henry Robb shipyard, Leith (1930s-1983)		
Industry: Shipbuilding/Boilermaking		
Description of operation: Plate bending rolls were developed to put the curves and bends into sheets of metal. This set of rolls is a small example of a type that was common in the boilermaking and shipbuilding industries. These rolls were installed in Henry Robb's Leith shipyard in the 1930s. Robb specialised in small to medium sized vessels such as tugs and dredgers. Yards building bigger vessels had much larger sets of rolls.		
Technical details: Height 207 cm Length 366 cm Width 116 cm		
Classification: Metalworking		
Type: [Not specified] Drive: [Not specified] Attachments: / Features:		
Condition/Completeness: Complete. Fair condition. Suitability for student projects: Suitable for general cleaning and painting. Could form a Machine Pits project which involves working with Museum Volunteers to return the overhead belt system to operation.		
Further documentation: [Not specified]		
Comments: /		



Collection: SMM/Accession no.: A/1983/0020	Object name: Punching, shearing and angle-iron cutting machine	Updated/by: L. Ross
Manufacturer: G. Edwards & Co., Johnstone		
Description: Punching, shearing and angle-iron cutting machine. Cast iron frame with pulley shaft including flywheel and large gearwheel.		
Location: On display in Linthouse Building.		
Production date: 1880s		
Place of production: Johnstone		
Place of use/Acquired from: A.F. Craig & Co.'s boiler shop, Paisley, 1880s-1980s.		
Industry: Boilermaking		
Description of operation: The combined punch and shear was the standard shipyard and boiler works tool. This one had the added function of the angle-iron cutter in the centre, making it extremely versatile. When it was in operation in A.F. Craig & Co.'s boiler shop in Paisley it was fitted with an overhead crane to handle plates. Plates were large and heavy, and many machine tools had their own in-built handling systems like this.		
Technical details: Height 244 cm Length 320 cm Width 97 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Flywheel and gearwheel]		
Attachments: /		
Features: /		
Condition/Completeness: Incomplete. Fair condition.		
Suitability for student projects: Suitable for cleaning / painting or conservation.		
Further documentation: [Not specified]		
Comments: [Currently no image available]		

Collection: SMM/Accession no.: A/1983/0006	Object name: Punching and shearing machine	Updated/by: L. Ross
Manufacturer: JBA McKinnel, Dumfries		
Description: Hand-operated punching and shearing machine. Large gearwheel driven by large flywheel in cast iron frame. Shearing / punch mechanism.		
Location: On display in Linthouse Building		
Production date: c. 1870		
Place of production: Dumfries		
Place of use/Acquired from: Blacksmith's workshop, Newbridge, Moffat (1870-1973)		
Industry: Shipbuilding		
Description of operation: Early iron shipbuilders and metalworkers used manpower to manipulate metal, as this hand-powered punch and shear shows. With the change from wooden to iron ship construction, plates had to be punched or drilled, cut to size and shape, curved appropriately, and riveted together. Tools capable of these functions were developed, and the first of these were powered by hand. This punch and shear was originally used to cut through iron. As plates got thicker and ships larger, machine tools which could manipulate metal quickly, powerfully, and economically were developed.		
Technical details: Height 210 cm Length 160 cm Width 123 cm		
Classification: Metalworking		
Type: [Not specified] Drive: Manually driven Attachments: / Features: /		
Condition/Completeness: Complete. Good condition. Suitability for student projects: Not suitable. Further documentation: [Not specified]		
Comments: [On loan from NMS.]		

Collection: SMM/Accession no.: 1995-003	Object name: Hydraulic riveter	Updated/by: L. Ross
Manufacturer: Hugh Smith & Co.		
Description: Large cast iron hydraulic riveter. Hydraulic piping has been removed. Machine is set into the ground.		
Location: Outdoor exhibit		
Production date: 1919		
Place of production: Glasgow		
Place of use/Acquired from: Arthur Street Works of John G. Kincaid & Co., Greenock, maker of marine engines. Presented to the Museum by the Scottish Development Agency.		
Industry: Boilermaking		
Description of operation: Large hydraulic riveters like this one were produced to rivet together metal plates after they had been shaped and punched. A hot rivet was placed into the holes in the two plates and a hydraulic jaw was closed upon a die at the opposite end, forming a second rivet head.		
Technical details: Height 548.64 cm Length 457.2 cm Width 121.92 cm		
Classification: Metalworking		
Type: [hydraulic riveting machine]		
Drive: [Not specified]		
Attachments: /		
Features: /		
Condition/Completeness: Incomplete. Good condition.		
Suitability for student projects: Not suitable.		
Further documentation: [Not specified]		
Comments: This particular machine was built for John G. Kincaid & Co., Greenock, which placed the order in 1919. This was during the post-World War I shipbuilding boom, when many firms were investing in equipment to cope with the demand for new vessels to replace those lost during the conflict. It was saved from Kincaid's Arthur Street premises in 1991, where it had been used to rivet the shell plates of marine boilers.		

Collection: SMM/Accession no.: A/1983/024	Object name: Shaping machine	Updated/by: L. Ross
<p>Manufacturer: P & W MacLellan., Engineers, Glasgow</p>		
<p>Description: MacLellan machine tool. Metal shaping machine. Vertical frame supporting table and horizontal arm powered by pulley.</p>		
<p>Location: Offsite storage.</p>		
<p>Production date: [Unknown]</p>		
<p>Place of production: Glasgow</p>		
<p>Place of use/Acquired from: Clyde Shipping Co., Glasgow, until 1982.</p>		
<p>Industry: Fleet maintenance</p>		
<p>Description of operation: For shaping metal parts for fleet maintenance.</p>		
<p>Technical details: Height 115 cm Length 120 cm Width 85 cm</p>		
<p>Classification: Metalworking</p>		
<p>Type: [Not specified]</p>		
<p>Drive: [Not specified]</p>		
<p>Attachments: /</p>		
<p>Features: /</p>		
<p>Condition/Completeness: Complete. Fair condition.</p>		
<p>Suitability for student projects: Yes. Restoration or returning to working order.</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [Currently no image available.]</p>		

Collection: SMM/Accession no.: A/1983/0013	Object name: Slotting machine	Updated/by: L. Ross
Manufacturer: Loudon Brothers Ltd.		
Description: Slotting machine. Upright frame with slotted table. Pulley shaft with crank drive to tool post on vertical slide.		
Location: On display in Linthouse Building		
Production date: 1880s		
Place of production: Johnstone		
Place of use/Acquired from: A.F. Craig & Co., Paisley (textile machinery workshop), 1880s-1980s.		
Industry: Textile machinery construction		
Description of operation: Used to make vertical cuts in metal. It is fitted with a rotary table, allowing round, flat, or irregular contours to be machined via the vertically moving tool. The main framework of the tool comprises a single iron casting. It needed to be solid and rigid enough to absorb all the vibrations and forces caused by the cutting operation. Otherwise these would have been transmitted to the cutting tool, causing the machine to lose accuracy.		
Technical details:		
Weight 2 tons		
Height 246 cm		
Length 239 cm		
Width 173 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: Belt driven		
Attachments: /		
Features: /		
Condition/Completeness: Incomplete. Good condition after restoration in 2014.		
Suitability for student projects: Potential project to return to operation via motor and drive belt and display in a safe way so public is not at risk.		
Further documentation: [Not specified]		
Comments: /		

Collection: SMM/Accession no.: 2002-006(004)	Object name: Model of general purpose and flanging press	Updated/by: L. Ross
Manufacturer: Hugh Smith (Engineering) Ltd., Kilmarnock, formerly Glasgow		
Description: Model of a general purpose and flanging press made for trade exhibition. Body painted light blue, simplified form without technical details.		
Location: In storage.		
Production date: c. 1975		
Place of production: Kilmarnock		
Place of use/Acquired from: Transferred from the Ballast Trust, Johnstone. Salvaged by Ballast Trust from Hunslet Barclay Engineers, Kilmarnock. (1975-1990)		
Industry: Engineering / Shipbuilding		
Description of operation: [For flanging and pressing metal.]		
Technical details: Height 15 cm Length 16.7 cm Width 7.3 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: /		
Features: /		
Condition/Completeness: Complete. Good condition.		
Suitability for student projects: Not suitable for a practical project but suitable for an interpretation / display project.		
Further documentation: [Not specified]		
Comments: [Currently no image available.]		

Collection: SMM/Accession no.: 2002-006(005)	Object name: Model of general purpose and flanging press	Updated/by: L. Ross
Manufacturer: Hugh Smith (Engineering) Ltd., Kilmarnock, formerly Glasgow		
Description: Model of a general purpose and flanging press made for trade exhibition. Body painted light blue, simplified form without technical details.		
Location: In storage.		
Production date: c. 1975		
Place of production: Kilmarnock		
Place of use/Acquired from: Transferred from the Ballast Trust, Johnstone. Salvaged by Ballast Trust from Hunslet Barclay Engineers, Kilmarnock. (1975-1990)		
Industry: Engineering / Shipbuilding		
Description of operation: [For flanging and pressing metal.]		
Technical details: Height 6.6 cm Length 12.5 cm Width 7.6 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: /		
Features: /		
Condition/Completeness: Complete. Good.		
Suitability for student projects: Not suitable for a practical project, but suitable for an interpretation / display project.		
Further documentation: [Not specified]		
Comments: [Currently no image available.]		

Collection: SMM/Accession no.: 2002-006(003)	Object name: Model of plate edge mill	Updated/by: L. Ross
<p>Manufacturer: Hugh Smith (Engineering) Ltd., Kilmarnock, formerly Glasgow</p> <p>Description: Model of plate edge mill made for trade exhibition. Body painted light blue, simplified form without technical details.</p> <p>Location: In storage.</p> <p>Production date: c. 1975</p> <p>Place of production: Kilmarnock</p> <p>Place of use/Acquired from: Transferred from the Ballast Trust, Johnstone. Salvaged by Ballast Trust from Hunslet Barclay Engineers, Kilmarnock. (1975-1990)</p> <p>Industry: Engineering / Shipbuilding</p> <p>Description of operation: [For cutting and removing material from a workpiece.]</p> <p>Technical details: Height 10.7 cm Length 30.6 cm Width 7.5 cm</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: /</p> <p>Features: /</p> <p>Condition/Completeness: Complete. Good condition.</p> <p>Suitability for student projects: Not suitable for a practical project but suitable for an interpretation / display project.</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Collection: SMM/Accession no.: 2002-006(001)	Object name: Model of plate edge planer	Updated/by: L. Ross
<p>Manufacturer: Hugh Smith (Engineering) Ltd., Kilmarnock, formerly Glasgow</p> <p>Description: Model of a plate edge planer made for trade exhibition. Body painted light blue, simplified form without technical details.</p> <p>Location: In storage.</p> <p>Production date: c. 1975</p> <p>Place of production: Kilmarnock</p> <p>Place of use/Acquired from: Transferred from the Ballast Trust, Johnstone. Salvaged by Ballast Trust from Hunslet Barclay Engineers, Kilmarnock (1975-1990)</p> <p>Industry: Engineering / shipbuilding</p> <p>Description of operation: Used to make vessels watertight by cutting the edges of plates so that they fitted together neatly. On one side of the machine are the supports which held the weight of the plate. The other side features the cutting tool which planed the edge. Once the cutter reached the end a mechanism switched belts, reversing it to make another cut.</p> <p>Technical details: Height 24 cm Length 99 cm Width 16.5 cm</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: /</p> <p>Features: /</p> <p>Condition/Completeness: Complete. Good condition.</p> <p>Suitability for student projects: Not suitable for a practical project but suitable for an interpretation / display project.</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

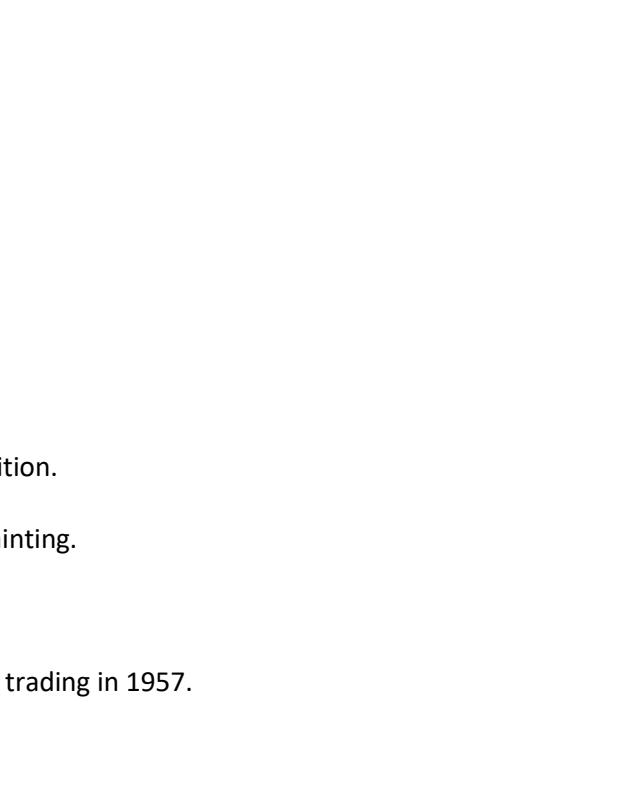
Collection: SMM/Accession no.: 2002-006(006)	Object name: Model of frame bending press	Updated/by: L. Ross
Manufacturer: Hugh Smith (Engineering) Ltd., Kilmarnock, formerly Glasgow		
Description: Model of a frame bending press made for trade exhibition. Body painted light blue, simplified form without technical details.		
Location: In storage.		
Production date: c. 1975		
Place of production: Kilmarnock		
Place of use/Acquired from: Transferred from the Ballast Trust, Johnstone. Salvaged by Ballast Trust from Hunslet Barclay Engineers, Kilmarnock. (1975-1990)		
Industry: Engineering / Shipbuilding		
Description of operation: Used to bend rather larger pieces of metal for yachts, leading to stronger construction.		
Technical details: Height 6.6 cm Length 12.5 cm Width 7.6 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: /		
Features: /		
Condition/Completeness: Good condition. Complete.		
Suitability for student projects: Not suitable for a practical project, but suitable for an interpretation / display project.		
Further documentation: [Not specified]		
Comments: [Currently no image available.]		

