



Room: Engineering Technology/ Metal Technology

Engineering – LIST B
Equipment List and Specifications

Standards, Specifications and Conditions

All equipment/machinery/tools shall be durable and safe for school use. Equipment wholly or partly funded from public funds is subject to Inspection by officers from the Department of Education & Skills.

It is essential that tenders for equipment for school use shall:

- i) Comply fully with the specifications and be durable and safe for school use.**
- ii) Comply fully with the standards as detailed and shall comply fully with European (EN) standards, both established and developing.**
- iii) Comply with European electrical standards and CE marking as appropriate.**
- iv) Be accompanied by documentation of sufficient detail for full evaluation.**
- v) Include the completed and signed certificate of compliance.**

Award of a contract is conditional on the production of a current tax clearance certificate.

Failure to comply with the above may result in the tender being deemed null and void.

Section 1 – Machine Tools

Notes: Details of the warranty for each item being quoted should be submitted and accompanied by a statement of service support and likely applicable charges.

Equipment to be commissioned and training provided where appropriate.

Code Quantity	Descriptions & Specifications:	Cost €
ENG/B/101 3	<p>Centre Lathe. All metric indexing. Centre height: c.140 mm to 180 mm to admit c.500 mm to 1000 mm between centres. Fully enclosed oil bath gearbox with provision for cutting screw thread pitches in millimetres. Range of spindle speeds (typical speeds; 36-1600/40-2500 rpm). Spindle bore, c.38 mm min. Foot-operated brake/switch, no more than 24V to control buttons, c.1-2.2 kW electric motor.</p> <p>Electric supply 380 V, 3 pH, 50 Hz. Machine to be mounted on steel cabinet base and supplied complete with starter/isolator. The following total number of accessories should be supplied with the lathe and, where possible, fitted.</p> <ul style="list-style-type: none"> a) Pump, tank and fittings. b) Quick change tool-post. c) Carbide tooling package to suit lathe, to include: right hand tool holder, boring bar (c.12 mm), parting-off block and blade. d) Appropriate carbide inserts for tooling package at c. e) Multi-head knurling tool with fine, medium and coarse knurls. f) Three jaw self-centering chuck, c.110 mm. Chuck complete with key and set of reversible jaws. g) Four jaw independent chuck, c.150-200 mm, complete with key. h) Drill chuck, c.13 mm capacity complete with key and arbor. Chuck to suit tailstock of lathe. i) Morse taper centres – one live centre and one dead centre. j) Face plate, c.150-300 mm. k) Travelling steady, and fixed steady – 3 point. l) Angle poise low voltage lamp. m) Set of spanners. n) Operator handbook. o) Set of anti-vibration pads - fitted to lathe. <p>Manufacturer: _____ Catalogue No: _____</p>	
ENG/B/102 1	<p>Vertical Bandsaw, floor standing, 2/variable speed, table size: c.350-450 mm square, table tilt facility, cutting height: c.150-300 mm, cutting width: c.300-400 mm, blade guard, no-volt release switch, 230 V / 400 V.</p> <p>Manufacturer: _____ Catalogue No.: _____</p>	
ENG/B/103 2	<p>Scroll saw, bench mounted, 2/variable speed, table tilt facility, blade guard attachment, motor: c.120-200 W, 230 V.</p> <p>Manufacturer: _____ Catalogue No.: _____</p>	
ENG/B/104 1	<p>Horizontal band saw (mobile), c.200 mm cutting capacity 380 V 3 pH / 230 V 1 pH</p> <p>Manufacturer: _____ Catalogue No: _____</p>	
ENG/A/105 1	<p>Double-ended pedestal grinder, with eye shields, tool rests / water trough. Wheel diameter c.250 mm, coarse and medium grit type. 230 v, 50 Hz.</p> <p>Manufacturer: _____ Catalogue No: _____</p>	
ENG/B/106 1	<p>Grinding wheel dresser.</p> <p>Manufacturer: _____ Catalogue No: _____</p>	
ENG/B/107 1	<p>Drill grinding attachment, c.6 to 25 mm.</p> <p>Manufacturer: _____ Catalogue No: _____</p>	
ENG/B/108 1	<p>Lever shearing machine, capacity 6 mm strip, c.12 mm round.</p> <p>Manufacturer: _____ Catalogue No: _____</p>	

