

BHARAT HEAVY ELECTRICAL LIMITED, JHANSI			
		Specification No.	6001/R1
		Item No.	MT-1/1/1527
		Location	FABRICATION
		Quantity	ONE NUMBER
NOTE:			
1	VENDOR must submit complete information against clause No. 24.0 ( Qualifying condition). The offer meeting this clause would only be processed.		
2	The " Specified/to be confirmed by" Column and where applicable, the " Deviations" Column of this format shall be filled in by the Vender and submitted along with the offer. Technical details also submitted with the offer. Inadequate / incomplete, ambiguous, or unsustainable information against any of the clauses of the specification / requirements shall be treated as non - compliance.		
3	The offer and all documents enclosed with offer should be in English language only.		
SPECIFICATION CUM COMPLIANCE CERTIFICATE OF FLAME CUTTING MACHINE			
S.No.	DESCRIPTION OF BHEL REQUIREMENT	OFFERED BY VENDER	DEVIATION
1.0	SCOPE		
1.1	DESIGN, MANUFACTURE,INSPECTION & TESTING AT VENDOR'S WORKS, PACKING & FORWARDING, SUPPLY, ERECTION & COMMISSIONING AND PROVING AT BHEL WORKS OF CNC OXY FUEL PROFILE CUTTING MACHINE	Vendor to confirm	
2.0	JOB REQUIREMENT :		
2.1	Oxy-Fuel cutting : The machine should be capable of cutting carbon steel and low alloy steel plates of following specification:	Vendor to confirm	
2.2	(i) Maximum plate thickness - upto 100 mm.	Vendor to confirm	
2.3	(ii) Bed size 16 meter x 3.5 meter	Vendor to confirm	
2.4	(iii) Any contour cutting as per CNC programme.	Vendor to confirm	
3.0	EQUIPMENT		
3.1	The CNC Oxy fuel cutting machine shall be robust construction, capable of maintaining accurate cutting under continuous heavy duty Fabrication condition.	Vendor to confirm	
3.2	The machine is to be supplied complete with all necessary accessories, controls, hoses, power cables, pressure gauges, flow meter, UPS system, Isolation transformer, X &Y axis table etc ready to use condition (X-Y axis table mounting fixure will be provided by BHEL for which detailed drawing will be provided by vender).	Vendor to confirm	
3.2	The CNC Oxy Fuel cutting machine consist of following:		
3.2.1	Double side drive System	Vendor to confirm	
3.2.2	CNC controller	Vendor to confirm	
3.2.3	Oxy Fuel Station	Vendor to confirm	
3.2.4	Torch height controller	Vendor to confirm	
3.2.5	X-Y axis cutting table	Vendor to confirm	
4.0	SPECIFICATION		
4.1	Basic Equipment:- Should be capable to cut 2 nos plates of size 3500 mm x 8000 mm. Placed along length.	Vendor to confirm	
4.1.1	Powerful double sides synchronized longitudinal rack & pinion drive.	Vendor to confirm	
4.1.2	Track width - Min. 3500 mm	Vendor to confirm	
4.1.3	Track length - Min. 17000 mm	Vendor to confirm	

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4.1.4	Thickness cutting capacity -upto 100 mm (maximum) quality of cut as per DIN2310 part -4 for dry gas plasma cutting.	Vendor to confirm	
4.1.5	Positional accuracy : $\pm 0.76$ mm	Vendor to specify	
4.1.6	Repeatability : $\pm 0.5$ mm	Vendor to specify	
4.1.7	Longitudinal accuracy : $\pm 0.5$ mm per 5 meter	Vendor to specify	
4.1.8	Diagonal accuracy : Less than or equal to 1.5 mm	Vendor to specify	
4.1.9	Max. speed : 6,000 mm/ min	Vendor to specify	
4.1.10	Oxy Fuel torch : 4 Nos.	Vendor to confirm	
4.2	<b>CUTTING TORCH:</b>		
4.2.1	The equipment should be capable for mounting of 4 nos cutting torches to cover the whole range of cutting upto 100 mm (maximum) for oxy-acetylene cutting.	Vendor to confirm	
4.2.2	Oxy-acetylene contour cutting Torch - 4 nos. (cutting capacity upto 100 mm)	Vendor to confirm	
4.3	<b>DOUBLE SIDE DRIVE SYSTEM</b>		
4.3.1	Drive system shall be powerful double side drive system.	Vendor to confirm	
4.3.2	Rail gantry for travling of drive.	Vendor to confirm	
4.3.3	Servo drives & motors shall be provided	Vendor to confirm	
4.3.4	The system shall be heavy duty gear rack with hardened Pinions.	Vendor to confirm	
4.3.5	Heavy duty power track for hose and cable management shall be provided.	Vendor to confirm	
4.4	<b>CONTROL SYSTEM:</b>		
4.4.1	Two axes CNC control system with programminmg facility having following features mentioning model, make, complete details:-	Vendor to confirm	