Collection: SMM/Accession no.: 2002-006(002)	Object name: Model of vertical plate bender	Updated/by: L. Ross
<p>Manufacturer: Hugh Smith (Engineering) Ltd., Kilmarnock, formerly Glasgow</p> <p>Description: Model of vertical plate bender made for trade exhibition. Body painted light blue, simplified form without technical details.</p> <p>Location: In storage.</p> <p>Production date: c. 1975</p> <p>Place of production: Kilmarnock</p> <p>Place of use/Acquired from: Transferred from the Ballast Trust, Johnstone. Salvaged by Ballast Trust from Hunslet Barclay Engineers, Kilmarnock. (1975-1990)</p> <p>Industry: Engineering / Shipbuilding</p> <p>Description of operation: [For bending cylinders used in the production of boilers, pressure vessels etc.]</p> <p>Technical details: Height 32 cm Length 30 cm Width 14 cm</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: /</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: Complete. Good condition.</p> <p>Suitability for student projects: Not suitable for a practical project, but suitable for an interpretation / display project.</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available.]</p>		

Collection: SMM/Accession no.: A/1983/0014	Object name: [Vertical] wood drill	Updated/by: L. Ross
Manufacturer: Ransome		
Description: Ransome drill for drilling and boring wood. Long operating lever.		
Location: On display in Linthouse Building		
Production date: [Unknown]		
Place of production: London, England		
Place of use/Acquired from: Clyde Shipping Co., Glasgow		
Industry: Shipbuilding		
Description of operation: [For drilling and boring wood.]		
Technical details: Height 142 cm Length 102 cm Width 76 cm		
Classification: Woodworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: /		
Features: /		
Condition/Completeness: Complete. Fair condition.		
Suitability for student projects: Yes. [Please contact the Scottish Maritime Museum for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: SMM/Inventory no.: 03345	Object name: Joiners morticing machine	Updated/by: L. Ross
Manufacturer: possibly Kilmarnock manufacturer.		
Description: Joiners morticing machine		
Location: On display in Linthouse Building.		
Production date: Unknown		
Place of production: Unknown		
Place of use/Acquired from: Unknown		
Industry: Joinery		
Description of operation: [For cutting woodworking joints.]		
Technical details: [Not specified]		
Classification: Woodworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: /		
Features: /		
Condition/Completeness: [Not specified. Please contact the Scottish Maritime Museum for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: [Plate on the machine indicates "Carrona" as manufacturer, which could refer to The Carron Company on the Carron Works, Falkirk.]		



Collection: SMM/Accession no.: A/1983/0016	Object name: Joiners morticing machine	Updated/by: L. Ross
<p>Manufacturer: Alexander Mathieson & Sons</p> <p>Description: Morticing machine number 737, painted blue and red and marked 'Saracen Tool Works' with crescent motif. Operating lever with counterweight. This hand morticing machine is typical of Mathieson's pattern.</p> <p>Location: On display in Linthouse Building</p> <p>Production date: c. 1885</p> <p>Place of production: Saracen Works, Glasgow</p> <p>Place of use/Acquired from: Machine once owned by Kingshill Colliery. Acquired from Strathclyde Regional Council.</p> <p>Industry: Coal mining</p> <p>Description of operation: Used to cut woodworking joints.</p> <p>Technical details: Height 183 cm Length 76 cm Width 60 cm</p> <p>Classification: Woodworking</p> <p>Type: [Not specified]</p> <p>Drive: Hand operated</p> <p>Attachments: /</p> <p>Features: /</p> <p>Condition/Completeness: Complete. Good condition.</p> <p>Suitability for student projects: Suitable for repainting.</p> <p>Further documentation: [Not specified]</p> <p>Comments: Alexander Mathieson & Sons ceased trading in 1957.</p>		

Collection: SRPS/Accession no.: LDP 13	Object name: Horizontal Boring Mill	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: H W Kearns & Co</p> <p>Description: Horizontal Boring Mill</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Manchester, England</p> <p>Place of use/Acquired from: Falkirk Sanitary & Brass in 1975.</p> <p>Industry: Supplier of Sanitary pipework and fittings.</p> <p>Description of operation: For cutting metal.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete, used occasionally. Drive arrangement heavily guarded to allow operation.</p> <p>Suitability for student projects: [Not specified. Please contact the SRPS for further assessment.]</p> <p>Further documentation: Operators manual, maintenance record sheet.</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Collection: SRPS/Accession no.: LDP 12	Object name: Vertical Boring Mill	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Webster [Bennett Ltd]</p> <p>Description: Vertical Boring Mill</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Oldbury, West Midlands, England</p> <p>Place of use/Acquired from: [Not specified]</p> <p>Industry: [Not specified]</p> <p>Description of operation: For cutting metal.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Machine complete, but out of use due to continual fault in hydraulic system. Decision awaited as to repair or dispose.</p> <p>Suitability for student projects: [Currently not suitable, but could be used for restoring the hydraulic drive system. Please contact the SRPS for further assessment.]</p> <p>Further documentation: Operators manual, parts list, maintenance record sheet.</p> <p>Comments: /</p>		

Collection: SRPS/Accession no.: LDS 06	Object name: Nibbler	Updated/by: SRPS/GRL 09/2015
Manufacturer: Duplex Electric Tools		
Description: Floor mounted Nibbler		
Location: Romney Hut Workshop, Bo'ness		
Production date: [Unknown]		
Place of production: Kenley, England		
Place of use/Acquired from: Outreach, Larbert		
Industry: Engineering		
Description of operation: Cutting material.		
Technical details: [Not specified]		
Classification: Metalworking		
Type: Cutting		
Drive: Electric 3 phase		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Complete, but stored.		
Suitability for student projects: [Not specified. Please contact SRPS for further assessment.]		
Further documentation: Maintenance Record Sheet		
Comments: /		

Collection: SRPS/Accession no.: LDP 23	Object name: Magmount Drill	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Walter Schweizer AG</p> <p>Description: Magmount Drill</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Dudinghen, Switzerland</p> <p>Place of use/Acquired from: Found on site.</p> <p>Industry: [Unknown]</p> <p>Description of operation: Drilling or reaming holes.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Type Sem 50R</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and used regularly although requires some attention to magnetic capability.</p> <p>Suitability for student projects: [Suitable. Please contact SRPS for further assessment.]</p> <p>Further documentation: Maintenance Record Sheet.</p> <p>Comments: /</p>		

Collection: SRPS/Accession no.: LDP 24	Object name: Magmount Drill	Updated/by: SRPS/GRL 09/2015
<p>Manufacturer: ALFRA Ltd</p> <p>Description: Magmount Drilling Machine</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Hockenheim, Germany</p> <p>Place of use/Acquired from: Purchased from AKRO Plant Hire, Livingston</p> <p>Industry: [Not specified]</p> <p>Description of operation: Drilling/Reaming holes in material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: For repair – motor burnt out.</p> <p>Suitability for student projects: [Restoration of motor required. Please contact the SRPS for further assessment.]</p> <p>Further documentation: Operators Manual, maintenance record sheet.</p> <p>Comments: [No image available.]</p>		

Collection: SRPS/Accession no.: LDS 15	Object name: Drilling Machine	Updated/by: SRPS/GRL 09/2015
Manufacturer: Alfred Herbert Ltd		
Description: 3 headed Pillar Drill		
Location: Romney Hut Workshop, Bo'ness		
Production date: [Unknown]		
Place of production: Coventry, England		
Place of use/Acquired from: [Not specified]		
Industry: [Not specified]		
Description of operation: Drilling holes in material.		
Technical details: [Not specified]		
Classification: Metalworking		
Type: 3 headed type		
Drive: Electric 3 phase		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Complete, but stored.		
Suitability for student projects: [Not specified. Please contact the SRPS for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: SRPS/Accession no.: LDS 04	Object name: Pillar Drill	Updated/by: SRPS/GRL 08/2015
Manufacturer: Meddings		
Description: ½" Floor standing Drill		
Location: Romney Hut Workshop, Bo'ness		
Production date: [Unknown]		
Place of production: Ivybridge, Devon, England		
Place of use/Acquired from: Outreach, Larbert		
Industry: Engineering/Education		
Description of operation: Drilling and cutting holes in material.		
Technical details: [Not specified]		
Classification: Metalworking		
Type: Cutting		
Drive: Electric 3 phase		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Dismantled and stored.		
Suitability for student projects: [Not specified. Please contact the SRPS for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: SRPS/Accession no.: LDS 26	Object name: Pillar Drill	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Fobco</p> <p>Description: ½" Floor standing Drill</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Swadlincote, Burton on Trent, England</p> <p>Place of use/Acquired from: Hermitage Academy, Helensburgh</p> <p>Industry: Education</p> <p>Description of operation: Drilling and cutting holes in material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Dismantled and stored.</p> <p>Suitability for student projects: [Not specified. Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [No image available.]</p>		

Collection: SRPS/Accession no.: LDP 07	Object name: Radial Arm Drill	Updated/by: SRPS/GRL 8/2015
<p>Manufacturer: William Asquith</p> <p>Description: Radial Arm Drill</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Halifax, England</p> <p>Place of use/Acquired from: Auction at Jig Borers (Scotland) Ltd Motherwell</p> <p>Industry: Engineering</p> <p>Description of operation: Drilling/Reaming holes in metal.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and in use on a regular basis.</p> <p>Suitability for student projects: [Suitable. Please contact SRPS for further assessment.]</p> <p>Further documentation: Maintenance record</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Collection: SRPS/Accession no.: LDP 33	Object name: Radial Arm Drill	Updated/by: SRPS/GRL 08/2015
Manufacturer: Quatters & Smith		
Description: Radial Arm Drill		
Location: Romney Hut Workshop, Bo'ness		
Production date: [Unknown]		
Place of production: Barnsley, [England]		
Place of use/Acquired from: Romec Ltd, [Stockport, England]		
Industry: Engineering Arm of Royal Mail		
Description of operation: Drilling material.		
Technical details: [Not specified]		
Classification: Metalworking		
Type: Cutting		
Drive: Electric 3 phase		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Complete and used regularly.		
Suitability for student projects: [Suitable. Please contact SRPS for further assessment.]		
Further documentation: Maintenance Record Sheet		
Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]		



Collection: SRPS/Accession no.: LDS 17	Object name: Radial Arm Drill	Updated/by: SRPS/GRL 08/2015
Manufacturer: Kitchen & Walker		
Description: Radial Arm Drill		
Location: Romney Hut Workshop, Bo'ness		
Production date: [Unknown]		
Place of production: Halifax, England		
Place of use/Acquired from: Virgin Trains Polmadie in 2001.		
Industry: Transport		
Description of operation: Drilling and reaming holes in material.		
Technical details: [Not specified]		
Classification: Metalworking		
Type: Drilling and Reaming		
Drive: Electric 3 phase		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Complete and stored.		
Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: SRPS/Accession no.: LDS 27	Object name: Radial Arm Drill	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Meddings</p> <p>Description: Type MF 5/3 Radial Arm Drill</p> <p>Location: Stored in SRE2 at Bo'ness.</p> <p>Production date: [Unknown]</p> <p>Place of production: Ivybridge, England</p> <p>Place of use/Acquired from: Outreach, Larbert</p> <p>Industry: Engineering</p> <p>Description of operation: Drilling holes in material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking.</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete, but not commissioned.</p> <p>Suitability for student projects: [Currently not suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [No image available.]</p>		

