



AN ROINN DEPARTMENT  
OIDEACHAIS OF EDUCATION  
AGUS SCILEANNA AND SKILLS

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**Room: Engineering Technology/ Metal  
Technology**

**Engineering – LIST A**  
**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 and tenderers for equipment for school use shall:

- Comply fully with the specifications and be durable and safe for school use.
- Comply fully with the standards as detailed and shall comply fully with European Standards (EN), both established and developing.
- Comply with European electrical standards and CE marking as appropriate.
- Fully comply with requirements in the Request for Tenders (RFT) document.
- Be accompanied by documentation of sufficient detail for full evaluation.
- 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 – General Workshop Equipment/Tools

Code Quantity	Descriptions & Specifications	Cost €:
ENG/A/01 24	Engineer's bench vice, cast iron with c.100-125 mm steel jaws. Manufacturer: Catalogue No:	
ENG/A/02 24	Pair of fibre grips for ENG/A/100. Manufacturer: Catalogue No:	
ENG/A/03 24	Engineers ball pein hammer, weight c.500 g (1 lb). Manufacturer: Catalogue No:	
ENG/A/04 4	Claw hammer, tempered/hardened head, wood/metal handle, 500 g (1 lb). Manufacturer: Catalogue No:	
ENG/A/05 4	Carpenters mallet, c.115 mm Manufacturer: Catalogue No:	
ENG/A/06 24	Engineers stainless steel rule, pearl chrome finish, 300 mm long, graduated in mm. Manufacturer: Catalogue No:	
ENG/A/07 24	Engineers stainless steel rule, pearl chrome finish, 150 mm long, graduated in mm. Manufacturer: Catalogue No:	
ENG/A/08 24	Engineers steel try square, blade 120 mm min. Manufacturer: Catalogue No:	
ENG/A/09 4	Woodwork try-square, blade length: 150 mm min. Manufacturer: Catalogue No:	
ENG/A/10 24	Engineers spring dividers, c.100-150 mm. Manufacturer: Catalogue No:	
ENG/A/11 24	Engineer's fully integrated scribe, double ended, c.175 mm. Manufacturer: Catalogue No:	
ENG/A/12 24	Engineers centre punch, c.100 mm. Manufacturer: Catalogue No:	
ENG/A/13 24	Engineer's jenny callipers, c.125 mm, firm friction joint, adjustable point. Manufacturer: Catalogue No:	
ENG/A/14 24	Chisel, flat, c.150 mm long. Manufacturer: Catalogue No:	
ENG/A/15 24	Hacksaw frame, 300 mm, adjustable or fixed type. Manufacturer: Catalogue No:	
ENG/A/16 24	Junior hacksaw frame. Manufacturer: Catalogue No:	
ENG/A/17 24	Tenon saw, c.250 mm – 300 mm, stiffening rib. Manufacturer: Catalogue No:	
ENG/A/18 24	Hand file, 250 mm long, smooth grade, double cut. Manufacturer: Catalogue No:	
ENG/A/19 24	Hand file, 250 mm long, bastard grade, double cut. Manufacturer: Catalogue No:	
ENG/A/20 24	File card (wooden base type), c.100 mm x 50 mm. Manufacturer: Catalogue No:	
ENG/A/21 2	Combination set, with centre head, square head, protractor and 300 mm rule. Manufacturer: Catalogue No:	
ENG/A/22 5	Universal bevel protractor, c.150 mm blade. Manufacturer: Catalogue No:	

Quantity	Descriptions & Specifications		Cost €:
ENG/A/23 4	Universal bevel, c.150 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/24 2	Surface plate, c.200 mm-300 mm square or rectangular, machined surfaces.		
	Manufacturer:	Catalogue No:	
ENG/A/25 2	Surface gauge, adjustable beam, scribe, column c.200 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/26 4	V-block and clamp, min. clamping capacity 25 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/ 2	Centre square, capacity 40-50 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/27 2	Toolmaker's clamp, c.100 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/28 2	Precision vernier caliper, capacity c.150 mm, dial reading 0.02 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/29 2	Precision vernier caliper, capacity c.150 mm, digital reading.		
	Manufacturer:	Catalogue No:	
ENG/A/30 4	Precision micrometer, capacity 0-25 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/31 1	Internal micrometer set. Capacity: c.25-55 mm complete with extension rods, spacing collar and fitted case: accuracy 0.01 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/32 1	Vernier depth gauge, c.150 mm blade, reading 0.02 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/33 1	Precision micrometer, capacity 25-50 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/34 1	Universal dial test indicator, dial graduated to read 0.01 mm. Range c.8 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/35 1	Magnetic base holder for dial test indicator.		
	Manufacturer:	Catalogue No:	
ENG/A/36 1	Set of telescopic gauges, complete with case.		
	Manufacturer:	Catalogue No:	
ENG/A/37 2	Slotted angle plate, size: c. 113 mm x 88 mm x 75 mm – open-ended type.		
	Manufacturer:	Catalogue No:	
ENG/A/38 1	Feeler gauge, metric, e.g., 10 blades – 0.05 mm-0.08 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/39 1	Radius gauge, metric.		
	Manufacturer:	Catalogue No:	
ENG/A/40 1	Drill gauge, e.g., 0.5 mm to 12 mm x 0.5 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/41 1	Screw pitch gauge, ISO forms, metric		
	Manufacturer:	Catalogue No:	
ENG/A/42 6	Engineer's outside spring caliper, c.100-150 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/43 6	Engineer's inside spring caliper, c.100-150 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/44 1	Wire gauge, 1-36 swg (0.19 – 7.6 mm).		
	Manufacturer:	Catalogue No:	