4.4.2	Control unit , operating system & user interface with necessary features including.	Vendor to confirm	
4.4.3	Simple and clearly arranged menu guide for programming	Vendor to confirm	
4.4.4	Control panel with large switches for all machine functions.	Vendor to confirm	
4.4.5	CPU -(Model/capacity to be specified ).	Vendor to specify	
4.4.6	TFT-colour monitor (size/details to be specified).	Vendor to confirm	
4.4.7	Pen drive (USB port) and CD drive system. (MB to be mentioned)	Vendor to confirm	
4.4.8	Digital I/O -Broad (details to be mentioned)	Vendor to confirm	
4.4.9	Data transfer Facility with additional USB port & by remote.	Vendor to confirm	
4.4.10	Inbuilt standard shapes with variable lead in / lead out.	Vendor to confirm	
4.4.11	Programmable kerf & kerf compensation between pierce points .	Vendor to confirm	
4.4.12	Automatic plate alignments.	Vendor to confirm	
4.4.13	Reversing /repositioning .	Vendor to confirm	
4.4.14	Angle dependent corner slow down.	Vendor to confirm	
4.4.15	Edit /MOI/ Text programme function.	Vendor to confirm	
4.4.16	Programe mirror imaging .	Vendor to confirm	
4.4.17	Programme rotation in 1 deg.-steps.	Vendor to confirm	
4.4.18	Powder marking ( speed 20 m/min with slow down at corner ) .	Vendor to confirm	
4.4.19	Zoom function.	Vendor to confirm	
4.4.20	Copy function.	Vendor to confirm	
4.4.21	Back up function	Vendor to confirm	
4.4.22	Look ahead function	Vendor to confirm	

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4.4.23	Cut observation	Vendor to confirm	

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4.4.24	Extended diagonistic system with error log function.	Vendor to confirm	
4.4.25	Indication of remaining cutting time .	Vendor to confirm	
4.4.26	Any other necessary functions needed for meeting job requirements mentioned at clause 4.0 of specification.	Vendor to confirm	
<b>4.5</b>	<b>CAD/CAM programming software package to meet job requirements as mentioned at clause 4.0 of specification .</b>	Vendor to submit	
<b>4.5.1</b>	<b>Vendor to provide details of CAD/CAM programming software including :-</b>		
4.5.1.1	i) CAD-Module giving details of gemoetry function ,Auxiliary function, Manipulations , Dimensions, Macros,Text input etc.	Vendor to confirm	
4.5.1.2	ii) Special functions giving details of marking functions, print output , Data converter, NC link, Simulation,Post processor etc.	Vendor to confirm	
4.5.1.3	iii) Path automatic nesting module giving details of lead in/ lead out , nesting etc.	Vendor to confirm	
4.5.1.4	iv) Parts library with graphic representation.	Vendor to confirm	
4.5.1.5	v) Work order management.	Vendor to confirm	
<b>4.6</b>	<b>OPERATOR PANEL:</b>		
4.6.1	i) Operator control panel should display all control features & should have all push buttons ,signal lamps, gauges,Knobs etc. for easy & comfortable operation.	Vendor to confirm	
4.6.2	<b>ii) All details of operator Panel to be provided.</b>	Vendor to submit	
<b>4.7</b>	<b>DRIVE SYSTEM:</b>		
4.7.1	AC servo motor & drive system including:-	Vendor to confirm	
4.7.2	i) Longitudinal double side drive	Vendor to confirm	
4.7.3	ii) Transverse drive & control	Vendor to confirm	
4.7.4	iii) Rapid drive (speed 6000 mm/min)	Vendor to confirm	
<b>4.8</b>	<b>TRACK /ENERGY FEEDING SYSTEM:</b>		
4.8.1	Drag chain for longitudinal energy feeding system should be strong & flexible and properly supported along total length with sufficient no. of supports so that it can carry total weight of cables & hoses for long time at continuous duty without any breakage or damage of drag chain.	Vendor to confirm	
4.8.2	Drag chain type energy feeding system to cover entire range of track length to meet job requirements as per clause no. 4.0 of specification.	Vendor to confirm	
4.8.3	Capacity of drag chain to be mentioned.	Vendor to submit	
4.8.4	Crriage for transverse energy system for oxy-acetylene cutting to cover full track width to meet job requirements as per clause 4.0 of specification.	Vendor to confirm	
<b>4.9</b>	<b>TORCH SUSPENSION SYSTEM:</b>		
4.9.1	Torch suspension system for oxy-acetylene cutting including auto ignition device , height sensing device to meet cutting of thickness upto 100 mm (maximum).	Vendor to confirm	
<b>5.0</b>	<b>SCOPE OF SUPPLY</b>		