Collection: SRPS/Accession no.: LDS 08	Object name: Power Hammer	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Samuel Platt</p> <p>Description: Power Hammer</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Wednesbury, West Midlands, England</p> <p>Place of use/Acquired from: [Not specified]</p> <p>Industry: [Not specified]</p> <p>Description of operation: Forging material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Forging material/air hammer</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete, but requires restoration, stored outside.</p> <p>Suitability for student projects: [Suitable for e.g. restoration project. Please contact SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: SRPS/Accession no.: LDS 24	Object name: Power Hammer	Updated/by: SRPS/GRL 09/2015
<p>Manufacturer: B & S Massey</p> <p>Description: Power Hammer</p> <p>Location: Strathspey Railway, Aviemore</p> <p>Production date: [Unknown]</p> <p>Place of production: Manchester, England</p> <p>Place of use/Acquired from: [Not specified]</p> <p>Industry: [Not specified]</p> <p>Description of operation: Shaping material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Shaping/air hammer</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and used regularly.</p> <p>Suitability for student projects: [Suitable. Please contact SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [No image available.]</p>		

Collection: SRPS/Accession no.: LDP 22	Object name: Bench Grinder	Updated/by: SRPS/GRL 08/2015
Manufacturer: AB Arboga		
Description: Bench Grinder		
Location: Romney Hut Workshop, Bo'ness		
Production date: [Unknown]		
Place of production: Arboga, Sweden		
Place of use/Acquired from: [Unknown]		
Industry: [Not specified]		
Description of operation: Shaping material.		
Technical details: [Not specified]		
Classification: Metalworking		
Type: Grinding		
Drive: Electric 3 phase		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Complete and used regularly.		
Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]		
Further documentation: Maintenance Record Sheet		
Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]		

Collection: SRPS/Accession no.: LDP 62	Object name: Bench Grinder	Updated/by: SRPS/GRL 09/2015
<p>Manufacturer: B Elliott & Co</p> <p>Description: 10" Selecta model</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Willesden, London</p> <p>Place of use/Acquired from: [Not specified]</p> <p>Industry: [Not specified]</p> <p>Description of operation: Grinding material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Grinding</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and used regularly.</p> <p>Suitability for student projects: [Suitable. Please contact SRPS for further assessment.]</p> <p>Further documentation: Maintenance Record Sheet</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Collection: SRPS/Accession no.: LDP 108	Object name: Linisher	Updated/by: SRPS/GRL 09/2015
<p>Manufacturer: Willow</p> <p>Description: Whippetoff Linisher</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Unable to trace</p> <p>Place of use/Acquired from: Hermitage Academy, Helensburgh</p> <p>Industry: Education</p> <p>Description of operation: [For improving the finish of surfaces and/or polishing surfaces by applying grinding techniques.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Finishing</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete, about to be commissioned.</p> <p>Suitability for student projects: [Suitable. Please contact SRPS for further assessment.]</p> <p>Further documentation: Maintenance Record Sheet</p> <p>Comments: /</p>		

Collection: SRPS/Accession no.: LDS 28	Object name: Linisher	Updated/by: SRPS/GRL 09/2015
<p>Manufacturer: RJH Finishing Systems</p> <p>Description: Bandface Linishing Machine</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Heckmondwike, England</p> <p>Place of use/Acquired from: Hermitage Academy Helensburgh</p> <p>Industry: Education</p> <p>Description of operation: [For improving the finish of surfaces and/or polishing surfaces by applying grinding techniques.] Sanding material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Sanding</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete, but requires checked and installed.</p> <p>Suitability for student projects: [Currently not suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [No image available.]</p>		

Collection: SRPS/Accession no.: LDP 21	Object name: Floor mounted Grinder	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Lumsden Machine Co</p> <p>Description: Floor mounted grinder</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Not specified]</p> <p>Place of production: Lumsden Machine Co, Gateshead</p> <p>Place of use/Acquired from: Rolls Royce Hillington</p> <p>Industry: Aero Engine Production</p> <p>Description of operation: Grinding material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Grinding/floor mounted</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and used regularly.</p> <p>Suitability for student projects: [Suitable. Please contact SRPS for further assessment.]</p> <p>Further documentation: Maintenance Record Sheet</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Collection: SRPS/Accession no.: LDP 18	Object name: Surface Grinder	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Churchill Machine Tool Co</p> <p>Description: Surface Grinder</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Altringham, England</p> <p>Place of use/Acquired from: [Not specified]</p> <p>Industry: [Not specified]</p> <p>Description of operation: Grinding flat surfaces.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Grinding</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and used regularly.</p> <p>Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: Operators Manual, Maintenance Record Sheet</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Collection: SRPS/Accession no.: LDP 106	Object name: Grinder	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Jones & Shipman</p> <p>Description: Tool & Cutter Grinder</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Leicester, England</p> <p>Place of use/Acquired from: Clydebank College in 2007</p> <p>Industry: Education</p> <p>Description of operation: Grinding cutting tools.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Grinding</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and used regularly.</p> <p>Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: Operators Manual, Maintenance Record Sheet.</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site. Currently no image available.]</p>		

Collection: SRPS/Accession no.: LDP 147	Object name: Tool Grinder	Updated/by: SRPS/GRL 09/2015
<p>Manufacturer: RJH Finishing Systems</p>		
<p>Description: Trim Tool Tool Grinder</p>		
<p>Location: Romney Hut Workshop, Bo'ness</p>		
<p>Production date: [Unknown]</p>		
<p>Place of production: Heckmondwike, England</p>		
<p>Place of use/Acquired from: Hermitage Academy Helensburgh</p>		
<p>Industry: Education</p>		
<p>Description of operation: Grinding cutting tools.</p>		
<p>Technical details: [Not specified]</p>		
<p>Classification: Metalworking</p>		
<p>Type: Grinding</p>		
<p>Drive: Electric 3 phase</p>		
<p>Attachments: [Not specified]</p>		
<p>Features: /</p>		
<p>Condition/Completeness: Complete, about to be commissioned.</p>		
<p>Suitability for student projects: [Suitable. Please contact SRPS for further assessment.]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Collection: SRPS/Accession no.: LDS 18	Object name: Guillotine	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: F J Edwards</p> <p>Description: 4' Manual Guillotine</p> <p>Location: Stored out of use in SRE2 at Bo'ness.</p> <p>Production date: [Unknown]</p> <p>Place of production: London, England</p> <p>Place of use/Acquired from: Outreach, Larbert in 1995.</p> <p>Industry: Engineering</p> <p>Description of operation: Shearing material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Shearing</p> <p>Drive: Manual</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete, but out of use.</p> <p>Suitability for student projects: [Restoration to working condition required. Please contact SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [No image available.]</p>		

Collection: SRPS/Accession no.: LDS 14	Object name: Capstan Lathe	Updated/by: SRPS/GRL 09/2015
<p>Manufacturer: H W Ward</p> <p>Description: Model 7D Capstan Lathe</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Birmingham, England</p> <p>Place of use/Acquired from: [Not specified]</p> <p>Industry: [Not specified]</p> <p>Description of operation: Cutting material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Understood complete, but stored outside.</p> <p>Suitability for student projects: [Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Currently no image available, machine is stored covered on the site.]</p>		

Collection: SRPS/Accession no.: LDS 23	Object name: Capstan Lathe	Updated/by: SRPS/GRL 09/2015
Manufacturer: Alfred Herbert Ltd		
Description: 2D Capstan Lathe		
Location: Romney Hut Workshop, Bo'ness		
Production date: [Not specified]		
Place of production: Coventry, England		
Place of use/Acquired from: [Unknown]		
Industry: [Not specified]		
Description of operation: Cutting material.		
Technical details: [Not specified]		
Classification: Metalworking		
Type: Cutting		
Drive: Electric 3 phase		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Complete, but stored.		
Suitability for student projects: [Please contact the SRPS for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: SRPS/Accession no.: LDP 11	Object name: Centre Lathe	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: H Wohlenberg</p> <p>Description: Type W 45 Centre Lathe</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Hannover, Germany</p> <p>Place of use/Acquired from: Rolls Royce, Hillington in 1996.</p> <p>Industry: Production of Aero Engines</p> <p>Description of operation: Metal Cutting Lathe</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and in regular use.</p> <p>Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: Maintenance record sheet.</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Collection: SRPS/Accession no.: LDS 16	Object name: Centre lathe	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: George Swift</p> <p>Description: Centre Lathe</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Halifax, England</p> <p>Place of use/Acquired from: Virgin Trains Polmadie in 2001.</p> <p>Industry: Transport</p> <p>Description of operation: Cutting material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and stored.</p> <p>Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: SRPS/Accession no.: LDP 10	Object name: Lathe	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Lodge & Shipley</p> <p>Description: 14" Gap Bed Lathe</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: 1925</p> <p>Place of production: Cincinnati, Ohio, USA</p> <p>Place of use/Acquired from: Kelvin Diesels, Glasgow in 1982.</p>		<p>Industry: Engineering – production of Diesel IC Engines.</p> <p>Description of operation: Metal cutting lathe</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete in regular use.</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: Maintenance record sheet.</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>

Collection: SRPS/Accession no.: LDS 01	Object name: Wheel Lathe	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Craven Brothers</p> <p>Description: 6' Wheel Lathe</p> <p>Location: Outside Romney Hut Workshop, Bo'ness</p> <p>Production date: 1894</p> <p>Place of production: Manchester, England</p> <p>Place of use/Acquired from: British Railways, Heaton Shed, Newcastle 1975</p> <p>Industry: Transport</p> <p>Description of operation: Cutting material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Understood to be complete, but in a dismantled state and lying outside open to the elements.</p> <p>Suitability for student projects: [Currently not suitable, but could be assessed for restoration project. Please contact the SRPS for further information.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>	 	

Collection: SRPS/Accession no.: LDP 08	Object name: Student Lathe	Updated/by: SRPS / GRL 8/2015
<p>Manufacturer: Colchester Lathe Co</p> <p>Description: Standard Round Head Gap Bed Lathe</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: 1955</p> <p>Place of production: Colchester, England</p> <p>Place of use/Acquired from: Romec Engineering in 1997.</p> <p>Industry: Engineering arm of Royal Mail.</p> <p>Description of operation: [For turning and cutting metal.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and in regular use.</p> <p>Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: Workshop Manual, Parts list, Maintenance record.</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Collection: SRPS/Accession no.: LDP 09	Object name: Student Lathe	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Colchester Lathe Co</p> <p>Description: Mascot 1600 Lathe</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Colchester, England</p> <p>Place of use/Acquired from: ROMEC, Rutherglen in 1998</p> <p>Industry: Engineering arm of Royal Mail.</p> <p>Description of operation: Metal turning lathe.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and in regular use.</p> <p>Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: Operating Manual, Parts list, Maintenance record sheet</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Collection: SRPS/Accession no.: LDP 109	Object name: Student Lathe	Updated/by: SRPS / GRL 8/2015
<p>Manufacturer: Colchester Lathe Co</p> <p>Description: Standard Round Head Gap Bed Lathe</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: 1955</p> <p>Place of production: Colchester, England</p> <p>Place of use/Acquired from: Anniesland College Glasgow in 2002.</p> <p>Industry: Education</p> <p>Description of operation: [For turning and cutting metal.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting/gap-bed</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and available for use.</p> <p>Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: Workshop Manual, Parts list, Maintenance record.</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Collection: SRPS/Accession no.: LDP 19	Object name: Horizontal Milling Machine	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Cincinnati Milling Machine Co</p> <p>Description: Horizontal milling machine</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [presumably after the WW2]</p> <p>Place of production: Cincinnati, Ohio, USA</p> <p>Place of use/Acquired from: Napier College Edinburgh in 1989.</p> <p>Industry: Education</p> <p>Description of operation: Cutting material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and used regularly.</p> <p>Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: Operators Manual, Maintenance Record Sheet</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Accession Number: LDP 16	Object name: [Vertical] milling machine	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: B Elliott & Co</p> <p>Description: [Heavy duty vertical milling machine]</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Willesden, London, England</p> <p>Place of use/Acquired from: [Unknown]</p> <p>Industry: [Not specified]</p> <p>Description of operation: Milling material</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and used regularly.</p> <p>Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: Operators Manual, Maintenance Record Sheet</p> <p>Comments: /</p>		

Collection: SRPS/Accession no.: LDP 40	Object name: Box & Pan Folder	Updated/by: SRPS/GRL 09/2015
Manufacturer: Unknown Description: 6' Manual Box & Pan Folder Location: Romney Hut Workshop, Bo'ness Production date: Unknown Place of production: Unknown Place of use/Acquired from: Unknown Industry: Unknown		Description of operation: Folding material. Technical details: [Not specified] Classification: Metalworking Type: Folding Drive: Manual Attachments: / Features: / Condition/Completeness: Complete and used regularly. Suitability for student projects: [Not specified. Please contact the SRPS for further assessment.] Further documentation: Maintenance Record Sheet Comments: /