Quantity	Descriptions & Specifications		Cost €:
ENG/A/45 4	Set(s) of assorted flat and Philips head screwdrivers with plastic handles.		
	Manufacturer:	Catalogue No:	
ENG/A/46 4	Combination pliers, c.200 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/47 4	Heavy-duty electricians pliers with insulated handles, c.150 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/48 2	Slip joint pliers, chrome finish, c.230 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/49 2	Flat nose pliers, c.160 mm, insulated handles.		
	Manufacturer:	Catalogue No:	
ENG/A/50 2	Round nose pliers, c.160 mm, insulated handles.		
	Manufacturer:	Catalogue No:	
ENG/A/51 2	Vice grips, c.250 mm, lever release.		
	Manufacturer:	Catalogue No:	
ENG/A/52 2	Sheet-metal vice grips, c.250 mm, lever release.		
	Manufacturer:	Catalogue No:	
ENG/A/53 4	Hand vice, spring type, c.100 mm length.		
	Manufacturer:	Catalogue No:	
ENG/A/54 2	Adjustable spanner, chrome finish, c.200 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/55 2	Set, combination spanners (ring/open jaw ended), metric: e.g., 6 x 7 to 18 x 19, chrome finish.		
	Manufacturer:	Catalogue No:	
ENG/A/56 1	Set of bi-hex sockets and accessories (metric: e.g., 10 to 32 x 2 mm).		
	Manufacturer:	Catalogue No:	
ENG/A/57 2	Set of allen keys, e.g., 3 mm - 10 mm.		
	Manufacturer:	Catalogue No:	
ENG/A/58 2	Riveting tool set, to include, snap, set and bolster to suit 3 mm rivets.		
	Manufacturer:	Catalogue No:	
ENG/A/59 2	Riveting tool set, to include, snap, set and bolster to suit 5 mm rivets.		
	Manufacturer:	Catalogue No:	
ENG/A/ 2	Riveting tool set, to include, snap, set and bolster to suit 6 mm rivets.		
	Manufacturer:	Catalogue No:	
ENG/A/60 2	Pop riveting kit, complete with pliers and assorted rivets, industrial grade.		
	Manufacturer:	Catalogue No:	
ENG/A/61 1	Set of number stamps, 3 mm, set of 9, Grade A.		
	Manufacturer:	Catalogue No:	
ENG/A/62 1	Set of number stamps, 5 mm, set of 9, Grade A.		
	Manufacturer:	Catalogue No:	
ENG/A/63 1	Set of letter stamps, 3 mm, set of 27, Grade A.		
	Manufacturer:	Catalogue No:	
ENG/A/64 1	Set of letter stamps, 5 mm, set of 27, Grade A.		
	Manufacturer:	Catalogue No:	
ENG/A/65 2	Set of pin punches, e.g., 1.5 mm to 8 mm, c.100-150 mm long.		
	Manufacturer:	Catalogue No:	
ENG/A/66 2	Set of stocks, dies, taps and wrenches, ISO thread form, e.g., 6 mm to 12 mm x 1 mm. Circular die pattern. Set complete in strong case.		
	Manufacturer:	Catalogue No:	
ENG/A/67 1	Hand held engraver, variable speed.		
	Manufacturer:	Catalogue No:	