5.1	Gantry system.(Refer clause 4.0 of specification)	Vendor to confirm	
5.2	Heavy duty machined tracks .	Vendor to confirm	
5.3	Energy feeding drag chain for longitudinal and transverse movements for oxy-acetylene cutting .	Vendor to confirm	

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5.5	Two axis CNC-control system for oxy-acetylene cutting .	Vendor to confirm	
5.6	Software package for Auto CAD/Auto nesting & Corresponding hardware requirements.	Vendor to confirm	
5.7	Gas manifold system for both oxy-acetylene	Vendor to confirm	
5.8	Gas cutting torches - 4 nos	Vendor to confirm	
5.9	Torch suspension system for oxy -acetylene cutting torches.	Vendor to confirm	
5.10	Auto ignition device & flashback arrestors fitted with torches .	Vendor to confirm	
5.11	Sitting arrangement for operator infront of operator panel.	Vendor to confirm	
5.12	All hoses & cable assemblies required for oxy-acetylene cutting system . All power cables & hoses should be of high quality , robust & resistant to heat ,oil and suitable for tropical environment.	Vendor to confirm	
5.13	Sets of tools required for operation & maintenance of oxy-acetylene cutting system.	Vendor to confirm	
5.14	Cutting tables for oxy-acetylene.	Vendor to confirm	
5.16	Industrial PC mounted on the gantry.	Vendor to confirm	
<b>5.17</b>	<b>UPS &amp; STABILISER FOR CNC SYSTEM:</b>		
5.17.1	UPS unit including Siemens UPS module SITOP with rechargeable battery of sufficient time and having provision for unattended automatic shutdown feature for Windows operating system.	Vendor to confirm	
5.17.2	Stabiliser of suitable rating	Vendor to confirm	
<b>5.18</b>	<b>AIR CONDITINERS:</b>		
5.18.1	Independent air conditioners with Dehumidifiers of suitable & sufficient capacity to be provided for each Electrical / Electronic Panels / Cabinets including Operator's Panel considering specified ambient conditions. Detailed specifications of the same to be provided.	Vendor to confirm	
5.18.2	Air conditioner must be of refrigerant type.(Refer ambient conditions as per clause no. 18.3 of specification)	Vendor to confirm	
5.19	Items required for civil foundation /erection & Earthing of the machine.(Foundation details & Earthing details to be provided)	Vendor to confirm	
<b>6.0</b>	<b>ELECTRIC SYSTEM:</b>		
6.1	Power supply- 415V±10%,50Hz±3% 3 phase AC supply.	Vendor to confirm	
<b>6.2</b>	<b>REQUIREMENTS FOR ELECTRICAL EQUIPMENT</b>		
6.2.1	Power Supply will be provided by BHEL at a single point near the machine, as per layout recommended by Vendor. All types of switches, cables, connections, circuit breakers etc. required for connecting BHEL's power supply point to different parts of the machine should be provided by the vendor.	Vendor to confirm	
6.2.2	Tropicalisation: All electrical / electronic equipment shall be tropicalized.	Vendor to confirm	
6.2.3	All electrical & electronic control cabinets & panels should be dust and vermin proof.	Vendor to confirm	
6.2.4	All electrical components in the cabinets should be mounted on DIN Rail.	Vendor to confirm	

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6.2.5	All electrical / electronic panels to be provided with adequate door locks. All electrical & electronic panels including operator's panel should have sufficient illumination and power receptacles/plug points of 220Volts, 5/15 Amp AC with on/off switch.	Vendor to confirm	
6.2.6	All motors shall conform to IEC or Indian Standards	Vendor to confirm	
6.2.7	All the cable trays required for laying of cables should be included in the offer.	Vendor to confirm	
6.2.8	Vendor should ensure the proper earthing for the machine and its peripherals/accessories. Any material requirement for the same should be informed with foundation design/drawings. The vendor can take earthing connection from the nearest column of the production shop.	Vendor to confirm	
7.0	<b>SAFETY ARRANGEMENTS</b> Following safety features in addition to other standard safety features should be provided on the machine:	Vendor to confirm	
7.1	Machine should have adequate and reliable safety interlocks / devices to avoid damage to the machine, workpiece and the operator due to the malfunctioning or mistakes. Machine functions should be continuously monitored and alarm / warning indications should be generated.	Vendor to confirm	