Collection: SRPS/Accession no.: LDS 18	Object name: Folding machine	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: F J Edwards</p> <p>Description: Trueform 600 Folding machine</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Not specified]</p> <p>Place of production: London, England</p> <p>Place of use/Acquired from: Falkirk College</p> <p>Industry: Education</p> <p>Description of operation: Folding material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Folding</p> <p>Drive: Manual lever</p> <p>Attachments: /</p> <p>Features: /</p> <p>Condition/Completeness: Incomplete, no fingers. Unable to source replacements at the moment.</p> <p>Suitability for student projects: [Currently not suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: SRPS/Accession no.: LDS 13	Object name: Cropping, Punching and Dishing Machine	Updated/by: SRPS/GRL 09/2015
<p>Manufacturer: H Pels & Co</p> <p>Description: Cropping, Punching and Dishing machine</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Glasgow, Scotland</p> <p>Place of use/Acquired from: Anniesland College</p> <p>Industry: Education</p> <p>Description of operation: Cropping, punching & dishing material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cropping, Punching and Shaping</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete, but requires checked and installation.</p> <p>Suitability for student projects: [Currently not suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: SRPS/Accession no.: LDS 03	Object name: Cropping and shearing machine	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: FICEP</p> <p>Description: Multi use cropping and shearing machine</p> <p>Location: Outside Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Varesse, Italy</p> <p>Place of use/Acquired from: Outreach, Larbert</p> <p>Industry: Engineering/Education</p> <p>Description of operation: Shearing material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Shearing</p> <p>Drive: Electric 3 phase</p> <p>Attachments: /</p> <p>Features: /</p> <p>Condition/Completeness: Complete, but not put into service.</p> <p>Suitability for student projects: [Suitable for e.g. restoration project. Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: SRPS/Accession no.: LDS 29	Object name: Universal sheet metal machine	Updated/by: SRPS/GRL 09/2015
<p>Manufacturer: Pullmax Inc</p> <p>Description: Universal sheet metal machine</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Chicago, Illinois</p> <p>Place of use/Acquired from: Falkirk College</p> <p>Industry: Education</p> <p>Description of operation: Shearing etc. material</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Shearing etc.</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Stored outside, understood complete, but will require checked and installed in workshop.</p> <p>Suitability for student projects: [Currently not suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: SRPS/Accession no.: LDP 20	Object name: Band saw	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Addison Saw</p> <p>Description: Bandmaster band saw</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Stourbridge, West Midlands, England</p> <p>Place of use/Acquired from: [Unknown]</p> <p>Industry: [Not specified]</p> <p>Description of operation: [For cutting metal. Used for structural steel works.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete and used regularly.</p> <p>Suitability for student projects: [Suitable. Please contact SRPS for further assessment.]</p> <p>Further documentation: Maintenance Record Sheet</p> <p>Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]</p>		

Collection: SRPS/Accession no.: LDP 148	Object name: Chop saw	Updated/by: SRPS/GRL 09/2015
Manufacturer: Motori Elettrici		A photograph of a green chop saw machine, model ETS 125, standing on a black metal frame. The machine has a large green base and a light green upper assembly. It is positioned in a workshop environment with various tools and equipment visible in the background.
Description: Chop saw		
Location: Romney Hut Workshop, Bo'ness		
Production date: [Unknown]		
Place of production: Bologna, Italy		
Place of use/Acquired from: [Unknown]		
Industry: [Not specified]		
Description of operation: Cutting metal.		
Technical details: [Not specified]		
Classification: Metalworking		
Type: Cutting		
Drive: Electric 3 phase		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Complete and used irregularly.		
Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: SRPS/Accession no.: LDP 15	Object name: Shaping machine	Updated/by: SRPS/GRL 08/2015
Manufacturer: Edgwick Description: Shaper Location: Romney Hut Workshop, Bo'ness Production date: [Unknown] Place of production: Alfred Herbert Ltd. Coventry Place of use/Acquired from: Napier College Edinburgh in 1989. Industry: Education Description of operation: Shaping material. Technical details: [Not specified] Classification: Metalworking Type: Cutting Drive: Electric 3 phase Attachments: [Not specified] Features: / Condition/Completeness: Complete and used regularly. Suitability for student projects: [Suitable. Please contact the SRPS for further assessment.] Further documentation: Operators Manual, Maintenance Record Sheet Comments: [The machine tool is used for restoration purposes in the workshop on the Bo'ness site.]		

Collection: SRPS/Accession no.: LDP 52	Object name: Shaping machine	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: Butler Machine Tool Co</p>		
<p>Description: Shaper</p>		
<p>Location: Running Shed Workshop, Bo'ness</p>		
<p>Production date: [Unknown]</p>		
<p>Place of production: Halifax, England</p>		
<p>Place of use/Acquired from: [Not specified]</p>		
<p>Industry: [Not specified]</p>		
<p>Description of operation: Shaping material.</p>		
<p>Technical details: [Not specified]</p>		
<p>Classification: Metalworking</p>		
<p>Type: Cutting</p>		
<p>Drive: Electric 3 phase</p>		
<p>Attachments: [Not specified]</p>		
<p>Features: /</p>		
<p>Condition/Completeness: Complete, but out of use at the moment.</p>		
<p>Suitability for student projects: [Currently not suitable. Please contact the SRPS for further assessment.]</p>		
<p>Further documentation: [Not specified]</p>		
<p>Comments: /</p>		

Collection: SRPS/Accession no.: LDS 11	Object name: Shaping machine	Updated/by: SRPS/GRL 09/2015
<p>Manufacturer: B Elliott & Co</p> <p>Description: Small 10M [Shaper]</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Willesden, London, England</p> <p>Place of use/Acquired from: Hermitage Academy, Helensburgh</p> <p>Industry: Education</p> <p>Description of operation: Cutting material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete, but requires installed and checked.</p> <p>Suitability for student projects: [Currently not suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		 

Collection: SRPS/Accession no.: LDS 31	Object name: Shaping machine	Updated/by: SRPS/GRL 09/2015
<p>Manufacturer: B Elliott & Co</p> <p>Description: 14 S [Shaping machine]</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Unknown]</p> <p>Place of production: Willesden, London, England</p> <p>Place of use/Acquired from: Anniesland College, Glasgow</p> <p>Industry: Education</p> <p>Description of operation: Cutting material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete, but requires installed and checked.</p> <p>Suitability for student projects: [Currently not suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: SRPS/Accession no.: LDS 32	Object name: Shaping machine	Updated/by: SRPS/GRL 09/2015
Manufacturer: B Elliott & Co		
Description: Model 14MR Shaper		
Location: Romney Hut Workshop, Bo'ness		
Production date: [Unknown]		
Place of production: Willesden, London, England		
Place of use/Acquired from: Anniesland College, Glasgow, Scotland		
Industry: Education		
Description of operation: Cutting material		
Technical details: [Not specified]		
Classification: Metalworking		
Type: Cutting		
Drive: Electric 3 phase		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Complete, but requires installed and checked.		
Suitability for student projects: [Currently not suitable. Please contact the SRPS for further assessment.]		
Further documentation: [Not specified]		
Comments: [Currently no image available.]		

Collection: SRPS/Accession no.: LDS 25	Object name: Wooden key making machine	Updated/by: SRPS/GRL 08/2015
<p>Manufacturer: W A Fell</p> <p>Description: Machine for manufacturing oak keys for railway chairs</p> <p>Location: Romney Hut Workshop, Bo'ness</p> <p>Production date: [Not specified]</p> <p>Place of production: Windermere, England</p> <p>Place of use/Acquired from: Caledonian Railway (Brechin) Ltd</p> <p>Industry: Heritage Railway</p> <p>Description of operation: Cutting material.</p> <p>Technical details: [Not specified]</p> <p>Classification: Woodworking</p> <p>Type: Cutting</p> <p>Drive: Electric 3 phase</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Incomplete and without any operating instructions. Presently lying outside deteriorating.</p> <p>Suitability for student projects: [Currently not suitable. Please contact the SRPS for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		



Collection: Shetland Museum/Accession no.: A91-2008	Object name: Pillar Drill	Updated/by: L. Goodlad
Manufacturer: [Unknown]		
Description: Pillar Drill and 6 drill bits. The large flat drill was made from a cold chisel by the donor's father Jock Ratter.		
Location: Shetland Museum, offsite store		
Production date: [Unknown]		
Place of production: [Unknown]		
Place of use/Acquired from: Malakoff Ltd, North Ness, Lerwick; Jock Ratter, North Biggins, Foula		
Industry: Shipwrights; Blacksmith		
Description of operation:		
Technical details: [Not specified]		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: [Not specified]		
Condition/Completeness: [Currently dismantled. Please contact Shetland Museum for further assessment.]		
Suitability for student projects: [Currently not suitable.]		
Further documentation: [Not specified]		
Comments: No image available.		

Collection: Shetland Museum/Accession no.: IMP 2015.216	Object name: Carpenter's Lathe	Updated/by: L. Goodlad
<p>Manufacturer: Tammie Umphray</p> <p>Description: Woodworking lathe: The device comprises the platform with headstock, the moving tailstock, and flywheel. The linkage to the treadle is missing, as is the tool rest.</p> <p>Location: Shetland Museum, Crofthouse Museum, Dunrossness, Shetland</p> <p>Production date: 1890s – 1910s</p> <p>Place of production: The Gravins, Foula</p> <p>Place of use/Acquired from: As above</p> <p>Industry: Joinery</p> <p>Description of operation: Woodturning</p> <p>Technical details: Height 1520 mm Length 1200 mm Width 530 mm</p> <p>Classification: Woodworking</p> <p>Type: [Not specified] Drive: Manual Attachments: [Not specified]</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: Fair</p> <p>Suitability for student projects: [Not specified. Please contact Shetland Museum for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Tammie Umphray lived on the island of Foula and probably used this lathe in his private workshop for personal use or occasional jobs for friends and neighbours. The following link shows a photo of his house with attached workshop: <a a="" and="" behind="" carpenter's="" data-bbox="933 309 1405 617" flywheel="" href="http://photos.shetland-museum.org.uk/index.php?a=ViewItem&key=SXsiTil6NTUyLCJQIjp7InZhbHVljoI2JhdmlucylsIm9wZXJhdG9yljoiMSIsImZ1enp5UHJlZml4TGVuZ3RoiMyIsImZ1enp5TWluU2ltaWxhcmI0eSI6MC41LCJtYXhTdWdnZXN0aW9ucyl6ljUiLCJhbHdheXNTdWdnZXN0IjpudWxsfx0&pg=3&WINID=1446555248415#SxclEeEvJs4AAAFQzWkjGQ/26526]</p> </td><td>  </p>		

Collection: Summerlee Museum / Accession no.: COTSL-1987-0033	Object name: Horizontal drilling, boring and tapping machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: G&A Harvey and Co</p> <p>Description: Horizontal drilling, boring and tapping machine</p> <p>Location: In storage</p> <p>Production date: c.1920</p> <p>Place of production: Govan, Glasgow</p> <p>Place of use/Acquired from: Scott Lithgow, Cartsburn, Greenock</p> <p>Industry: [Not specified]</p> <p>Description of operation:</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum / Accession no.: COTSL-1992-0088-014	Object name: Boiler shell and butt strap drilling machine	Updated/by: M. Allan/J. Parkes
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Manufacturer: Thomas Hudson and Co

Description: Boiler shell and butt strap drilling machine

Location: On outside display (Engineering Pavilion)

Production date: 1910

Place of production: Coatbridge

Place of use/Acquired from: Thomas Hudson and Co, boilermakers, Coatbridge

Industry: Boilermaking

Description of operation: [For drilling holes in metal.]

Technical details:

Drill (H&W&DD): 140 x 370 x 140

Table (H&W&DD): 70 x 290 x 290



Classification: Metalworking

Type: [Not specified]

Drive: [Not specified]

Attachments: [Not specified]

Features: /

Condition/Completeness: The end of the drive screw for raising and lowering the saddle is bent.

Suitability for student projects: [Not specified. Please contact Summerlee museum for further assessment.]

Further documentation: [Not specified]

Comments: The drill and table are currently displayed separately in the Engineering Pavilion.

Collection: Summerlee Museum / Accession no.: NN	Object name: Portable drilling machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Staveley Machine Tool Co	Description: Portable drilling machine	 A black and white photograph showing a large, heavy-duty industrial machine, specifically a portable drilling machine, situated in a large factory or workshop. The machine is mounted on a heavy base and features a tall, vertical column with various mechanical components and a worktable. The background shows the complex steel framework and structural elements of the industrial building.

Location: In storage

Production date: 1960s

Place of production: [Not specified]

Place of use/Acquired from: Murray
and Paterson, Coatbank Engine
Works, Coatbridge

Industry: General Engineering

Description of operation: [For boring
holes in metal.]

Technical details:

Height 325 cm

Width 125 cm

Depth 290

Classification: Metalworking

Type: [Not specified]

Drive: [Not specified]

Attachments: [Not specified]

Features: /

Condition/Completeness: Only a small area of the original paintwork remains; various handles are missing/incomplete.