Code Quantity	Descriptions & Specifications	Cost €:
ENG/A/68 6 6 6	Set of three taps (taper, second and plug) for screw cutting 6 mm ISO. Set of three taps (taper, second and plug) for screw cutting 8 mm ISO. Adjustable tap wrench to suit. Manufacturer: Catalogue No:	
ENG/A/69 6 6 6	Circular dies for screw cutting 6 mm ISO. Circular dies for screw cutting 8 mm ISO. Stock to suit above dies. Manufacturer: Catalogue No:	
ENG/A/70 4	Set of drills, HSS, parallel shank, 1.0 to 13 mm x 0.5 mm. Set in case. Manufacturer: Catalogue No:	
ENG/A/71 1	Set of drills, HSS, M.T. shank, 14 to 25 mm x 1 mm. Manufacturer: Catalogue No:	
ENG/A/72 2	Set of counter sink drills, HSS, 6, 8, 10 mm. Parallel shank 90°. Manufacturer: Catalogue No:	
ENG/A/73 1	Set of c.5 hole-saws, complete with arbor, sizes from c.20 mm to c.60 mm diameter. Manufacturer: Catalogue No:	
ENG/A/74 2	Set of combination centre drills, HSS, No. 1, 2, 3, 4, 5, 6, and 7. 60° angle (Slocumb). Manufacturer: Catalogue No:	
ENG/A/75 1	Morse-taper sleeves, 3-2, 2-1. Manufacturer: Catalogue No:	
ENG/A/76 1	Parallel machine reamers, parallel shank, e.g., 6 to 12 x 2 mm steps. Manufacturer: Catalogue No:	
ENG/A/77 2	Cordless drill, min. 14 V complete with case and spare battery. <b>Two year warranty.</b> Manufacturer: Catalogue No:	
ENG/A/77a 1	Variable speed double insulated electric hand drill, 110 V 50 Hz supply, complete with chuck and key, c.13 mm capacity. <b>Two year warranty.</b> Manufacturer: Catalogue No:	
ENG/A/78 1	Portable electric orbital sander, complete with tool case, 110 V, 50 Hz, c.600 W motor. <b>Two year warranty.</b> Manufacturer: Catalogue No:	
ENG/A/79 1	Portable electric jig saw, complete with tool case, 110 V, 50 Hz, c.700 W motor. <b>Two year warranty.</b> Manufacturer: Catalogue No:	
ENG/A/80 2	Crosscut chisel, c.150 mm. Manufacturer: Catalogue No:	
ENG/A/81 2	Round nose chisel, c.150 mm. Manufacturer: Catalogue No:	
ENG/A/82 2	Diamond point chisel, c.150 mm. Manufacturer: Catalogue No:	
ENG/A/83 2	Miniature side cutter pliers, spring leaf mechanism, c.150 mm Manufacturer: Catalogue No:	
ENG/A/84 2	Miniature top cutter pliers, spring leaf mechanism, c.150 mm Manufacturer: Catalogue No:	

Code Quantity	Descriptions & Specifications	Cost €:
ENG/A/85 4 4 4	Chisels (firmer): 6 mm 10 mm 18 mm Manufacturer: Catalogue No:	
ENG/A/86 4 4 4	Chisels (bevel): 6 mm 10 mm 18 mm Manufacturer: Catalogue No:	
ENG/A/87 2	Bench plane, smooth, 50 mm cutter, adjustable for depth of cut/alignment. Manufacturer: Catalogue No:	
ENG/A/88 6	Cast iron bench blocks, rough machined on one face, c. 250 mm x c.200 mm x c.50 mm. Manufacturer: Catalogue No:	
ENG/A/89 6	Quarter litre oilcan. Manufacturer: Catalogue No:	
ENG/A/90 1	Combination oilstone, c.200 mm, coarse and fine faces. Manufacturer: Catalogue No:	
ENG/A/91 1	Engineers steel try square, blade length 200-250 mm. Manufacturer: Catalogue No:	
ENG/A/92 12	Hand files – 200 mm bastard. Manufacturer: Catalogue No:	
ENG/A/93 12	Hand files – 200 mm smooth. Manufacturer: Catalogue No:	
ENG/A/94 12	Hand files – 150 mm bastard. Manufacturer: Catalogue No:	
ENG/A/95 12	Hand files – 150 mm smooth. Manufacturer: Catalogue No:	
ENG/A/96 12	Half-round files – 250 mm smooth. Manufacturer: Catalogue No:	
ENG/A/97 12	Half round files – 250 mm bastard. Manufacturer: Catalogue No:	
ENG/A/98 12	Half round files – 150 mm smooth. Manufacturer: Catalogue No:	
ENG/A/99 12	Half round files – 150 mm bastard Manufacturer: Catalogue No:	
ENG/A/100 12	Round files – 200 mm smooth. Manufacturer: Catalogue No:	
ENG/A/101 12	Round files – 200 mm bastard. Manufacturer: Catalogue No:	
ENG/A/102 12	Round files – 150 mm smooth. Manufacturer: Catalogue No:	
ENG/A/103 12	Round files – 150 mm bastard. Manufacturer: Catalogue No:	
ENG/A/104 12	Square files – 200 mm smooth. Manufacturer: Catalogue No:	
ENG/A/105 12	Square files – 200 mm bastard. Manufacturer: Catalogue No:	

Code Quantity	Descriptions & Specifications	Cost €:
ENG/A/106 12	Square files – 150 mm smooth. Manufacturer: Catalogue No:	
ENG/A/107 12	Square files – 150 mm bastard. Manufacturer: Catalogue No:	
ENG/A/108 12	Three-square files – 200 mm smooth. Manufacturer: Catalogue No:	
ENG/A/109 12	Three-square files – 200 mm bastard. Manufacturer: Catalogue No:	
ENG/A/110 12	Warding files – 150 mm smooth. Manufacturer: Catalogue No:	
ENG/A/111 12	Warding files – 150 mm bastard. Manufacturer: Catalogue No:	
ENG/A/112 24	“Abra” files (or equal), c.250 mm, medium. Manufacturer: Catalogue No:	
ENG/A/113 4	Pair of “abra” file spring clips Manufacturer: Catalogue No:	
ENG/A/114 6	Piercing saw frames. Manufacturer: Catalogue No:	
ENG/A/115 6	Pack of blades for item ENG/A/207. Manufacturer: Catalogue No:	
ENG/A/116 72	File handle for 250 mm file, plastic or wooden. Manufacturer: Catalogue No:	
ENG/A/117 96	File handle for 200 mm file, plastic or wooden. Manufacturer: Catalogue No:	
ENG/A/118 120	File handle for 150 mm file, plastic or wooden. Manufacturer: Catalogue No:	
ENG/A/119 200	Hacksaw blade, 300 mm, 24 T.P.I. Manufacturer: Catalogue No:	
ENG/A/120 4	Set of c.6/12 assorted needle files. Manufacturer: Catalogue No:	
ENG/A/121 200	Hacksaw blade junior type. Manufacturer: Catalogue No:	