7.2	A detailed list of all alarms / indications provided on machine should be submitted by the supplier.	Vendor to confirm	
7.3	Flash back arrestors should be fitted in the Oxygen / Aceytelene pipe lines.	Vendor to confirm	
7.4	Non return valves (NRV) should be fitted for Aceytelene/oxygen heating as well as cutting lines.	Vendor to confirm	
7.5	All the pipes, cables etc. on the machine should be well supported and protected. These should not create any hindrance to machine operator's movement for effective use of machine and for maintenance personnels .	Vendor to confirm	
7.6	Emergency Switches at suitable locations as per International Norms should be provided.	Vendor to confirm	
8.0	<b>ENVIRONMENTAL PERFORMANCE</b>		
8.1	<b>The machine should conform to following factors related to environment :</b>	Vendor to confirm	
8.1.1	Maximum noise level shall be 85 dB(A) at normal load condition, 1 meter away from the machine with correction factor for back ground noise, if necessary. This will be measured as per international standards like DIN 45635-16, if required.	Vendor to confirm	
8.1.2	No hazardous chemicals shall be required to be used in the machine.	Vendor to confirm	
8.1.3	If any safety / environmental protection enclosure is required it should be built in by the vendor.	Vendor to confirm	
8.1.4	Paint of the machine should be oil resistant & should not get peeled off.	Vendor to confirm	
9.0	<b>FAULT DIAGNOSTIC SYSTEM :</b>	Vendor to confirm	
9.1	Supplier's own diagnostic system with required Software and Hardware installed on the CNC system, which shows detailed cause and remedy for the fault on the CNC system display with full diagnostics indicating the element /device causing the fault.	Vendor to confirm	

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<b>10.0</b>	<b>LEVELING &amp; ANCHORING SYSTEM</b>		
10.1	Complete set of anchoring materials including foundation bolts, nuts, washers, fixators, leveling shoes etc for alignment of tracks, levelling of tracks & transverse carriage, torch suspension system & fix the machine to the foundation . Details to be submitted.	Vendor to confirm	
<b>11.0</b>	<b>TOOLS FOR ERECTION, OPERATION &amp; MAINTENANCE</b>		
11.1	Tools and Equipments required for erection of the machine shall be brought by the vendor. Necessary tools like Torque Wrench, Spanners, Keys, grease guns etc. for operation and maintenance of the machine should be supplied by the vendor. List of such tools and machine equipments to be submitted.	Vendor to confirm	
11.2	Set of Test instruments for alignment of track, carriage , checking levelling of cutting table to be brought by vendor . List of instruments to be submitted.	Vendor to confirm	
<b>12.0</b>	<b>SPARES</b>		
12.1	Itemwise breakup of standard mechanical, electrical and electronic & CNC spares to be given for 2 years normal maintenance.	Vendor to confirm	
13.0	<b>DOCUMENTATION :</b> Three sets of following documents (Hard copies) in English language should be supplied along with the machine:-	Vendor to confirm	
13.1	O & M manuals of Machine & CNC system	Vendor to confirm	
13.2	Programming Manuals of Machine & CNC system	Vendor to confirm	
13.3	Detailed Maintenance manual of machine with all drawings of machine assemblies/sub-assemblies/parts including Electrical / circuit diagrams. All machanical Assembly/ Sub Assembly Drawings shall be supplied with the part list also in English.	Vendor to confirm	
13.4	Hardware manual of CNC system.	Vendor to confirm	
13.5	Interface & commissioning manuals for CNC system.	Vendor to confirm	
13.6	Electrical schewatic wiring diagram junction Box details , connector pin details cable layout.	Vendor to confirm	
13.7	O &M manual of plasma power source .	Vendor to confirm	
13.8	Wiring diagram, Circuit diagram , Component layout of plasma Source.	Vendor to confirm	
13.9	Alarm list & diagnostic manual of plasma unit .	Vendor to confirm	
13.10	Manual of all bought- out items , Spare ports list and complete addresses of bought- out items supplier.	Vendor to confirm	
13.11	Catalogues, Operation & Maintenance Manuals of all bought out items including drawings, wherever applicable.	Vendor to confirm	