Suitability for student projects: [Not specified]

Further documentation: [Not specified]

Comments: This machine replaced an earlier portable drilling machine at Murray and Paterson.

Collection: Summerlee Museum /Accession no.: COTSL-1992-0088-008	Object name: Large radial drilling machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Tullis</p> <p>Description: Radial drilling machine</p> <p>Location: On outside display</p> <p>Production date: c. 1930</p> <p>Place of production: Clydebank</p> <p>Place of use/Acquired from: Thomas Hudson and Co, boilermakers, Coatbridge</p> <p>Industry: Boilermaking</p> <p>Description of operation: [For boring holes in metal.]</p> <p>Technical details: Height 350 cm Width 270 cm Depth: 125</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: The table is separate and is one of two found on site so it is not certain if it is the one originally associated with this drill. Handles bent.</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>	 	

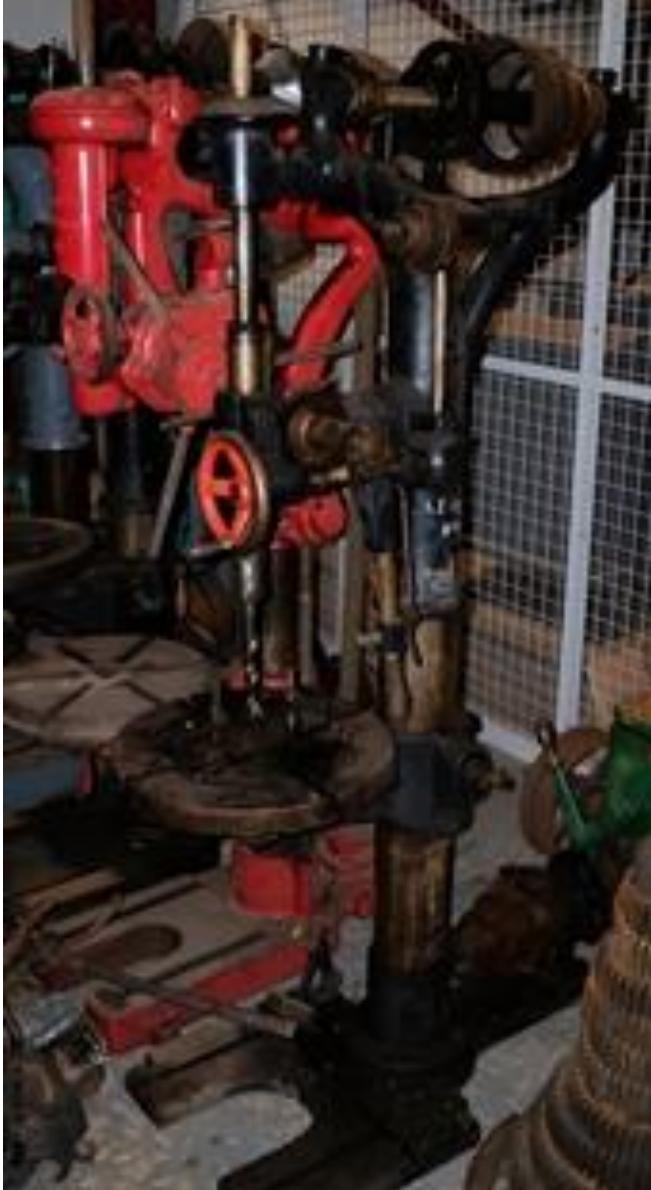
Collection: Summerlee Museum/Accession no.: COTSL-1986-0002	Object name: Radial drilling machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Loudon Brothers Description: Radial drilling machine Location: On display Production date: 1895 Place of production: Glasgow Place of use/Acquired from: Pott, Cassells and Williamson, Motherwell Industry: Sugar Machinery manufacture Description of operation: [For boring holes in metal.] Technical details: [Not specified] Classification: Metalworking Type: [Not specified] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [In good condition. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1986-0009	Object name: Radial drilling machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: possibly James Archdale and Co (bears plate of P&W MacLellan, factor)</p> <p>Description: Radial drilling machine</p> <p>Location: In storage</p> <p>Production date: c. 1910</p> <p>Place of production: possibly Birmingham</p> <p>Place of use/Acquired from: J Gardiner and Co, brass founders, Greenock</p> <p>Industry: Brass founding</p> <p>Description of operation: [For boring holes in metal.]</p> <p>Technical details: Height 200 cm Width 210 cm Depth 82 cm</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: COTSL-1992-0088-012	Object name: Radial drilling machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: WD McKendrick and Co</p> <p>Description: Radial drilling machine with direct drive from DC electric motor</p> <p>Location: On display</p> <p>Production date: c. 1900</p> <p>Place of production: Oakfield Works, Motherwell</p> <p>Place of use/Acquired from: Thomas Hudson and Co, boilermakers, Coatbridge</p> <p>Industry: Boiler making</p> <p>Description of operation: [For boring holes in metal.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: Electrically driven</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [In good condition. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: NN	Object name: Radial drilling machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Tullis		
Description: Radial drilling machine		
Location: On outside display (Engineering Pavilion)		
Production date: Unknown		
Place of production: Clydebank		
Place of use/Acquired from: Kingshill Colliery workshops		
Industry: Coal Mining		
Description of operation: [For boring holes in metal.]		
Technical details: Height 250 cm Width 210 cm Depth 125 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Good. [Please contact Summerlee museum for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: Identifying number 2096-18 – on a brass plate on the operating side.		

Collection: Summerlee Collection/Accession no.: COTSL-1987-0010-005	Object name: Vertical drilling machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Robert A King</p> <p>Description: Radial drilling machine</p> <p>Location: In storage</p> <p>Production date: c. 1880</p> <p>Place of production: Glasgow</p> <p>Place of use/Acquired from: Aberdeen Gas Works</p> <p>Industry: Gas making</p> <p>Description of operation: {For boring holes in metal.}</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Part of table broken off; cowlings still present over front gear wheels. Damage to table (chunk missing plus indentations from drill bits).</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

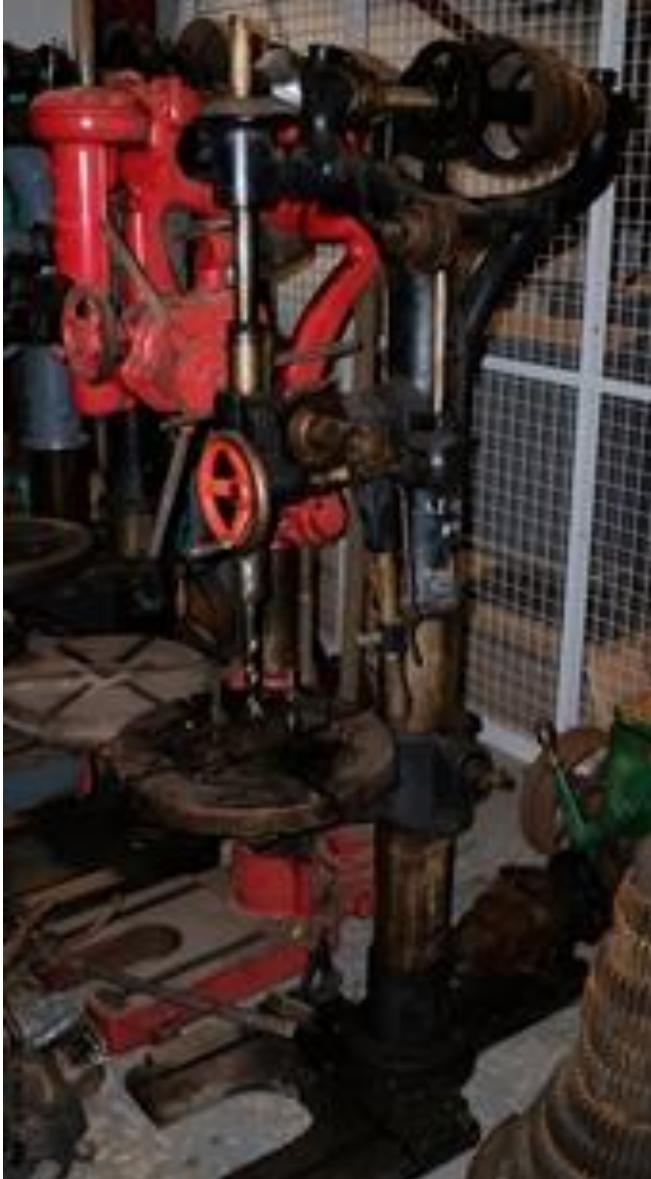
Collection: Summerlee Museum/Accession no.: LI-1987-0002-007	Object name: Vertical drilling machine	Updated/by: M. Allan / J. Parkes
Manufacturer: [Not specified]		
Description: Vertical drilling machine		
Location: In storage		
Production date: [Not specified]		
Place of production: [Not specified]		
Place of use/Acquired from: [Not specified]		
Industry: [Not specified]		
Description of operation: [For boring holes in metal.]		
Technical details: [Not specified]		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Current status unclear [Please contact Summerlee museum for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: /		

Collection: Summerlee Museum/Accession no.: NLC-1999-0150	Object name: Vertical drilling machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Unknown ('Empire' brand)</p> <p>Description: Vertical drilling machine</p> <p>Location: In storage</p> <p>Production date: c.1900-1910</p> <p>Place of production: [Not specified]</p> <p>Place of use/Acquired from: Hamilton Engineering Co (used for producing electrical control gear for cranes), then Coatbridge College.</p> <p>Industry: [Engineering/Education]</p> <p>Description of operation: Used for producing electrical control gear for cranes.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		



Collection: Summerlee Museum/Accession no.: NN	Object name: Vertical drilling machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Dempster Moore and Co Description: Vertical drilling machine Location: In storage Production date: Unknown Place of production: Glasgow Place of use/Acquired from: [Not specified] Industry: [Not specified] Description of operation: [For boring holes in metal.] Technical details: [Not specified] Classification: Metalworking Type: [Not specified] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: [Dempster Moore and Co. were rather merchants of machine tools than actual manufacturers.]		

Collection: Summerlee Museum/Accession no.: NN	Object name: Vertical drilling machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Unknown		
Description: Vertical drilling machine		
Location: On display		
Production date: Unknown		
Place of production: [Not specified]		
Place of use/Acquired from: Thomas Hudson and Co, boilermakers, Coatbridge		
Industry: Boilermaking		
Description of operation: [For boring holes in metal.]		
Technical details: [Not specified]		
Classification: Metalworking		
Type: [Originally belt driven and converted to electric drive.]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: /		

Collection: Summerlee Museum/Accession no.: NN	Object name: Vertical drilling machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Denbigh Engineering Co.</p> <p>Description: Vertical drilling machine</p> <p>Location: In storage</p> <p>Production date: [Not specified]</p> <p>Place of production: [Not specified]</p> <p>Place of use/Acquired from: Supposedly from a coach works in the Wishaw area.</p> <p>Industry: Coachbuilding</p> <p>Description of operation: [For boring holes in metal.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: NN	Object name: 'Goliath' power hammer	Updated/by: M. Allan / J. Parkes
Manufacturer: Unknown		
Description: 'Goliath' power hammer		
Location: Outside display		
Production date: Unknown		
Place of production: England		
Place of use/Acquired from: [Not specified]		
Industry: Forging		
Description of operation: [For forging and shaping metal.]		
Technical details: [Not specified]		
Classification: Metalworking		
Type: [Air hammer]		
Drive: [pneumatic]		
Attachments: [Not specified]		
Features: [Not specified]		
Condition/Completeness: [Not specified. Please contact Summerlee Museum for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: /		

Collection: Summerlee Museum/Accession no.: NN	Object name: Power hammer	Updated/by: M. Allan / J. Parkes
Manufacturer: [Not specified] Description: Power hammer Location: On outside display Production date: Unknown Place of production: [Not specified] Place of use/Acquired from: [Not specified] Industry: Forging Description of operation: [For forging and shaping metal.]		Technical details: [Not specified] Classification: Metalworking Type: [Air hammer] Drive: [pneumatic] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee Museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: One of these hammers is from William Bain & Co – there is a photo in the curatorial library showing both hammers and with info on the back.

Collection: Summerlee Museum/Accession no.: NN	Object name: Power hammer	Updated/by: M. Allan / J. Parkes
Manufacturer: Allday and Onions Description: Power hammer (3 CWT) Location: On outside display Production date: Unknown Place of production: Birmingham, England Place of use/Acquired from: [Not specified] Industry: Forging Description of operation: [For forging and shaping metal.] Technical details: [Not specified] Classification: Metalworking Type: [Air hammer] Drive: [pneumatic] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee Museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: One of these hammers is from William Bain & Co – there is a photo in the curatorial library showing both hammers and with info on the back.		