Section 2 – Metal Heating Equipment and Accessories		
Code Quantity	Descriptions & Specifications	Cost €:
ENG/A/201 2	Smiths close mouth tongs, flat bit, and lightweight. Manufacturer: Catalogue No:	
ENG/A/202 2	Smith bolt type tongs, c.10 mm, lightweight. Manufacturer: Catalogue No:	
ENG/A/203 2	Smiths square mouth tongs, c.10 m lightweight. Manufacturer: Catalogue No:	
ENG/A/204 1	Brazing hearth; single station type, c.525 mm x c.450 mm x c.1045 mm. Unit to be supplied with gas/air brazing torch, gas/air jewellery torch, compressor unit, gas/air non-return valves, refractory hearth, side and rear shields lined with asbestos free materials. Unit to be fitted with extended rear shield, gas solenoid valve, pressure switch and temperature insulation bricks. Electrics: 1 pH, 50 Hz, 220-240 V, c.375 W. <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:	
ENG/A/205 1	Soldering iron heating stove, chamber type, suitable for two irons. Supplied complete with pizod spark ignitor, burner, burner tray and temperature controller. Manufacturer: Catalogue No:	
ENG/A/206 2	Soldering iron, straight with handle, c.220 g. Manufacturer: Catalogue No:	
ENG/A/207 2	Soldering iron, straight with handle, c.500 g. Manufacturer: Catalogue No:	
ENG/A/208 2	Soldering iron, hatchet with handle, c.500 g. Manufacturer: Catalogue No:	
ENG/A/209 1	Gas fired kiln, max. temperature c.1000 °C. Overall dimensions c.420 mm x c.300 mm x c.245 mm. Complete with pizod spark igniter, flame failure device, heat control valve, safety door. Temperature indicator, removable burner tray and refractory tile. (Type of gas supply available to be stated when ordering). <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:	
ENG/A/210 1	Tongs, scissor action, brass type, size: c.200 mm. Manufacturer: Catalogue No:	
ENG/A/211 1	Multi-use portable gas torch with gas container, fine flame adjustment, screw-on burner, safety checked and test burned. <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:	

Section 3 – Sheet Metal Equipment		
Code Quantity	Descriptions & Specifications	Cost €:
ENG/A/301 2	Tinmans folding bars, c.250 mm Manufacturer: Catalogue No:	
ENG/A/302 3	Tinmans snips: straight, c.200 mm. Manufacturer: Catalogue No:	
ENG/A/303 2	Tinmans snips, straight, c.150 mm. Manufacturer: Catalogue No:	
ENG/A/304 3	Tinmans snips, curved, c.200 mm. Manufacturer: Catalogue No:	
ENG/A/305 1	Vacuum forming machine, bench top model, cut sheet size min. 250 mm x min. 450 mm. Electrics – 230 V, 50 Hz. Manufacturer: Catalogue No:	
ENG/A/306 2	Plastic faced hammer, c.25 mm diameter head. Manufacturer: Catalogue No:	
ENG/A/307 2	Copper and hide-faced hammer, c.40 mm head. Manufacturer: Catalogue No:	
ENG/A/308 4	Rawhide mallet, c.40 mm diameter head. Manufacturer: Catalogue No:	
ENG/A/309 2	Boxwood mallet, c.40 mm diameter head. Manufacturer: Catalogue No:	
ENG/A/310 2	Boxwood mallet, c.50 mm diameter head. Manufacturer: Catalogue No:	
ENG/A/311 2	Boxwood bossing mallet, c.50 mm diameter head. Manufacturer: Catalogue No:	
ENG/A/312 2	Boxwood bossing mallet, c.60 mm diameter head. Manufacturer: Catalogue No:	
ENG/A/313 1	Set of tinmans groovers, e.g., 5 mm, 6 mm, 7 mm. Manufacturer: Catalogue No:	
ENG/A/314 6	Steel wire brush, e.g., 4-row type, fitted with plain back. Manufacturer: Catalogue No:	
ENG/A/315 2	Plannishing hammer, c.125 g. Manufacturer: Catalogue No:	
ENG/A/316 2	Raising hammer, c.200 g. Manufacturer: Catalogue No:	
ENG/A/317 2	Collet hammer, c.200 g. Manufacturer: Catalogue No:	
ENG/A/318 2	Blocking hammer, c.200 g. Manufacturer: Catalogue No:	
ENG/A/319 2	Doming hammer, c.150 g. Manufacturer: Catalogue No:	
ENG/A/320 2	Repousse hammer, c.150 g. Manufacturer: Catalogue No:	
ENG/A/321 1	Set of repousse punches. Manufacturer: Catalogue No:	
ENG/A/322 1	Set of dotting punches. Manufacturer: Catalogue No:	
ENG/A/323 1	Set of engravers, different shapes in set. Manufacturer: Catalogue No:	

