

PROJECT: SUPPLY AND INSTALLATION OF MAINTENANCE ANCILLARY SERVICES WORKSHOP TOOLS, EQUIPMENT AND MACHINES AT KUSILE POWER STATION REV. 1

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>SUMMARY</u>				
ITEM 1	PRELIMINARIES AND GENERAL	SUM	1.00		
ITEM 2	MACHINING WORKSHOP	SUM	1.00		
ITEM 3	WELDING AND FABRICATION WORKSHOP	SUM	1.00		
	Final Summary Total Excl. VAT				

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ITEM NO.	DESCRIPTION	UNIT	NO.	QUANTITY	TOTAL RATE	AMOUNT
1	<u>ITEM 1</u> <u>PRELIMINARIES AND GENERAL</u>					
1.1	Safety File	Once off	1	1		
1.2	PPE	Once off	1	25		
1.3	Entry Medicals	Once off	1	25		
1.4	Exit Medicals	Once off	1	25		
1.5	Police Clearance Certification	Once off	1	25		
Total Exc. VAT						

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ITEM 2 - MACHINING WORKSHOP					
ITEM NO	ITEM	SPECIFICATION	QTY	RATE	AMOUNT
1	Band saw horizontal	Capacity (mm) 254 x 457, Blade speeds (fpm) 50, 125, 200, 275, Motor Output 2Hp (1.5kW) , Floor Space (mm) 1600 x 710 x1080, Electrics 380V, 3-phase, 50cyl, Blade size 3365mm x 25mm. Metal bandsaw optimum	1		
2	Bench with vice (2x/bench)	Jaw width 150mm, Opening 175mm, 6" IN (150 MM) Cast Iron Swivel Base Bench Vice. 2.5 Mt by 12 Mt (L *B)	5		
3	Centre lathe (extra large)	Working range, Swing over bed 800 mm, Swing over cross slide 520 mm, Swing of the bed gap 870 mm, Useful length of the bed gap 320 mm, Distance between centres 6000mm, Height of centres over bed 395 mm, Spindle, Speed range 11,2 - 1800 min.-1, Spindle front. TOS SUI 80	1		
4	Centre lathe (medium)	Working range, Swing over bed 710 mm, Swing over cross slide 420 mm Swing of the bed gap 960 mm Useful length of the bed gap 300 mm Distance between centres 3000, Height of centres over bed 355 mm, Spindle Speed range 10 - 1000 min.-1 Spindle front nose. CPI 229	2		
5	Centre lathe (small)	Diameter over bed (Max), 500mm, Diameter over cross slide (Max), 270mm, Diameter in gap (max), 700mm, Length between centres (Max), 1500mm, Diameter of hole through spindle, 52mm, Spindle nose fitting, STN ISO 702/III - B6 , Spindle speed range, 22.4 - 20	1		
6	Centre lathe CNC (large)	Working range, Swing over bed 800 mm, Swing over cross slide 520 mm, Swing of the bed gap 870 mm, Useful length of the bed gap 320 mm, Distance between centres 6000mm, Height of centres over bed 395 mm, Spindle, Speed range 11,2 - 1800 min.-1, Spindle front, bed length 5m	1		
7	Centre lathe CNC (medium)	Working range, Swing over bed 710 mm, Swing over cross slide 420 mm Swing of the bed gap 960 mm Useful length of the bed gap 300 mm Distance between centres 3000, Height of centres over bed 355 mm, Spindle Speed range 10 - 1000 min.-1 Spindle front nose S, bed length 3.5m	1		
8	Centre lathe 2 Axial CNC (small)	Diameter over bed (Max), 500mm, Diameter over cross slide (Max), 270mm, Diameter in gap (max), 700mm, Length between centres (Max), 1500mm, Diameter of hole through spindle, 52mm, Spindle nose fitting, STN ISO 702/III - B6 , Spindle speed range, 22.4 - 21, 1.2m bed length	1		
9	Drilling Machine	up to 70mm drill, Radial Arm	1		
10	Gear cutting machine	380V	1		
11	Grinder - Surface	500mm x 500mm Magnetic effective surface.	1		
12	H-frame press	55ton, with attachment, MICRO-TEC SHOP PRESS HYDRAULIC 50 TON	1		
13	Hydraulic press	MICRO-TEC PRESS SHOP HYDRAULIC 25 TON	2		
14	Hydraulic Press 120 ton	Press capacity 120 tons, Stroke 6", Vertical movement 44", Base 80" x 60", Table width 14". A large 120Ton hydraulic press with a gauge. Stroke / Travel 300 MM, Working Range 710 MM. Pump Type Hydraulic Bed Adjustments Height Adjustment Bed Width 370 MM	1		
15	Keyway cutter 50mm	Internal keyways 4 - 40mm	1		
16	lapping machines	High precision polishing machine surface lapping machine double sided lapping machine	2		
17	Milling machine	Multi purpose, 50/25mm milling machine	1		
18	Milling machine CNC	XK300: Mini CNC Milling Machine, boring mill horizontal	1		
19	Milling machine universal	Vertical Milling Machine, Table 500mmx300mm working area	1		
20	Milling machine universal LARGE	Working surface (mm) 1250 x 280, -Slots, number and size 3 x 16mm, T-Slots centres (mm) 63 ,Swivel movement +/- 45deg , Longitudinal range (mm) 850, Cross range (mm) 290 ,Vertical range (mm) 475, Distance from centre of spindle to table (mm) 0 - 475, Wei	1		
21	Milling machine universal large CNC	Working surface (mm) 1250 x 280, -Slots, number and size 3 x 16mm, T-Slots centres (mm) 63 ,Swivel movement +/- 45deg , Longitudinal range (mm) 850, Cross range (mm) 290 ,Vertical range (mm) 475, Distance from centre of spindle to table (mm) 0 - 475, Wei	1		
22	Milling machine.	Swing up to 1500mm, effective height 1m, Vertical Boring Mill	1		
23	Milling machine.	Turning table up to 1200mm, horizontal boring mill	1		
24	Pedestal drilling machine	Capacity Drilling capacity in 35 mild steel (mm), Spindle taper 4 (morse taper), Distance from spindle to column (mm) 300, Distance from spindle to table min/max (mm) 70 - 885, Distance from spindle to base max (mm)1245 Table Rotation of table to head 36	2		
25	Pedestal grinder	220v 3000W, two grinding discs, speed 2950rpm, disc size 150x20#36 and 150x40#80, 360mm wheel size	2		
26	Pedestal grinder - large	Grinding/ Contact Wheel Size (mm) 300 x 50 x 32, Motor power continuous (hp) 3 Spindle speed (rpm) 1400 or 2800 Weight (kg) 90 / 140, Power supply 380/3/50	1		
27	Toolbox	Fitter toolbox	4		
28	Workshop layout design	Refer to MAS workshop plan for mechanical machining shop	1		
				Total Exc. VAT	