Collection: Summerlee Museum/Accession no.: COTSL-1987-0010-001	Object name: Steam hammer	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Andrew Barclay and Co</p> <p>Description: Steam hammer (with anvil and re-heating furnace)</p> <p>Location: On display</p> <p>Production date: Unknown</p> <p>Place of production: Kilmarnock</p> <p>Place of use/Acquired from: Aberdeen Gasworks</p> <p>Industry: Forging</p> <p>Description of operation: [For forging and shaping metal.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Steam hammer]</p> <p>Drive: [Driven by steam.]</p> <p>Attachments: [Not specified]</p> <p>Features: With anvil and reheating furnace</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee Museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: COTSL-1986-0014-002	Object name: Drill forge and pick sharpening machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Ingersoll Rand Ltd Description: Drill forge and pick sharpening machine (hydraulically operated) Location: On outside display Production date: [Not specified] Place of production: [Not specified] Place of use/Acquired from: Cardowan Colliery, Stepps Industry: Coalmining Description of operation: [Not specified] Technical details: [Not specified] Classification: Metalworking Type: [Not specified] Drive: Hydraulically driven Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1991-0246	Object name: Pilger rolls for tube-making	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: [Not specified]</p> <p>Description: Pilger rolls for tube-making</p> <p>Location: On display</p> <p>Production date: 1960s</p> <p>Place of production: [Not specified]</p> <p>Place of use/Acquired from: Calder Tube Works, Mossend, Lanarkshire</p> <p>Industry: Tube-making</p> <p>Description of operation: [For pilger rolling.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: Film exists of these rolls in operation.</p>		

Collection: Summerlee Museum/Accession no.: COTSL-1986-0022	Object name: Spade forge shovel press for making spades	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: [Not specified]</p> <p>Description: Spade forge shovel press for making spades.</p> <p>Location: On display</p> <p>Production date: Unknown</p> <p>Place of production: [Not specified]</p> <p>Place of use/Acquired from: Caldervale Forge, Airdrie</p> <p>Industry: Forging</p> <p>Description of operation: Used for forging metal to make spades.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee Museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>	 	

Collection: Summerlee Museum/Accession no: COTSL-1989-0023-001	Object name: Bevel gear cutting machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Gleason Works Description: Bevel gear cutting machine Location: In storage Production date: Unknown Place of production: Rochester, NY, USA Place of use/Acquired from: MacTaggart Scott and Co, Loanhead, Midlothian Industry: Naval and Marine Engineering Description of operation: [For gear cutting operations to produce a gear.]		Technical details: [Not specified] Classification: Metalworking Type: [Not specified] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /

Collection: Summerlee Museum/Accession no.: COTSL-1993-0146	Object name: Gear hobbing machine	Updated/by: M. Allan/J. Parkes
Manufacturer: Unknown Description: Gear hobbing machine Location: Outside display Production date: 1930s Place of production: Unknown Place of use/Acquired from: Anderson Brothers Ltd (Engineers), Coatbridge Industry: General Engineering Description of operation: [For gear cutting.] Technical details: [Not specified] Classification: Metalworking Type: [Not specified] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1987-0004-009	Object name: Grindstone	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Blacks Emery Wheel Co</p> <p>Description: Grindstone</p> <p>Location: On outside display</p> <p>Production date: c. 1880</p> <p>Place of production: Manchester, England</p> <p>Place of use/Acquired from: Dumfin Sawmill, Glenfruin</p> <p>Industry: Sawmill/Joinery</p> <p>Description of operation: Used to sharpen woodworking tools.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [Not specified]</p>		

Collection: Summerlee Museum/Accession no.: NN	Object name: Tool grinder	Updated/by: M. Allan / J. Parkes
Manufacturer: Thomas White and Sons		
Description: Tool grinder		
Location: On outside display		
Production date: c. 1950		
Place of production: Paisley		
Place of use/Acquired from: James Lamont and Co, Greenock		
Industry: Shipbuilding/Repairing/Engineering		
Description of operation: [For sharpening woodworking tools.]		
Technical details: [Not specified]		
Classification: Metalworking		
Type: [tool grinder]		
Drive: [electrically driven]		
Attachments: [Not specified]		
Features: [Not specified]		
Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: /		

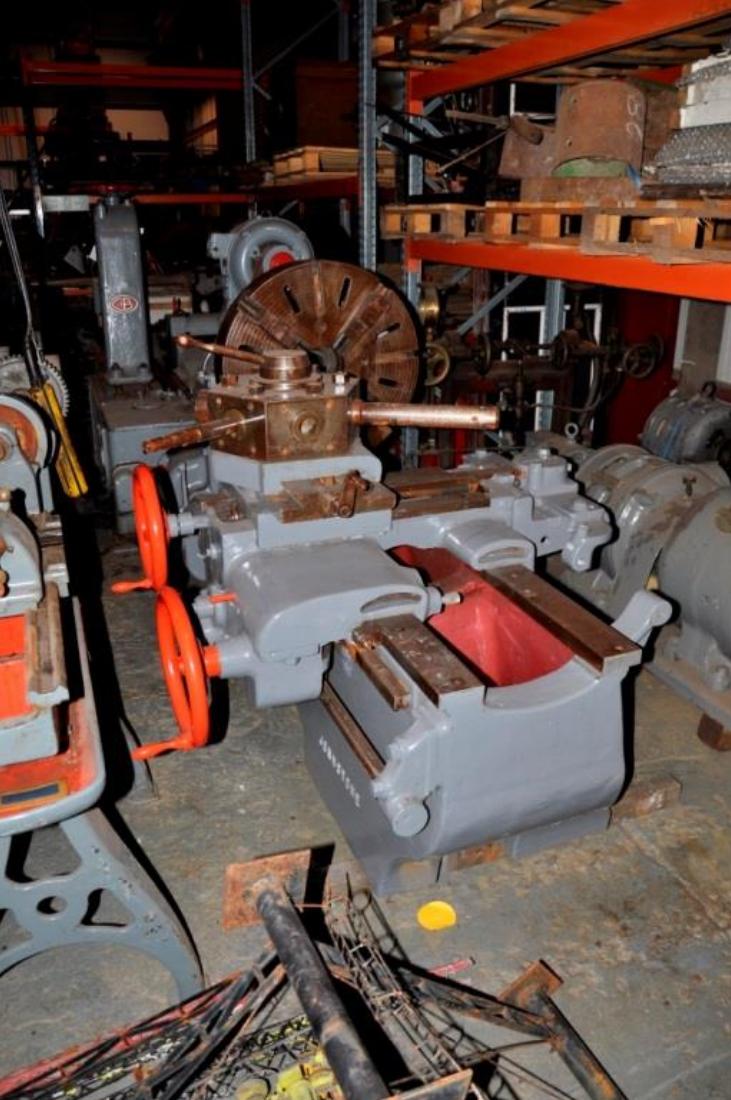


Collection: Summerlee Museum/Accession no.: COTSL-1986-0007	Object name: Brass finisher's chasing lathe	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: John Lang and Sons</p> <p>Description: Brass finishers chasing lathe ('Monkey Lathe')</p> <p>Location: On display</p> <p>Production date: c.1890</p> <p>Place of production: Johnstone, Renfrewshire</p> <p>Place of use/Acquired from: J. Gardiner and Co, Greenock</p> <p>Industry: Brassfounding</p> <p>Description of operation: [For working, turning and screwing brass materials.]</p> <p>Technical details: Height 127 cm Width 185 cm Depth 66 cm</p> <p>Classification: Metalworking</p> <p>Type: [Brass finisher's lathe]</p> <p>Drive: Flat belt drive</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession Number: NN	Object name: '1A' capstan lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: HW Ward and Co Description: '1A' capstan lathe Location: On display Production date: c.1936 Place of production: Birmingham, England Place of use/Acquired from: Kilpatrick Electrical Works, Paisley Industry: Electrical Engineering Description of operation: [For turning and cutting metal with a revolving tool holder.] Technical details: Height 125 cm Width 160 cm Depth 103 cm Classification: Metalworking Type: [Capstan lathe] Drive: Electrically driven Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: NLC-1999-0154	Object name: Capstan lathe	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Foster Machine Co</p> <p>Description: Capstan lathe for the production of pins, studs and small screws</p> <p>Location: In storage</p> <p>Production date: c.1900</p> <p>Place of production: Elkhart, Indiana, USA</p> <p>Place of use/Acquired from: Hamilton Engineering / Coatbridge College</p> <p>Industry: Education</p> <p>Description of operation: [For turning and cutting metal with a revolving tool holder.]</p> <p>Technical details: Height 120 cm Width 150 cm Depth 58 cm</p> <p>Classification: Metalworking</p> <p>Type: [Capstan lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: LOAN IN (Glasgow Museums)	Object name: Break bed lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: Crawhall and Campbell Description: Break bed lathe Location: On display Production date: c. 1860 Place of production: Glasgow Place of use/Acquired from: Thomas Tait and Co, papermakers, Inverurie Industry: Papermaking Description of operation: [For finishing holes and cutting metal with a cutting tool removing material from end of workpiece.] Technical details: Height 170 cm Width 595 cm Depth 180 cm Classification: Metalworking Type: [Facing and boring lathe] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: [The object belongs to a group of maintenance workshop machines within the Summerlee collection that were all acquired from Thomas Tait and Co, papermakers, Inverurie. The object group also includes a travelling head shaping machine and a horizontal planing machine . All of the machines were originally water-powered.]		

Collection: Summerlee Museum/Accession no.: COTSL-1986-0006	Object name: Facing and boring lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: John Lang and Sons Description: Lang boring and facing lathe Location: In storage Production date: Unknown Place of production: Johnstone, Renfrewshire Place of use/Acquired from: J J. Gardiner and Co, Greenock (acquired it c.1950) Industry: Jobbing Engineering Description of operation: [For finishing holes and cutting metal with a cutting tool removing material from end of workpiece.] Technical details: Height 144 cm Width 230 cm Depth 133 cm Classification: Metalworking Type: [Facing and boring lathe] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /	 A photograph of a grey metal facing and boring lathe. The machine has a large circular worktable at the top with several copper-colored tooling fixtures attached. A prominent red handwheel is located on the left side. The machine is situated in a workshop or storage area, with other industrial equipment and shelving visible in the background.	

Collection: Summerlee Museum/Accession no.: COTSL-1986-0005	Object name: Back-geared screw cutting lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: Rockford Lathe and Drill Co Description: Back-geared screw cutting lathe Location: In storage Production date: c.1900 Place of production: Illinois, USA Place of use/Acquired from: J Gardiner and Co, Greenock Industry: Brassfounding Description of operation: [For cutting and turning metal.] Technical details: Height 125 cm Width 212 cm Depth 75 cm Classification: Metalworking Type: [Industrial screw-cutting lathe] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1987-0004-005	Object name: Back-geared screw-cutting lathe	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: John Lang and Sons</p> <p>Description: Back-geared screw-cutting lathe</p> <p>Location: On display in Engineering Pavilion</p> <p>Production date: Unknown</p> <p>Place of production: Johnstone, Renfrewshire</p> <p>Place of use/Acquired from: Dumfin Sawmill, Glenfruin, Loch Lomond</p> <p>Industry: [Not specified]</p> <p>Description of operation: For turning and shafting.</p> <p>Technical details: Height 230 cm Width 1250 cm Depth 180 cm</p> <p>Classification: Metalworking</p> <p>Type: [Industrial screw-cutting lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Two handles missing; lubricators missing</p> <p>Suitability for student projects: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: COTSL-1986-0004	Object name: Back-geared sliding, surfacing and screw cutting lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: Reed Prentice Co	Description: Back-geared sliding, surfacing and screw cutting lathe with Norton quick change screwcutting gearbox (early example) and flat belt drive	
Location: On display in Engineering Pavilion		
Production date: c.1895		
Place of production: Worcester, Mass, USA		
Place of use/Acquired from: J. Gardiner and Co, Greenock		
Industry: Brassfounding		
Description of operation: [For cutting and turning metal.]		
Technical details: Height 135 cm Width 270 cm Depth 95 cm		
Classification: Metalworking		
Type: [Industrial screw-cutting lathe]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: Inspection plate over internal gear wheels is missing; 1 lubricator missing.		
Suitability for student projects: [Not specified. Please contact Summerlee museum for further assessment.]		
Further documentation: [Not specified]		
Comments: /		

Collection: Summerlee Museum/Accession no.: NLC-1999-0160	Object name: 'Bantam' small capacity lathe	Updated/by: Michael Allan
Manufacturer: Colchester Engineering Co		
Description: 'Bantam' small capacity lathe		
Location: In storage		
Production date: c.1920		
Place of production: Colchester, England		
Place of use/Acquired from: Hamilton Engineering / Coatbridge College		
Industry: Education		
Description of operation:		
Technical details: Height 120 cm Width 140 cm Depth 45		
Classification: Metalworking		
Type: [Industrial screw-cutting lathe]		
Drive: Belt driven		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: [Not specified]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1994-0021-001	Object name: Bench-top back-geared screw cutting lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: Unknown		
Description: Bench-top back-geared screw cutting lathe with accessories		
Location: In storage		
Production date: c. 1930		
Place of production: Unknown		
Place of use/Acquired from: Private donation, belonged to donor's father		
Industry: [Not specified]		
Description of operation: [For turning and cutting metal.]		
Technical details: [Not specified]		
Classification: Metalworking		
Type: [Industrial screw-cutting lathe.]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]		
Suitability for student projects: [Not specified]		
Further documentation: [Not specified]		
Comments: [No image available]		