Code Quantity	Descriptions & Specifications		Cost €:
ENG/A/324 1	Doming block, c.75 mm cube. Manufacturer: Catalogue No:		
ENG/A/325 2	Leather sandbag, c.200 mm dia. Manufacturer: Catalogue No:		
ENG/A/326 1	Leather sandbag, c.250 mm dia. Manufacturer: Catalogue No:		
ENG/A/327 1	Box and Pan folding machine – hand operated. Folding capacity in steel up to 2 mm (14 swg) min. x c.1000 mm length. Machine to be supplied complete with stand and range of clamping bars. <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:		
ENG/A/328 1	Guillotine – treadle type. Capacity in steel up to c.1.5 mm, c.1000 mm blade length. Manufacturer: Catalogue No:		
ENG/A/329 1	Plastic dip coating unit. Minimum capacity 50 litres. Supplied complete with air blower and air pressure regulator together with 20 kg packs of two different colours of Polyethylene powder. Electrics: 1 pH, 230 V, 50 Hz. <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:		
ENG/A/330 1	Thermoplastic sheet strip heater, suitable for bending of thermo-plastic sheets up to c.6 mm thick and up to c.500 mm wide. 110 V, 50 Hz. <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:		
ENG/A/331 1	Hot wire sculptor/cutter Electrics: 110/230 V, 50 Hz, voltage through the wire c.8 V. <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:		

Section 4 – Welding Equipment and Accessories		
Code Quantity	Descriptions & Specifications	Cost €:
ENG/A/401 1	Welding set with six nozzles, c.1 to 7. Manufacturer: Catalogue No:	
ENG/A/402 1	Length of oxygen and acetylene hose, c.5 metres long x 8 mm (or std) bore complete with standard fittings. Manufacturer: Catalogue No:	
ENG/A/403 1	Set of flashback arrestors (one for acetylene, one for oxygen) <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:	
ENG/A/404 1	Acetylene two stage regulator. <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:	
ENG/A/405 1	Oxygen two stage regulator. <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:	
ENG/A/406 1	Spindle key. Manufacturer: Catalogue No:	
ENG/A/407 1	Rubber wheeled welding trolley suitable for two cylinders. Manufacturer: Catalogue No:	
ENG/A/408 1	Set of tip cleaners. Manufacturer: Catalogue No:	
ENG/A/409 1	Spark Lighter. Manufacturer: Catalogue No:	
ENG/A/410 1	MIG welding set, wire size c.0.6-1.2 mm, OCV, c.46V, current range c.30-250A. <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:	
ENG/A/411 1	Electric arc welding set, fan cooled transformer output, c.220 A, 3 pH/1 pH, 5 kVA. <b>Three year on site warranty to include parts and labour.</b> Manufacturer: Catalogue No:	
ENG/A/412 1	Welding kit to suit ENG/A/411 to include, electrode holder, earth clamp, chipping hammer, primary and earth cables and hand shield. Manufacturer: Catalogue No:	
ENG/A/413 4	G clamp, c.100 mm. Manufacturer: Catalogue No:	
ENG/A/414 2	G clamp, c.200 mm. Manufacturer: Catalogue No:	
ENG/A/415 1	Spot welding gun, portable and suitable for bench mounting. Capacity on mild sheet 0.5 +0.5 mm min., 2 + 2 mm max. thickness, max. length of arms c.500 mm. Built in timer, 230V, 1 pH, 50 Hz, approx. weight 10 kg. <b>Two year warranty.</b> Manufacturer: Catalogue No:	