13.12	Details of operator's Panels.	Vendor to confirm	
13.13	Operating Manuals, Maintenance Manuals & Catalogues for supplied accessories.	Vendor to confirm	
13.14	PLC program print-outs ( hard copy ) with comments in English including PLC program for any other auxiliary system if used.	Vendor to confirm	
13.15	PLC program, NC data & PLC data on CD.	Vendor to confirm	
13.16	Operating system & PLC back up on CD.	Vendor to confirm	
13.17	Details of drives controlling the valves.	Vendor to confirm	
13.18	Complete list of parts/items( Bill of materials) used in the machine in English language.	Vendor to confirm	

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13.19	One additional set of all the above documentation on CD ROM, wherever possible.	Vendor to confirm	
<b>14.0</b>	<b>FOUNDATION</b>		
14.1	Vendor shall submit the foundations layout drawings for getting BHEL's approval within one month from the date of Letter of Intent (LOI) or Purchase Order, whichever is earlier. Complete Foundation details viz. static / dynamic load details. Foundation bolts ,clamps, washers etc. to be supplied by vendor.	Vendor to confirm	
14.2	Foundation of the machine will be designed by BHEL and will be concurred by the supplier.Construction of foundation will be carried out by BHEL under the supervision of supplier/ supplier representative if he requires so.	Vendor to confirm	
<b>15.0</b>	<b>ERECTION &amp; COMMISSIONING</b>		
15.1	Erection & Commissioning of track ,Gantry, Drag chain , carriage , Power source, cable /hose assemblies, gas manifolds, UPS / Voltage stabilizer, Isolation Transformer with all mechanical /electrical connections shall be responsibility of vendor.	Vendor to confirm	
15.2	Successful proving of BHEL components by the supplier shall be considered as part of commissioning for the machine . All tests, as mentioned at Sl. No. 19.0 (Machine Acceptance) and testing/demonstration of tele-diagnostic service etc. shall also be part of erection /commissioning.	Vendor to confirm	
<b>16.0</b>	<b>PROVEOUT</b>		
16.1	Successful cutting of components by vendor as per BHEL requirements through AUTO CAD/ AUTO NESTING /Programming to the specified cutting capability & quality of cut (as per job requirement vide clause no. 4.0 of specification) at BHEL works, using software package / tools etc. supplied by vendor.	Vendor to confirm	
<b>17.0</b>	<b>TRAINING</b>		
17.1	Four BHEL Persons in a group should be trained at vendor's works in the following area for 2 weeks.:-	Vendor to confirm	
17.1.1	(a) Operation of the machine.	Vendor to confirm	
17.1.2	(b) CNC Programming for the machine.	Vendor to confirm	
17.1.3	(c) Mechanical maintenance of the machine	Vendor to confirm	
17.1.4	(d) Electrical /Electronic maintenance of the machine.	Vendor to confirm	
17.2	Air-fare, boarding & lodging for the trainees shall be borne by BHEL.	Vendor to confirm	
17.3	Competent, English speaking experts shall be arranged by the vendor for satisfactory & effective training of BHEL personnel.	Vendor to confirm	
<b>18.0</b>	<b>AMBIENT CONDITIONS &amp; THERMAL STABILITY</b>		
18.1	Total machine including all supplied items should work trouble free and should give specified accuracies under existing power supply and ambient operating conditions, as mentioned below.	Vendor to confirm	
18.2	<b>Power Supply (AC):</b> Voltage = 415V +10% / -10% of fluctuations , Frequency= 50Hz +3 / -3 , No. of phases = 3 phase with neutral.	Vendor to confirm	



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18.3	<b>Ambient Operating Conditions:Temperature = 5 to 50 degree Celsius , Relative Humidity = 95% max.</b>	Vendor to confirm	
18.4	The machine should be suitable for continuous operation to its full capacity for 24 hours a day and 7 days a week throughout year. Vendor to ensure and confirm the same.	Vendor to confirm	
19.0	<b>MACHINE ACCEPTANCE (Tests/Activities to be performed &amp; demonstrated by Vendor)</b>	Vendor to confirm	
19.1	<b>Tests/Activities to be carried out at vendor's works on the machine before dispatch during Pre-Dispatch Inspection (PDI) by BHEL :</b>	Vendor to confirm	