Collection: Summerlee Museum/Accession no.: NLC-1999-0355	Object name: Bench-top lathe	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Unknown</p> <p>Description: Bench-top lathe</p> <p>Location: In storage</p> <p>Production date: Unknown</p> <p>Place of production: Unknown</p> <p>Place of use/Acquired from: Private donation. Belonged to a marine engineer.</p> <p>Industry: [Not specified]</p> <p>Description of operation: [For turning and cutting metal.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Industrial screw-cutting lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [No image available]</p>		

Collection: Summerlee Museum/Accession no.: NN	Object name: Lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: John Lang and Sons Description: Screw-cutting lathe Location: On display Production date: c. 1950s Place of production: Johnstone Place of use/Acquired from: Unknown Industry: Museum restoration/conservtion Description of operation: [For cutting and turning metal.] Technical details: [Not specified] Classification: Metalworking Type: [Industrial screw-cutting lathe] Drive: Flat belt drive Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: This machine is currently used in the Engineering Workshop at Summerlee and not considered part of the museum collection		

Collection: Summerlee Museum/Accession no.: COTSL-1986-0013	Object name: Long-bed screw-cutting centre lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: John Lang and Sons Description: Long-bed screw-cutting centre lathe for turning shafting Location: On display in Engineering Pavilion. Production date: c. 1880 Place of production: Johnstone Place of use/Acquired from: Murdoch MacKenzie, Motherwell - civil engineering and building Industry: General Maintenance Description of operation: For turning and shafting. Technical details: Height 130 cm Width 660 cm Depth 135 cm Classification: Metalworking Type: [Industrial screw-cutting lathe] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: Handles missing; lubricators missing. Suitability for student projects: [Not specified. Please contact Summerlee museum for further assessment.] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: NLC-2000-0401	Object name: 'Olympia' lathe	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Oscar Ehrlich, Chemnitz, Germany (used 'Olympia' name to disguise its German origins)</p> <p>Description: 'Olympia' lathe converted from treadle operation</p> <p>Location: In storage</p> <p>Production date: c.1920s/1930s</p> <p>Place of production: Chemnitz, Germany</p> <p>Place of use/Acquired from: Private donation, had belonged to a miner in Larkhall.</p> <p>Industry: Private workshop</p> <p>Description of operation: [For cutting and turning metal.]</p> <p>Technical details: Height 125 cm Width 135 cm Depth 48 cm</p> <p>Classification: Metalworking</p> <p>Type: [Industrial screw-cutting lathe]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: COTSL-1992-0088-010	Object name: Vertical lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: Unknown Description: Vertical lathe Location: On display Production date: Converted c.1900 from a horizontal planing machine Place of production: Illinois, USA Place of use/Acquired from: Thomas Hudson and Co, boilermakers, Coatbridge Industry: Boilermaking Description of operation: [For cutting and turning metal.] Technical details: Height 260 cm Width 200 cm Depth 335 Classification: Metalworking Type: [Industrial screw-cutting lathe] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1995-0003	Object name: Round-bed model-maker's lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: Drummond [Brothers] Description: Round-bed model-maker's lathe Location: In storage Production date: c.1920 Place of production: [Guildford, England] Place of use/Acquired from: Private donation Industry: Amateur metalworking Description of operation: [For turning and cutting metal.] Technical details: Height 123 cm Width 95 cm Depth 55 cm Classification: Metalworking Type: [Model engineer's lathe] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee Museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: NN	Object name: Horizontal 'Lincoln'-pattern milling machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Unknown</p> <p>Description: Horizontal 'Lincoln'-pattern milling machine</p> <p>Location: On display</p> <p>Production date: c. 1870</p> <p>Place of production: Leeds, England</p> <p>Place of use/Acquired from: Struthers and Co, Lanark (built agricultural machinery and steam engines)</p> <p>Industry: Agricultural Engineering</p> <p>Description of operation: [For cutting and removing material from a workpiece.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: ['Lincoln'-pattern]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: COTSL-1990-0061-018	Object name: Horizontal milling machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: J. Parkinson and Son</p> <p>Description: Horizontal milling machine</p> <p>Location: Engineering Workshop</p> <p>Production date: 1925</p> <p>Place of production: Shipley, Yorkshire, England</p> <p>Place of use/Acquired from: Lanarkshire Tramways Co, Motherwell. This machine is still used in the Engineering Workshop at Summerlee.</p> <p>Industry: Transport/Museum restoration and conservation</p> <p>Description of operation: [For cutting and removing material from a workpiece.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [horizontal]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: NLC-1999-0152	Object name: Horizontal milling machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Denbigh Engineering Co Description: Horizontal milling machine Location: On display Production date: c. 1920 Place of production: Horsely Heath, Tipton, England Place of use/Acquired from: Coatbridge College Industry: Education Description of operation: [For cutting and removing material from a workpiece.] Technical details: [Not specified] Classification: Metalworking Type: [horizontal] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1991-0257	Object name: Auto screw machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Pittler Description: Auto screw machine Location: In storage Production date: c.1900 Place of production: Leipzig, Germany Place of use/Acquired from: Private donation Industry: [Not specified] Description of operation: [Automatically controlled machine for cutting metal.] Technical details: Height 125 cm Width 115 cm Depth 62 cm Classification: Metalworking Type: [automatic] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1986-0008	Object name: Boring, facing and milling machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Kearns and Co</p> <p>Description: Boring, facing and milling machine</p> <p>Location: In storage</p> <p>Production date: 1914 or later</p> <p>Place of production: Manchester, England</p> <p>Place of use/Acquired from: J Gardiner and Co, brassfounders, Greenock</p> <p>Industry: Brass founding</p> <p>Description of operation: [Versatile milling machine for facing, boring and cutting metal.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: LOAN IN (Dan Macay)	Object name: Die filing machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: [Not specified]</p> <p>Description: Die filing machine</p> <p>Location: In storage</p> <p>Production date: [Not specified]</p> <p>Place of production: [Not specified]</p> <p>Place of use/Acquired from: [Private workshop]</p> <p>Industry: [Amateurs workshop]</p> <p>Description of operation: [Not specified]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: COTSL-1992-0088-013	Object name: Vertical boiler shell turning machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Unknown Description: Vertical boiler shell turning machine Location: On outdoor display Production date: 1897 Place of production: Unknown		Place of use/Acquired from: Thomas Hudson and Co, boilermakers, Coatbridge Industry: Boilermaking Description of operation: [For turning and trimming boiler shell plates.] Technical details: Height 150 cm Width 325 cm Depth 160 cm Classification: Metalworking Type: [vertical] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: Part broken off bed of machine; iron safety guard round table bent; 1 handle broken off. Suitability for student projects: [Not specified. Please contact Summerlee museum for further assessment.] Further documentation: [Not specified] Comments: /

Collection: Summerlee Museum/Accession no.: COTSL-1992-0042	Object name: Pipe screwing machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Charles Winn and Co Description: Pipe screwing machine Location: In storage Production date: 1930 Place of production: Birmingham, England Place of use/Acquired from: [DAKS, manufacturer of clothing, Larkhall factory] Industry: Clothing manufacture Description of operation: [For screwing pipes.] Technical details: Height 90 cm Width 120 cm Depth 65 cm Classification: Metalworking Type: [Not specified] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: NN	Object name: Pipe screwing machine	Updated/by: M. Allan / J. Pares
Manufacturer: Charles Winn and Co		
Description: Pipe screwing machine		
Location: In storage		
Production date: 1930		
Place of production: Birmingham, England		
Place of use/Acquired from: Found lying on its side in a compound at Summerlee.		
Industry: Unknown		
Description of operation: [For screwing pipes.]		
Technical details: Height 145 cm Width 140 cm Depth 50 cm		
Classification: Metalworking		
Type: [Not specified]		
Drive: [Not specified]		
Attachments: [Not specified]		
Features: /		
Condition/Completeness: poor (broken parts, heavy corrosion)		
Suitability for student projects: Currently not suitable; restoration required.		
Further documentation: [Not specified]		
Comments: This machine was found lying on its side in a compound at Summerlee and is being retained for assessment as part of the machine tools project.		

Collection: Summerlee Museum/Accession no.: COTSL-1997-0017-004	Object name: Horizontal planing machine	Updated/by: M. Allan / J.Parkes
<p>Manufacturer: Nicol Esplin</p> <p>Description: Horizontal planing machine</p> <p>Location: On display (Engineering Pavillion)</p> <p>Production date: c. 1900</p> <p>Place of production: Leysmill, Arbroath</p> <p>Place of use/Acquired from: [Not specified]</p> <p>Industry: [Not specified]</p> <p>Description of operation: [For producing plane surfaces by removing material in a linear motion.]</p> <p>Technical details: Height 2900 mm Length 4620 mm Width 3600 mm Weight approx. 7 tons</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: 4 of the 14 roller wheels are missing; crack across the bedplate.</p> <p>Suitability for student projects: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: LOAN IN (Glasgow Museums)	Object name: Horizontal planing machine	Updated/by: M. Allan / J.Parkes
<p>Manufacturer: Crawhall and Campbell</p> <p>Description: Horizontal planing machine</p> <p>Location: On display</p> <p>Production date: 1863</p> <p>Place of production: Glasgow</p> <p>Place of use/Acquired from: Thomas Tait and Co, papermakers, Inverurie</p> <p>Industry: Papermaking</p> <p>Description of operation: [For producing plane surfaces by removing material in a linear motion.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [horizontal]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [The object belongs to a group of maintenance workshop machines within the Summerlee collection that were all acquired from Thomas Tait and Co, papermakers, Inverurie. The object group also includes a travelling head shaping machine and a break bed lathe. All of the machines were originally water-powered.]</p>		

Collection: Summerlee Museum/Accession no.: NN	Object name: Horizontal planing machine	Updated/by: Michael Allan
Manufacturer: Smith and Coventry Description: Horizontal planing machine Location: Engineering Pavillion Production date: Unknown Place of production: Gresley Ironworks, Ordsal Lane, Salford (Manchester) Place of use/Acquired from: Fullwood Foundry, Hamilton; previously at Dunsmuir and Jackson, Govan Industry: Steel production/Iron founding Description of operation: [For producing plane surfaces by removing material in a linear motion.] Technical details: [Not specified] Classification: Metalworking Type: [horizontal] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1992-0088-001	Object name: Plate edge planing machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Crow Harvey, Glasgow Description: Horizontal planing machine Location: Engineering Pavilion Production date: 1890 Place of production: Glasgow Place of use/Acquired from: Thomas Hudson and Co, boilermakers, Coatbridge Industry: Boilermaking Description of operation: [For producing plane surfaces by removing material in a linear motion and cutting the edges of large plates.] Technical details: Height 230 cm Width 1250 cm Depth 180 cm Classification: Metalworking Type: [plate edge planing machine] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: Guide rail for saddle is bent; handle for gear changing is bent; only 4 clamps for workpiece are present. Suitability for student projects: [Not specified. Please contact Summerlee museum for further assessment.] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1992-0088-011	Object name: Steam powered horizontal plate bending rolls	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Unknown</p> <p>Description: Steam powered horizontal plate bending rolls, 3 rolls, powered by single cylinder reversing steam engine</p> <p>Location: On display</p> <p>Production date: c.1888</p> <p>Place of production: possibly Johnstone</p> <p>Place of use/Acquired from: Thomas Hudson and Co, boilermakers, Coatbridge</p> <p>Industry: Boilermaking</p> <p>Description of operation: [For curving metal plates.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [horizontal]</p> <p>Drive: [steam powered]</p> <p>Attachments: [Not specified]</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: Rare, possibly no other examples of steam powered bending rolls in the UK.</p>		

Collection: Summerlee Museum/Accession no.: COTSL-1992-0088-002	Object name: Vertical plate bending rolls	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Edwards</p> <p>Description: [Set of] vertical plate bending rolls</p> <p>Location: Outside display</p> <p>Production date: 1890</p> <p>Place of production: Johnstone, Renfrewshire</p> <p>Place of use/Acquired from: Thomas Hudson and Co, boilermakers, Coatbridge</p> <p>Industry: Boilermaking</p> <p>Description of operation: [For curving metal plates.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [vertical]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: [Not specified]</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: There is a good chance that more information about the machines used in Thomas Hudson and Co's Sheepford Boiler Works exists in the company archive which is preserved in North Lanarkshire Archives.</p>		