Section 5 –Electronics		
Code Quantity	Descriptions & Specifications	Cost €:
ENG/A/501 1	Basic electronics and/or mechanisms construction and simulation software; licence for seven users. Manufacturer: Catalogue No:	
ENG/A/503 6	Low cost construction set/kit, capable of allowing for the construction of models of various structures and mechanisms, e.g., bridges, towers, model automobiles, etc. A number to include appropriate power supply units. Manufacturer: Catalogue No:	
ENG/A/504 1	Educational electronics teaching kit capable of allowing for the demonstration of a range (c.20) simple electronic circuits/systems such as fire alarm and motor controllers. Kit to be accompanied with associated guides/texts, and suitable for use with a class group of students. Manufacturer: Catalogue No:	
ENG/A/505 1	Computer control/monitoring simulation software, complete with interface control box (e.g., bit by bit controller), computer connection lead and plug-in type power supply. Manufacturer: Catalogue No:	
ENG/A/506 6	LT variable voltage power supply unit, overload protection. Performance (approx.): DC – 0-25 V (no load) and 24V (8 A load) AC – 0-25 V (no load) and 24V (8 A load) <b>Two year warranty.</b> Manufacturer: Catalogue No:	
ENG/A/507 12	Electric soldering iron, complete with stand and sponge, c.15-30 W, 220-240 V. <b>Two year warranty.</b> Manufacturer: Catalogue No:	
ENG/A/508 6	Digital multi-meter, auto-ranging frequency measurement, capacitance measurement and transistor test. Voltage a.c and d.c – c.5 ranges each from 200 mV x 100 $\mu$ V to 600 V x 1 V Current a.c and d.c – c.4 ranges each from 2 mA x 1 $\mu$ A to 10 x 10 mA Resistance – c.6 ranges from 200 R x 0.01 R to 20 M x 10 K Capacitance – c.5 ranges from 2000 pF x 1 pf to 20 $\mu$ F 10 nF Frequency – c.5 ranges from 2 kHz x 1 Hz to 20 MHz x 100 kHz Diode test Continuity test Transistor test NPN and PNP <b>Two year warranty.</b> Manufacturer: Catalogue No:	
ENG/A/509 12	Miniature electronics tool kit, to contain tools such as pliers, snips, wire strippers and screwdrivers, in appropriate case. Manufacturer: Catalogue No:	
ENG/A/510 6	Helping-hands for soldering work Manufacturer: Catalogue No:	

Code Quantity	Descriptions & Specifications	Cost €:
ENG/A/511 2	De-soldering pump, portable type. Manufacturer: Catalogue No:	
ENG/A/512 2 2 2	Single core wire, diameter, c.1.2 mm x c.100 m length, to include: Black reels Red reels Blue reels Manufacturer: Catalogue No:	
ENG/A/513 2 2 2	Stranded wire, diameter, c.1.4 mm x c.100 m length, to include: Black reels Red reels Blue reels Manufacturer: Catalogue No:	
ENG/A/514 1 1	Extra flexible stranded wire, diameter, c.2.8 mm x c.100 m length, to include: Red Black Manufacturer: Catalogue No:	
ENG/A/515 10	Pack of c.10 crocodile clip leads. Manufacturer: Catalogue No:	
ENG/A/516 50 50 50 50	Pack/kit of 4 mm plugs and sockets, to include: 4mm Plug Red 4mm Socket Red 4mm Plug Black 4mm Socket Black Manufacturer: Catalogue No:	
ENG/A/517 40 40 40 40 40 40 100	Pack/kit of battery holders and clips, to include: 2XAA 4XAA 2XC 4XC 2XD 4XD PP3 battery snaps Manufacturer: Catalogue No:	
ENG/A/518 5 500 500 500 500 500	Pack/kit of micro-miniature electrolytic capacitors, to include, Variety capacitor kit suitable for simple electronic circuit building 100µF 16v 220µF 16v 470µF 16v 1000µF 16v 2200µF Manufacturer: Catalogue No:	
ENG/A/519 5 2000 1000 2000 1000 1000 1000 1000 1000 1000 1000 1000	Pack/kit of resistors, to include: Variety resistor kit suitable for simple electronic circuit building 270R 1K 2K2 4K7 10K 22K 33K 100K 150K 1M Manufacturer: Catalogue No:	

Code Quantity	Descriptions & Specifications:	Cost €:
ENG/A/520 100 100 100 100 100 100 50	Pack/kit of potentiometers, to include: 1K LIN 2200K LIN 10K LIN 47K LIN 100K LIN 1M LIN 100K LIN dual control (stereo) Manufacturer: Catalogue No:	
ENG/A/521 20 20 10	Miniature motors, to include: High torque miniature motor, 3-6 V High power, 12 V motor Solar motor Manufacturer: Catalogue No:	
ENG/A/522 100	Motor mount (e.g., self-adhesive) to suit miniature motors detailed in TECH/320. Manufacturer: Catalogue No:	
ENG/A/523 100	MES lamp (bulb), 6 V/60 mA, commercial grade. Manufacturer: Catalogue No:	
ENG/A/524 100	MES lamp (bulb) holder, solder tags at base. Manufacturer: Catalogue No:	
ENG/A/525 100	MES lamp (bulb) holder, spring loaded contact, fixing centres: c.23 mm. Manufacturer: Catalogue No:	
ENG/A/526 500 500 500 500 2000 500 500 40	Pack/kit of assorted standard 5mm LED's and clips, to include: Red Yellow Green Flashing 5mm bezel panel clips (one piece). Silicone rectifier diode IN4001 1A, 50V max. Silicone rectifier diode IN5401 3A, 100V max Seven segment LED display, common cathode, c.13 mm Manufacturer: Catalogue No:	
ENG/A/527 50	Light dependent resistor (ORP 12 specification) Manufacturer: Catalogue No:	
ENG/A/528 100 10	Pack/kit of assorted sizes of strip-board, to include: 25 mm x 64 mm 119 mm x 455 mm Manufacturer: Catalogue No:	
ENG/A/529 30	Pack/kit of breadboard, to include: 400 Tie points Manufacturer: Catalogue No:	
ENG/A/530 200 100 100 100 50	Pack/kit of general purpose transistors, to include: ZTX321 NPN specification BC108 NPN specification BFY51 NPN specification BC109 NPN specification TIP121 Darlington NPN specification Manufacturer: Catalogue No:	