ENG/B/109 1	Double-ended floor mounted metal polishing machine complete with min. 250 mm diameter polishing mops and exterior spindles. Spindle speed, c.3100 rev/min., c.750 W motor, 380 V/230 V, 3 pH, 50 Hz Manufacturer: _____ Catalogue No: _____	
ENG/B/110 2	Drilling machine, pedestal model, capacity in steel c.26 mm. All geared variable spindle speeds. Complete with fitted drill chuck, key and chuck guard. Electrics 3 pH, 380V, 50Hz. Supplied complete with starter/isolator. Manufacturer: _____ Catalogue No: _____	
ENG/B/111 2	Drill-press vice (approx. 125 mm jaws, prismatic type) complete with appropriate hold down clamps. Manufacturer: _____ Catalogue No: _____	
ENG/B/112 1	ONE ONLY TO BE SUPPLIED PER SCHOOL. Bench mounted computer numerically controlled (CNC) slant bed educational training lathe: max. machining diameter c.55 mm, travel in x-axis: c.50 mm, travel in z-axis: c.250 mm, typical spindle speed range: c.100-4000 rpm. Electric supply: 110/230 V, 1 pH, 50/60 Hz. Machine to be compatible with standard computer hardware, operating system/CADCAM software, fully enclosed working area, operator's handbook. Appropriate tooling package to cater for standard lathe operations to be included. Note: <u>Details of specification of computer required to operate to be furnished to school.</u> Manufacturer: _____ Catalogue No: _____	
ENG/B/113 1	Low cost impact testing machine (e.g., capable of carrying out Izod/ Charpy/ tensile impact testing of plastics materials), bench mounted type. Manufacturer: _____ Catalogue No: _____	
ENG/B/114 1	Low cost tensile testing/extensometer machine, portable/bench mounted type. Manufacturer: _____ Catalogue No: _____	
ENG/B/115 1	Injection Moulding Machine: for demonstration of injection moulding principles; bench top/portable model suitable for school use; set of 4 moulds for production of objects up to c.20 g; 2 kg of suitable polymer granules. 230 V, 50 Hz. Manufacturer: _____ Catalogue No: _____	

Note: Equipment to be commissioned and training provided.

**Equipment for Engineering Technology/Metalwork
ONE SECTION**

Section	Code Quantity.	Descriptions & Specifications:	Total Cost €
Section 1	ENG/B/101-115	Machine Tools.	
Total :			€
Add for VAT:			€
Total Amount for ENG/B List:			€

Standards, Specifications and Conditions

All equipment/machinery/tools shall be durable and safe for school use. Equipment wholly or partly funded from public funds is subject to Inspection by officers from the Department of Education and Science.

It is essential that tenders for equipment for school use shall:

- i) Comply fully with the specifications listed.
- ii) Ensure that all equipment/machinery/tools shall be of an appropriate quality and standard suitable for use in a post-primary school workshop setting.
- iii) Comply fully with European (EN) standards, established and developing, as appropriate.
- iv) Comply with European electrical standards and CE marking as appropriate.
- v) Be accompanied by documentation of sufficient detail for full evaluation.
- vi) Ensure consistency between machinery/equipment/tools quoted for and that supplied.
- vii) Include the completed and signed certificate of compliance.

Award of a contract is conditional on the production of a current tax clearance certificate

Failure to comply with the above may result in the tender being deemed null and void

Certificate of Compliance with Standards, Specifications & Conditions

**I/We certify that the equipment tendered complies in all respects with the standards, specifications and other requirements/conditions specified in this tender document.
I/We hold a current tax clearance certificate.**

Company:			
Signed:		Date:	
Position:			