

Tender No.65.12.8017

TECHNICAL SPECIFICATION OF OPTICAL PROFILE CUTTING MACHINE Indent No. 25870043

Major Parameter.	1.		
	1.1	Nos. of cutting torches	02 nos. mounted on machine
	1.2	Cutting thickness capacity	Mild steel to IS: 2062 thickness up to 5mm to 100 mm with all the two torches working simultaneously and 150mm with single torch
	1.3	Cutting width	1500 mm
	1.4	Cutting length	5200 mm (By sliding the tracing table or add tables for full length)
	1.5	Max. Circle cut	1500mm
	1.6	Maximum Traced Rectangle	1500x1000mm (Increase Tracing table qty. for longer length)
Minor Parameter	2.0		
	2.1	Type of cutting torches	Nozzle mixing type with automatic ignition.
	2.2	Type of torch adjustment	Motorized (and also with manual/vertical adjustment)
	2.3	Minimum distance two cutter between two torches	135 mm
	2.4	Cutting accuracy	+/-0.8 mm per meter
	2.5	Inter gap for operator to stand	650 mm
	2.6	Cutting speed range (mm/minute)	70 to 700 mm/min
	2.7	Tracing width	1500mm for m/c
	2.8	Tracing length	As per requirement of cl. 1.4
	2.9	Tracing accuracy	+/-0.4 mm
	2.10	Repeating accuracy	+/-0.3 mm
2.11	Height of the tracing table	To suit cutting table of 800 mm height	
Concomitant accessories.	3.0	Gas manifold & hoses. All regulators & hoses required for control of 2 torch station on the machine.	
	3.1	One set of Setting devices / gauges including perpendicularity of the axis of the torch	
	3.2	Circle cutting attachment.-01no.	
	3.3	Suitable tool cabinet -01no	
	3.4	Service tools. -01set. a) One no. cylinder key. b) Spanner set. c) One set screw driver. d) One no. adjustable spanner. e) One pair gloves. f) One no. spark lighter. g) One no. wire brush. h) One no. chipping hammer. i) One no. goggles. j) One no. hammer.	
	3.5	Anchoring bolt and other materials for installation of machine.	
	3.5.1	Nozzle cleaning Kit.	
Operational accessories.	4	No	
Spare	5	Maintenance spares for two years should be provided .	
AMC requirement	6	Not required.	
Warranty Requirement	7	As per IRS General condition.	

Special requirement.	<p>i). The machine travel should be guided by rail tracks through lateral guided roller bearings on to the side carriages for travel.</p> <p>ii) the coordinate drive system comprising of electric /electronic and mechanical components should be inertia free and high dynamic drive.</p> <p>iii) The tracing drive arrangement should be photo electric (optical) tracer system.</p> <p>iv) The longitudinal travel should be through thyristorised/ transistorized controlled DC servo drive motors and precision racks. The racks should be suitably protected from dust. In case other type of longitudinal travel drive is offered, it should be explained clearly in detail with its features.</p> <p>v) The mechanism travel from both longitudinal and Traverse movement should be free in both direction of the machine.</p> <p>vi) The torch cutter should be back-fire feature and should be provided with back flash arrestors.</p> <p>vii) Manual as well as motorized vertical torch slide with ball screws for up and down movement of cutting torches.</p> <p>viii) There should be provision to eliminate gouging, under cutting and corner rounding of finished parts.</p> <p>ix) Tethered female threaded plugs on gas manifold outlets should be provided for blocking of the supply line to such torches as not in use or when torches are required to be removed from service.</p> <p>Joint Checkup , installation and commissioning: The contractor or his agent would required to carry out a joint checkup at the consignee's end along with consignee, before unpacking is done to avoid subsequent complaints regarding short transit/damages. It is necessary that joint inspection be done immediately on receipt of the machine by consignee to avoid commissioning delays due to shortage/transit damage.</p> <p>Complete installation and commissioning of the machine on a turn key basis which cover foundation, Electrical including cabling from mains to machine control(up to 10meters) as well as the machine, with supply al of all materials required.</p> <p>The supplier shall demonstrate machine performance and prove out the claimed capability for successful commissioning at the consignee `s work for a period of 8 hour shifts. After such successful demonstration as herein before, the consignee shall take over and watch the machine performance for a period of one month, before the final proving test certificate is issued.</p> <p>Training: Technical experts of the manufacturer during commissioning of the machine will fully adequately train operators/ maintenance staff nominated by the consignee.</p> <p>Technical Literature: 4 copies of spares parts catalogue giving the part list number of each components with exploded views and assembly drawings of major assembly, maintenance manual, trouble shooting guide, operational manual of the machine and all electrical circuit diagrams to the consignee .</p> <p>The tenderer should also furnish cutting and consumption tables showing cutting speed, pressure and gas consumption for full range of thickness 5 mm to 250 mm. However, the cutting speeds for following thickness of MS plates (as per IS: 2062) should be specifically given for demonstration of cutting quality cuts.</p> <table border="1" data-bbox="386 1465 1435 1778"> <tr><td>5.00mm thick MS plate</td></tr> <tr><td>10.00mm thick MS plate</td></tr> <tr><td>15.00mm thick MS plate</td></tr> <tr><td>20.00mm thick MS plate</td></tr> <tr><td>25.00mm thick MS plate</td></tr> <tr><td>15.00mm thick MS plate</td></tr> <tr><td>32.00mm thick MS plate</td></tr> <tr><td>50.00mm thick MS plate</td></tr> <tr><td>75.00mm thick MS plate</td></tr> <tr><td>100.00mm thick MS plate</td></tr> </table>	5.00mm thick MS plate	10.00mm thick MS plate	15.00mm thick MS plate	20.00mm thick MS plate	25.00mm thick MS plate	15.00mm thick MS plate	32.00mm thick MS plate	50.00mm thick MS plate	75.00mm thick MS plate	100.00mm thick MS plate
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