

E6/138/16

WORKSHOP OUTFIT FOR MECHANICAL DIESEL TRADE

SL NO	SI No in the syllabus	Item Description	Recommended specification	QUANTITY REQUIRED
1	9	Anvil 50 Kgs with Stand	<u>Anvil 50 Kgs with Stand</u> - Drop forged steel made with suitable stand	1
2	17	Chain Pulley Block-3 ton capacity with tripod stand	<u>Chain Pulley Block</u> -3 ton capacity with tripod stand	1
3	33	Different type of Engine Bearing model	<u>Different type of Engine Bearing model</u> - LCV type, Ball, Roller, Tapered roller, Needle , shell, Angular contact roller bearings (Six in a set), Genuine parts, New.	1
4	34	Different type of piston model	<u>Different type of piston model</u> -LCV types (3 nos of petrol and 3 nos of diesel), Genuine parts, New.	1
5	58	Granite surface plate 1600 x 1000 with stand and cover	<u>Granite surface plate</u> -1600 x 1000x100mm With (suitable metal stand of height- 120cm) and cover, Mirror Finished top,	1
6	60	Grease Gun heavy duty trolley type 10 kg capacity	<u>Grease Gun heavy duty trolley type</u> -10 kg capacity 10 kg capacity,heavy duty, trolley type	1
7	137	Surface gauge with dial test indicator plunger type i.e. 0.01 mm	<u>Surface gauge with dial test indicator</u> - plunger type, Least count- 0.01 mm Solid base, with all accessories. (Mitutoyo/Yamayo/Equivalent make)	4
8	142	Telescope gauge	<u>Telescope gauge</u> -With measuring head and accessories (Mitutoyo/Yamayo/Equivalent make)	4
9	144	Thermostat	Thermostat valve	2
10	147	Torque wrenches 5-35 Nm, 12-68 Nm & 50-225 Nm	<u>Torque wrenches</u> - 5-35 Nm, 12-68 Nm & 50-225 Nm Pre adjustable type, three nos in a set. IS 6789 : 2008	1
11	152	V' Block 75 x 38 mm pair with Clamps	<u>V' Block</u> -75 x 38 mm pair with Clamps Steel made with two blocks and two clamps	2
12	158	Water pump for dismantling and assembling	<u>Water pump</u> -for dismantling and assembling different types of Water pump in vehicles	4
13	4	Bench lever shears 250mm Blade x 3mm Capacity	<u>Bench lever shears</u> -250mm Blade x 3mm Capacity	1
14	9	Dual Magnetization Yoke : AC / HWDC, 230 VAC, 50Hz	<u>Dual Magnetization Yoke</u> : AC / HWDC, 230 VAC, 50Hz HWDC for subsurface flaw detection, Lifting capacity 27 kgs in DC, 5 kgs in AC mode. Portable MPI Units	1
15	11	Grinding machine (general purpose) D.E. pedestal with 300 mm dia wheels rough and smooth	<u>Grinding machine</u> - (general purpose) D.E. pedestal with 300 mm dia wheels rough and smooth pedestal type, Single phase, AC, 230v, 50Hz, with rotary switch. (H.M.T/ Black and decker/Crompton greaves/Equivalent make)	1
16	14	Hydraulic jack HI-LIFT type -3 ton capacity, and 5 Ton capacity	<u>Hydraulic jack</u> - HI-LIFT type -3 ton capacity, and 5 Ton capacity	1
17	15	Liquid penetrant Inspection kit	<u>Liquid penetrant Inspection kit</u> with Cleaner, Developer and remover in aerosol can.	1

18	17	Pipe Bending Machine (Hydraulic type) 12mm to 30mm	Pipe Bending Machine -(Hydraulic type) 12mm to 30mm	1
19	18	Pneumatic rivet gun with standard accessories	Pneumatic rivet gun -with standard accessories	2
20	19	Spring tension tester	Spring tension tester - Bench type	1
21	20	Tin smiths bench folder 600 x 1.6mm	Tin smiths bench folder - 600 x 1.6mm	1
22	22	Welding plant Oxy-Acetylene complete (high pressure)	<p>Welding plant Oxy-Acetylene complete (high pressure) 1.Oxygen and acetylene cylinders,:Oxygen cylinder with cap- capacity -7cu.m brand new, empty, high pressure, seamless steel gas cylinders, flat type, concave bottom cylinders as per,IS 7285 (part 2) 2004. Complete with neck ring and valve and cap, valve as per IS 3224, painted as specified under gas cylinder rules 2004, supported with manufactures test Welding plant Oxy-Acetylene complete (high pressure) certificate and approval from chief controller of explosives- Govt: of India, Nagpur. The test certificate should be valid for 05 years.</p> <p>2.Dissolvedf acetylene cylinder with cap- Welding plant Oxy-Acetylene complete (high pressure) capacity 6cu.m :Brand new, empty, high pressure, seamless steel gas cylinders, flat type, concave bottom cylinders as per,IS 7285 (part 2) 2004. Complete with neck ring and valve and cap, valve as per IS 3224, painted as specified under gas cylinder rules 2004, supported with manufactures test certificate and approval from chief controller of explosives - Govt: of India, Nagpur. The test certificate should be valid for 02 years.</p> <p>3.High Pressure welding torch No: 2 (ISI) with nozzle no:1,2,3,5 and 7:Gas welding blow pipe (torch) with flash back arrester for versatile applications using oxygen and acetylene gases. Five different nozzle nos of 1,2,3,5 and 7. Maximum plate thickness that can be welded 35mm, tip thread: M10x1.</p> <p>4.Trolley for cylinders- 1 no</p> <p>5. Adjustable spanner 10 inch: -1 no</p> <p>6. Spindle key- 1no</p> <p>7. Spark lighter- 1 no</p> <p>8. Oxygen gas rubber hose inside dia -8mm ISI, Blue colour- 10 mtrs long</p> <p>9. Acetylene gas rubber hose inside dia -8mm ISI, Red colour- 10 mtrs long</p> <p>10. Two stage Oxygen regulator (should confirm IS 6901)- 1 no</p> <p>11. Two stage Acetylene regulator (should confirm IS6901)- 1 no</p>	1
23	23	Welding Transformer (150-300 Amps)	<p>Welding Transformer - (150-300 Amps)TRANSFORMER WELDING SET WITH ACCESSORIES</p> <p><u>General</u> 1) Tyristorised power source (2) air - cooler machine , (3) linear current indicator scale, 4) class A- insulation with suitable buffering material for thermal resistance, (5) light weight and compact 6) protection class - IP 23</p> <p><u>INPUT</u> 1) SUPPLY VOLTAGE - 415v , 3 phase 50 HZ AC (2) rated input current - 63A (3) rated input KVA - 15KVA</p> <p><u>OUTPUT</u> 1) OUTPUT characteristics - constant current 2) range of welding current - 60- 300A 3) open circuit voltage - 66v (maximum) 4) power factor - 0.6 6) maximum out put (a) 60% duty cycle- 0- 400A b) 100% duty cycle - 230 A</p> <p>Accessories</p>	1
24	6	Fire Extinguishers, first- aid box	Co2 type, 3 kg capacity, with wall mounting.first aid box with necessary medicine	1