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ITEM 3 - WELDING AND FABRICATION WORKSHOP					
ITEM NO	ITEM	SPECIFICATION	QTY	RATE	AMOUNT
1	Band saw horizontal	Capacity (mm) 254 x 457, Blade speeds (fpm) 50, 125, 200, 275, Motor Output 2Hp (1.5kW) , Floor Space (mm) 1600 x 710 x1080, Electrics 380V, 3-phase, 50cyl, Blade size 3365mm x 25mm	2		
2	Band saw horizontal CNC	Capacity (mm) 254 x 457, Blade speeds (fpm) 50, 125, 200, 275, Motor Output 2Hp (1.5kW) , Floor Space (mm) 1600 x 710 x1080, Electrics 380V, 3-phase, 50cyl, Blade size 3365mm x 25mm	1		
3	Band saw vertical	Throat 520mm, Working Height 310mm, Blade Speeds 20 - 500m/min, Blade Width 16mm, Blade Length 3880mm, Table Size 600 x 500mm, Table inc 15 deg 4 way, Motor Power 2 Hp	1		
4	Bench with vice (2x/bench)	Jaw width 150mm, Opening 175mm	5		
5	Bending machine hydraulic 25mm	Adira QHD 20040 / Davi MCB 3037	1		
6	Bending machine hydraulic 3mm	Adira QHD 20041 / Davi MCB 3038	1		
7	Bending Machine/Press Brake.	up to 20mm Thickness plate bending	1		
8	Boiler Tube bender.	20mm - 500mm Radius. Up to 8mm thickness	1		
9	Dril, Reversable, Air with key chuck	Chuck size 13mm, Speed 800rpm, air pressure 630kPa, Air hose 10mm.	2		
10	Folding machine		1		
11	Gas and welding / Cutting equipment set	Set with trolley and large bottles (Internal and external)	3		
12	Grinder, Air Die, Heavy duty	Collet size 6 & 3mm, Speed 20000rpm, Air press 630kPa, Motor power 0.9 HP, Air hose 10mm	4		
13	Guillotine hydraulic	Work length 3000mm and plate dimension 25 mm	1		
14	Guillotine.	up to 16mm plate effective bed 1500mm x 2500mm.	1		
15	Hack Saw	Hi-Tension Hack Saw Frame Cast aluminum handle and end pieces with permanent blade pins, blade storage.	2		
16	Iron Worker.	HIW 115 Cylinder	1		
17	Laser Cutter	Bystar 3015, 4.4kW	1		
18	Oxy Acetylen Gas Cutting Machine CNC	up to 120mm plate effective bed 3000 MM* 6000MM	1		
19	Pedestal drilling machine	Capacity Drilling capacity in 35 mild steel (mm), Spindle taper 4 (morse taper), Distance from spindle to column (mm) 300, Distance from spindle to table min/max (mm) 70 - 885, Distance from spindle to base max (mm)1245 Table Rotation of table to head 36	1		
20	Pedestal drilling machine - normal	Drill capacity 14mm steel, 700W variable speed 450 - 4000 rpm, Depth of feed 60mm, chuck size 24mm	1		
21	Pedestal grinder	220v 300W, two grinding discs, speed 2950rpm, disc size 150x20#36 and 150x40#80, 360mm wheel size	1		
22	Pedestal grinder - large	Grinding Contact Wheel Size (mm) 300 x 50 x 32, Motor power continuous (hp) 3 Spindle speed (rpm) 1400 or 2800 Weight (kg) 90 / 140, Power supply 380/3/50	1		
23	Pipe bender - big size up to 3"	Multi function rolling pipe bending machine, 9 round pipe moulds: 16 - 76 mm	2		
24	Pipe Cutter	Heavy Duty Tube Cutter for 1/8" to 1 1/8" (50 to 250mm) O.D. Cutter includes retractable reamer/file and spare carbide cutting wheel. Carbide wheel cuts hard and soft copper, aluminum, brass, thin wall steel and stainless steel.	2		
25	Plasma Cutting Machine.	up to 16mm plate effective bed 1500mm x 2500mm.	1		
26	Plate Rolling Machine.	up to 20mm Thick plate rolling, effected length of 2500mm	1		
27	Welding machine.	450Amps. 380 supply	5		
28	Workshop layout design	Refer to MAS workshop plan for welding and fabrication	1		
Total Exc. VAT					