Code Quantity	Descriptions & Specifications:	Cost €:
ENG/A/531 150 150 100 100 100 100 100 50 10 50 50 50	Pack/kit of miniature switches, to include: Miniature toggle SPST Miniature toggle SPDT Miniature rocker Standard slide DPDTCO Push to make Push to break Push latching Tilt switch (mercury) Reed switch with magnets Microswitch button Microswitch lever Microminiature microswitch lever Manufacturer: Catalogue No:	
ENG/A/532 50	Control knobs, to fit c.6 mm shaft Manufacturer: Catalogue No:	
ENG/A/533 10	Low-fume / colophony free solder, 500 g / 22 swg (0.71 mm) Manufacturer: Catalogue No:	
ENG/A/534 2	Multiple drawer storage cabinets, plastic drawer type, wall mountable, c.60 drawer unit size. Manufacturer: Catalogue No:	

Section 6 – Pneumatics Equipment		
Code Quantity	Descriptions & Specifications:	Cost €:
ENG/A/601 1	Pneumatic modular board to allow for mounting of the following components ENG/A/702-710 below. Manufacturer: Catalogue No:	
ENG/A/602 12	Single-acting cylinder, c.20 mm bore, c.50 mm stroke Manufacturer: Catalogue No:	
ENG/A/603 12	Double-acting cylinder, c.20 mm bore, c.50 mm stroke Manufacturer: Catalogue No:	
ENG/A/604 12	Five port valve Manufacturer: Catalogue No:	
ENG/A/605 12	Flow control valves (restrictors) Manufacturer: Catalogue No:	
ENG/A/606 12	3/2 pushbutton valves Manufacturer: Catalogue No:	
ENG/A/607 6	Visual indicators Manufacturer: Catalogue No:	
ENG/A/608 6	Limit switch (roller lever activated) Manufacturer: Catalogue No:	
ENG/A/609 2	Reservoir (45 cm <sup>3</sup> capacity) Manufacturer: Catalogue No:	
ENG/A/610 3	Manifold, c.8 mm x c.4 mm outlet Manufacturer: Catalogue No:	
ENG/A/611 1	Air compressor, c.8 bar, c.5 litres/m, c.24 litre receiver <b>Two year warranty.</b> Manufacturer: Catalogue No:	
ENG/A/612 10 m	Nylon tube, c.4mm diameter, red Manufacturer: Catalogue No:	
ENG/A/613 10 m	Nylon tube, c.4mm diameter, blue Manufacturer: Catalogue No:	
ENG/A/614 10 m	Nylon tube, c.4mm diameter, clear Manufacturer: Catalogue No:	
ENG/A/615 2	Safety cutter, to suit cutting of nylon tube at ENG/A/712-714 above Manufacturer: Catalogue No:	
ENG/A/616 12	Equal T-connectors Manufacturer: Catalogue No:	
ENG/A/617 12	Equal elbow connectors Manufacturer: Catalogue No:	
ENG/A/618 24	Blanking plugs to suit ENG/A/716-717 above Manufacturer: Catalogue No:	
ENG/A/619 1	Basic pneumatics system construction & simulation software; license for seven users. Manufacturer: Catalogue No:	

**Section 7 – CAD Software and Hardware**

Code Quantity	Descriptions & Specifications:	Cost €:
ENG/A/700	Framework Agreement in place for purchase of 3d CAD software.	0.00
	Manufacturer: Catalogue No:	