Accession Number: LOAN IN (National Museums Scotland)	Object name: Scrap shearing machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Airdrie Iron Co</p> <p>Description: Scrap shearing machine</p> <p>Location: On display</p> <p>Production date: 1897</p> <p>Place of production: Airdrie</p> <p>Place of use/Acquired from: Lanarkshire Steel Works, Motherwell</p> <p>Industry: Forging</p> <p>Description of operation: Used to cut scrap into short lengths to be fed into an open hearth furnace.</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: COTSL-1992-0088-009	Object name: Punching and shearing machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: James Bennie and Co</p> <p>Description: Punching and shearing machine</p> <p>Location: On display</p> <p>Production date: 1866</p> <p>Place of production: Kinning Park Foundry, Glasgow</p> <p>Place of use/Acquired from: Thomas Hudson and Co, boilermakers, Coatbridge</p> <p>Industry: Boilermaking</p> <p>Description of operation: [For punching and shearing metal.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: NN	Object name: Punching and shearing machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Unknown Description: Punching and shearing machine Location: Outside display Production date: c.1890 Place of production: Unknown Place of use/Acquired from: Kingshill Colliery, Lanarkshire Industry: Coal mining Description of operation: [For punching and shearing metal.] Technical details: [Not specified] Classification: Metalworking Type: [Not specified] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1986-0001	Object name: Cold sawing machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Clifton and Baird Description: Cold sawing machine Location: In storage Production date: c.1926 Place of production: Johnstone Place of use/Acquired from: Murdoch McKenzie, Motherwell Industry: Civil Engineering Description of operation: [For cutting metal with a circular saw blade.] Technical details: [Not specified] Classification: Metalworking Type: [cold sawing machine] Drive: [Not specified] Attachments: [Not specified] Features: / Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Accession Number: LOAN IN (Glasgow Museums)	Object name: Travelling head shaping machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Crawhall and Campbell</p> <p>Description: Travelling head shaping machine</p> <p>Location: On display</p> <p>Production date: c.1860s</p> <p>Place of production: Glasgow</p> <p>Place of use/Acquired from: Thomas Tait and Co, papermakers, Inverurie (used in maintenance shop)</p> <p>Industry: Papermaking</p> <p>Description of operation: [For accurately producing flat surfaces.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [travelling head]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: [The object belongs to a group of maintenance workshop machines within the Summerlee collection that were all acquired from Thomas Tait and Co, papermakers, Inverurie. The object group also includes a horizontal planing machine and a break bed lathe. All of the machines were originally water-powered.]</p>		

Collection: Summerlee Museum/Accession no.: NLC-1999-0151	Object name: Shaping machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Almarco Engineering Co</p> <p>Description: Shaping machine</p> <p>Location: In storage</p> <p>Production date: c.1910</p> <p>Place of production: Wellingborough, England</p> <p>Place of use/Acquired from: Hamilton Engineering Co, then Coatbridge College</p> <p>Industry: General Engineering/Education</p> <p>Description of operation: [For accurately producing flat surfaces.]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [Not specified]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Suitability for student projects: [Not specified]</p> <p>Further documentation: [Not specified]</p> <p>Comments: /</p>		

Collection: Summerlee Museum/Accession no.: NLC-1999-0158	Object name: 14 stroke slotting machine	Updated/by: M. Allan / J. Parkes
<p>Manufacturer: Thomas Shanks and Co</p> <p>Description: 14 stroke slotting machine</p> <p>Location: On display</p> <p>Production date: c.1890</p> <p>Place of production: Johnstone</p> <p>Place of use/Acquired from: Blantyre Engineering/Coatbridge College</p> <p>Industry: Engineering/Education</p> <p>Description of operation: [Not specified]</p> <p>Technical details: [Not specified]</p> <p>Classification: Metalworking</p> <p>Type: [14 stroke]</p> <p>Drive: [Not specified]</p> <p>Attachments: [Not specified]</p> <p>Features: /</p> <p>Condition/Completeness: Complete, but recently disconnected from line shafting due to probable worn bearings.</p> <p>Suitability for student projects: [Not specified. Please contact Summerlee museum for further assessment.]</p> <p>Further documentation: [Not specified]</p> <p>Comments: This machine has an unusual elliptical gear wheel controlling the relative speeds of the up and down strokes of the cutting tool.</p>		

Collection: Summerlee Museum/Accession no.: COTSL-1991-0229-002	Object name: Curling stone grinding machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Andrew Barclay and Co Description: Curling stone grinding machine Location: On display (Engineering Pavilion) Production date: 1930s Place of production: Kilmarnock, East Ayrshire Place of use/Acquired from: [Mauchline, East Ayrshire] Industry: [Curling stone manufacture] Description of operation: [For grinding curling stone.] Technical details: Diameter 1390 mm Weight approx. 2 tons Length 1935 mm Width 1105 mm Classification: Stoneworking Type: [Not specified] Drive: Electrically driven Attachments: [Not specified] Features: [Not specified] Condition/Completeness: Electric drive motor not attached; handle is detached and is kept in storage. Suitability for student projects: [Not specified. Please contact Summerlee museum for further assessment.] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1991-0229-003	Object name: Curling stone polishing machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Andrew Barclay and Co Description: Curling stone polishing machine Location: In storage Production date: 1930s or later Place of production: Kilmarnock, East Ayrshire Place of use/Acquired from: [Mauchline, East Ayrshire] Industry: [Curling stone manufacture] Description of operation: [For polishing curling stone.] Technical details: Diameter 1120 mm Length 1176 mm Width 688 mm Classification: Stone-working Type: [Not specified] Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: Complete, some corrosion to base. Suitability for student projects: [Not specified. Please contact Summerlee museum for further assessment.] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1991-0229-001	Object name: Curling stone roughing machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Andrew Barclay and Co Description: Curling stone roughing machine Location: On display (Engineering Pavilion) Production date: 1930s Place of production: Kilmarnock, East Ayrshire Place of use/Acquired from: [Mauchline, East Ayrshire] Industry: [Curling stone manufacturing] Description of operation: [For roughing curling stone.] Technical details: Diameter: 1360 mm Length 2120 mm Width 980 mm Weight approx. 2 tons Classification: Stone-working Type: Electrically driven Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: Electric drive motor not attached; a wooden handle was replaced in 2011/12. Suitability for student projects: [Suitable. Please contact Summerlee museum for further assessment.] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1988-0128-005	Object name: Double wood[working] lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: Elliot ("from Pattern Shop") Description: Double wood[working] lathe Location: On outside display Production date: c. 1900 Place of production: Place of use (Association): A.F Craig, Paisley ("from Pattern Shop") Industry: Patternmaking Description of operation: [For turning and cutting wood.] Technical details: [Not specified] Classification: Woodworking Type: [double woodworking lathe] Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: [The object name was changed as this is believed to be a woodworking lathe and according to its purpose has been classified as such.]		

Collection: Summerlee Museum/Accession no.: NN	Object name: Wood[working] lathe	Updated/by: M. Allan / J. Parkes
Manufacturer: Unknown Description: Wood[working] lathe with 3 legs Location: On outside display Production date: Unknown Place of production: Unknwon Place of use (Association): Unknown Industry: Probably patternmaking Description of operation: [For turning and cutting wood.] Technical details: [Not specified] Classification: Woodworking Type: [Not specified] Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: [The object name was changed as this is believed to be a woodworking lathe and according to its purpose has been classified as such.]		

Collection: Summerlee Museum/Accession no.: NN	Object name: Chain mortice	Updated/by: M. Allan / J. Parkes
Manufacturer: Elsworth Description: Chain mortice Location: On outside display Production date: c. 1910 Place of production: Glasgow, Scotland Place of use/Acquired from: James Lamont and Co, Greenock Industry: Shipbuilding/Repairing/Engineering Description of operation: [For cutting holes in wood.] Technical details: [Not specified] Classification: Woodworking Type: [chain mortice] Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: Heavy surface corrosion. Suitability for student projects: [Currently not suitable. Please contact Summerlee museum for further assessment.] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1987-0079-004	Object name: Hand morticing machine	Updated/by: M. Allan / J. Parkes
Manufacturer: Carron Co Description: Hand morticing machine Location: On outside display Production date: c. 1920 Place of production: Falkirk, Scotland Place of use/Acquired from: The Rachan near Biggar Industry: [Not specified] Description of operation: [For cutting holes in wood.] Technical details: [Not specified] Classification: Woodworking Type: [hand operated morticing machine] Drive: [manually driven] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: NN	Object name: Spindle moulder	Updated/by: M. Allan / J. Parkes
Manufacturer: Thomas White and Sons Description: Spindle moulder Location: On outside display Production date: c. 1930 Place of production: Paisley Place of use/Acquired from: McBarron, woodworkers, Paisley Industry: Woodworking Engineering Description of operation: [For shaping wood with a vertically orientated spindle.] Technical details: [Not specified] Classification: Woodworking Type: [spindle moulder] Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: NN	Object name: Board planer	Updated/by: M. Allan / J. Parkes
Manufacturer: William McLean Description: Board planer Location: On outside display Production date: c. 1910 Place of production: Farmuir, Dundee Place of use/Acquired from: [Not specified] Industry: [Not specified] Description of operation: [For producing plane surfaces by removing material in a linear motion.] Technical details: [Not specified] Classification: Woodworking Type: [board sander] Drive: [electrically driven] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1987-0022-002	Object name: Board Sander	Updated/by: M. Allan / J. Parkes
Manufacturer: T Robinson and Son Ltd Description: Board Sander Location: On outside display Production date: c. 1910 Place of production: Yorkshire, England Place of use/Acquired from: Dumfin Sawmill, Kilwinning Industry: Sawmill/Joinery Description of operation: [For sanding wood.] Technical details: [Not specified] Classification: Woodworking Type: [board sander] Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: Paint loss and corrosion. Suitability for student projects: [Not specified. Please contact Summerlee museum for further assessment.] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1988-0128-002	Object name: Bobbin sander	Updated/by: M. Allan / J. Parkes
Manufacturer: The Oliver Machine Co Description: Sander/bobbin machine Location: In storage Production date: Unknown Place of production: Manchester, England Place of use/Acquired from: AF Craig, Paisley Industry: Ironfounding/Engineering Description of operation: [For sanding wood.] Technical details: [Not specified] Classification: Woodworking Type: [bobbin sander] Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1987-0022-001	Object name: Large horizontal band saw	Updated/by: M. Allan / J. Parkes
Manufacturer: John McDowall and Sons Description: Large horizontal band saw Location: In storage Production date: mid-1900s Place of production: Johnstone Place of use/Acquired from: Dirrans Sawmill, Kilwinning Industry: [Not specified] Description of operation: [For cutting wood.] Technical details: [Not specified] Classification: Woodworking Type: [horizontal band saw] Drive: [belt driven] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: Transmission does not currently work but was the subject of a study by a Glasgow Caledonian University Engineering student in 2013. Suitability for student projects: Suitable and has already become part of object-based student project. Further documentation: [Not specified] Comments: Believed to incorporate components from a similar machine from the Victoria Sawmills, Coatbridge.		

Collection: Summerlee Museum/Accession no.: NN	Object name: Vertical band saw	Updated/by: M. Allan / J. Parkes
= Manufacturer: John McDowall and Sons Description: Vertical bandsaw Location: On outside display Production date: Unknown Place of production: Johnstone Place of use/Acquired from: AF Craig, Paisley Industry: Ironfounding/Engineering Description of operation: For cutting wood] Technical details: [Not specified] Classification: Woodworking Type: [vertical band saw] Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1987-0074-002	Object name: Vertical band saw	Updated/by: M. Allan / J. Parkes
Manufacturer: Watson and Co Description: Vertical band saw Location: On outside display Production date: c. 1880 Place of production: Kilmarnock Place of use/Acquired from: John Stewart and Co, Wishaw Industry: Coach-building Description of operation: [For cutting wood.] Technical details: [Not specified] Classification: Woodworking Type: [vertical band saw] Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: NN	Object name: Vertical band saw	Updated/by: M. Allan / J. Parkes
Manufacturer: Unknown Description: Vertical band saw Location: On outside display Production date: Unknown Place of production: Unknown Place of use/Acquired from: Unknown Industry: [Not specified] Description of operation: [For cutting wood.] Technical details: [Not specified] Classification: Woodworking Type: [vertical band saw] Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: /		

Collection: Summerlee Museum/Accession no.: COTSL-1990-0019-001	Object name: Circular saw	Updated/by: M. Allan / J. Parkes
Manufacturer: Thomas White and Sons Description: Circular saw Location: On display Production date: 1922 Place of production: Paisley Place of use/Acquired from: McBarron, woodworkers, Paisley Industry: Joinery Description of operation: [For cutting wood.] Technical details: [Not specified] Classification: Woodworking Type: [circular saw] Drive: [Not specified] Attachments: [Not specified] Features: [Not specified] Condition/Completeness: [Not specified. Please contact Summerlee museum for further assessment.] Suitability for student projects: [Not specified] Further documentation: [Not specified] Comments: [This machine tool can also be classified as a table saw.]		