19.1.1	Demonstration of specified/offered Geometrical accuracies as per test chart/standard and specified values.	Vendor to confirm	
19.1.2	Demonstration of all features of the machine, control system & accessories	Vendor to confirm	
19.2	<b>Tests/Activities to be carried out at BHEL works while commissioning the machine.</b>	Vendor to confirm	
19.2.1	Demonstration of specified/offered Geometrical accuracies as per test chart/standard and specified values.	Vendor to confirm	
19.2.2	Full load test to demonstrate the maximum power & cutting capacity of the machine.	Vendor to confirm	
19.2.3	The machine should be tested for continuous running of 48 hrs. If any break down occurs during this test, the test should be repeated for 48 hrs from that time.	Vendor to confirm	
19.2.4	Demonstration of all features of the machine, control system & accessories to the satisfaction of BHEL for efficient and effective use of the machine.	Vendor to confirm	
19.2.5	Demonstration by actual use of all supplied accessories to their full capacity for required applications.	Vendor to confirm	
19.2.6	Training of BHEL machine operators & maintenance staff in operation of complete machine & accessories etc by the supplier's experts / engineers during their stay at BHEL works.	Vendor to confirm	
20.0	<b>PACKING</b>	Vendor to confirm	
20.1	Sea worthy & rigid packing for all items of complete machine, CNC System, all Accessories and other supplied items to avoid any damage/loss in transit. When machine is dispatched in containers, all small loose items shall be suitably packed in boxes.	Vendor to confirm	
21.0	<b>GUARANTEE</b>		
21.1	Guarantee for complete machine and all supplied accessories/ attachments/equipments/items for 24 months from the date of acceptance of the machine.	Vendor to confirm	
22.0	<b>GENERAL</b>		
22.1	Machine Model No.	Vendor to specify	
22.2	Total connected load (KVA)	Vendor to specify	
22.3	Total Space required (Length, Width, Height) for complete machine, accessories/attachments and other supplied items like Voltage Stabilizer, Isolation Transformer.	Vendor to specify	
22.4	Total weight of the machine	Vendor to specify	
22.5	Weight of heaviest part of machine	Vendor to specify	

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22.6	Weight of the heaviest assembly of the Machine	Vendor to specify	
22.7	Dimensions of largest part of the machine	Vendor to specify	
22.8	Vendor to submit reference list of customers where similar machines have been supplied mentioning broad specifications of the supplied machine i.e. Model, CNC System, capacity etc.	Vendor to submit	
22.9	Detailed catalogues, sketches/drawings/photographs pertaining to the offered machines and accessories/attachments/items should be submitted with the offer.	Vendor to submit	
22.10	All Cables and Hoses etc. should be well supported & protected in trays/brackets/drag chains etc.	Vendor to confirm	
23.0	<b>Painting of Machine / Electrical Panels : RAL 6011 Apple Green ( Polyurethane Paint )</b>	Vendor to confirm	
24.0	<b>QUALIFYING CONDITIONS</b>		
24.1	Only those vendors, who have supplied and commissioned at least one CNC Oxy fuel Cutting machine of same or higher capacity for similar applications in past 10 years and such machine is presently working satisfactorily (As on date of opening of tender) should quote. Vendor to submit performance certificates from the customers whom said machine is supplied for the satisfactory performance of the machine after one year of commissioning of the machine and the machine is presently working satisfactorily.	Vendor to submit	
24.2	Name of the customer / company where similar machine is installed.	Vendor to submit	
24.3	Complete postal address of the customer.	Vendor to submit	
24.4	Month & Year of commissioning.	Vendor to submit	
24.5	Name and designation of the contact person of the customer.	Vendor to submit	
24.6	Phone, FAX no. and e-mail address of the contact person of the customer.	Vendor to submit	
25.0	<b>BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false/incorrect, the offer shall be rejected.</b>	Vendor to confirm	
B.K.Manjhi		Inder Mathur	
Sr. Manager (FBM)		Sr. Manager (WE&S)	
R.N.Jha		S.J.Chakraborty	
AGM (FBM)		Sr. DGM (WE&S)	