Section 8 – Health & Safety Equipment:		
Code Quantity	Descriptions & Specifications:	Cost €:
ENG/A/801 24	Non-mist safety goggles, full ventilation, for use over spectacles, kite marked to BS 2092. Manufacturer: Catalogue No:	
ENG/A/802 24	Student aprons, suitable for workshop use. Manufacturer: Catalogue No:	
ENG/A/803 12	Clearways face shields with adjustable headbands. Full facial and eye protection while operating machine tools, forging, heating and melting of metals, etc. Kite marked to BS 2092. Manufacturer: Catalogue No:	
ENG/A/804 1	Lightweight safety spectacles with fully adjustable side frames and clear side shields, fitted with replaceable lens to BS 2092. Manufacturer: Catalogue No:	
ENG/A/805 6	Heavy duty chrome leather apron, complete with apron ties, suitable for hot metal working, e.g., welding, forging, casting, etc. Manufacturer: Catalogue No:	
ENG/A/806 2	Arc-welding auto-darkening helmet. Manufacturer: Catalogue No:	
ENG/A/807 6	Gas welding goggles, kite marked to BS 2092 and BS 1542. Manufacturer: Catalogue No:	
ENG/A/808 6	Pair Gloves for materials handlings, abrasion and cut resistant; oil, grease and dirt repellent. Manufacturer: Catalogue No: Manufacturer: Catalogue No:	
ENG/A/809 2	Pair heating resistant leggings for use during the metal casting process. Manufacturer: Catalogue No:	
ENG/A/810 2	Soft soap/hand barrier cream dispenser, rechargeable type, suitable for wall mounting. Manufacturer: Catalogue No:	
ENG/A/811 1	Roll of hand paper, 200 mm wide, on roller stand. Manufacturer: Catalogue No:	
ENG/A/812 4	Portable Welding Screens freestanding, self-supporting panels constructed from tubular steel and green flameproof material conforming to BS 3119.20. Dimensions: Frame c.1.8m x c.1.2m; Screen: c.1.5m x c.1.2m. Manufacturer: Catalogue No:	
ENG/A/813 1	Single Phase, double wound, transformer with earth metallic screen between windings. Mounted in robust carrying case. Input 230 V, 50 Hz. Output 110 V in 2 x 16 A sockets to CEE 17. Rating: 2 kVA. Unit to comply with Factories Act. (Electricity Regulations) of 1972. <b>Two year warranty.</b> Manufacturer: Catalogue	
ENG/A/814 1	First aid cabinet, wall mounted type, size: c.240 x c.370 x c.100 mm - with hinged door complete with kit min. 24 person first aid kit. Manufacturer: Catalogue No:	
ENG/A/815 2	Ear Defenders: headband and ear cup type. To be supplied complete with two sets of renewable sealing rings and to conform/be tested to EN352/BS 5108. Attenuation of 20 dB required. Manufacturer: Catalogue No:	
ENG/A/816 6	Safety signs appropriate for workshop display, assorted. Manufacturer: Catalogue No:	

Section 9 – General Ancillary Equipment:		
Code Quantity	Descriptions & Specifications:	Cost €:
ENG/A/901 24	Bench brush, banister type, c.300 mm overall x c.50 mm at end, flat backed. Resin set pure bristle. Manufacturer: Catalogue No:	
ENG/A/902 2	Plastic funnel, c.100 mm diameter. Manufacturer: Catalogue No:	
ENG/A/903 1	Electronic Label maker, complete with tapes. Manufacturer: Catalogue No:	
ENG/A/904 2	Glue gun, complete with box (c.1 kg) of glue sticks, 230 V, 50 Hz. Manufacturer: Catalogue No:	
ENG/A/905 1 set	Blackboard instruments comprising: compass, c.500 mm approx. with steel point; 60° set square, heavy duty plastic type, c.500 mm side; 45° set square, heavy duty plastic type, c.500 mm side with hand clasp; protractor, heavy duty type, c.425 mm side; rule, bevelled edge, 1 metre long, with metric graduations, heavy-duty type. Manufacturer: Catalogue No:	
ENG/A/906 1	Mobile tool cabinet, c.1000 x c.500 x c.350 mm, all metal construction complete with fitted drawer and lock. Manufacturer: Catalogue No:	
ENG/A/907 2	Large plastic dustbin with fitted lid, capacity c.76 litres. Manufacturer: Catalogue No:	
ENG/A/908 2	Galvanised bucket, c.10 litre capacity. Manufacturer: Catalogue No:	
ENG/A/909 2	Floor sweeping brushes. Manufacturer: Catalogue No:	
ENG/A/910 25	T-square, A2 size, quality hardwood. Manufacturer: Catalogue No:	
ENG/A/911 25	A2 drawing board. Manufacturer: Catalogue No:	

**Note:** Equipment to be commissioned and training provided where appropriate. Where servicing is required during the warranty period then the cost should be included in the tender price.

## Equipment for Engineering Technology/Metalwork NINE SECTIONS

Section	Code Quantity.	Descriptions & Specifications:	Total Cost €:
Section 1	ENG/A/001-121	General Workshop Equipment/Tools	
Section 2	ENG/A/201-211	Metal Heating Equipment and accessories	
Section 3	ENG/A/301-331	Sheet Metal Equipment	
Section 4	ENG/A/401-415	Welding Equipment and Accessories	
Section 5	ENG/A/501-535	Electronics equipment	
Section 6	ENG/A/601-618	Pneumatics equipment	
Section 7	ENG/A/700	CAD Software and Hardware	
Section 8	ENG/A/801-816	Health and Safety Equipment.	
Section 9	ENG/A901-11	General Ancillary Equipment.	
Add for VAT:			€
Total Amount for ENG/A 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 Skills.**

**It is essential that tenders and tenderers for equipment for school use shall:**

- Comply fully with the specifications and be durable and safe for school use.
- Comply fully with the standards as detailed and shall comply fully with European Standards (EN), both established and developing.
- Comply with European electrical standards and CE marking as appropriate.
- Fully comply with requirements in the Request for Tenders (RFT) document.
- Be accompanied by documentation of sufficient detail for full evaluation.
- 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 and in the Request for Tenders (RFT).**

**Company:**

**Signed:**

**Position:**

**Date:**