

TECHNICAL COMPLIANCE SHEET FOR LASER ENGRAVING MACHINE			
Sl. No.	Description	Compliance (Yes/No)	If, no. State the deviation
1	Supply, erection, commissioning and proving of the machine to desired capacity, technical parameters, temperature accuracy and specified quality and rated output for the components as per input drawings and in compliance with the technical specification.		
2	Firm to specify Model / Make of the machine for desired specification in technical bid.		
3	Engraving / Cutting Area (X, Y axes) 1220mm x 910mm or (4' x 3')		
4	X , Y axes Rails: Linear guide way. The pulleys/pinion should be equipped with maintenance free U shape bearings.		
5	Z Axis Moving: Automatic		
6	Laser Power: 100W / 135W / 170W		
7	Max. Cutting Depth/ Thickness : 20 / 25 / 30mm for materials as Acrylic, MDF, etc.		
8	Table / Bed: Motorized Up/Down Flatbed Table		
9	Minimum Letter Size: 1mm – 1.5mm (English Font)		
10	Resolution: Range of 125 DPI to 1200 DPI		
11	Laser Source: Metal Laser Tube type, Sealed CO2 Laser, Auto Focus		
12	Laser Pointer Safety: Visible-Beam Lasers: Class 2, Class 3R		
13	Max. Engraving Speed: 0-2000mm/s		
14	Speed Control: Adjustable from 0.1 to 100%		
15	Drive type: AC Servo Control		
16	Software supported for output data: Supported on Windows Platform i.e. ArtCut, LaserCut, AutoCAD, CorelDraw or equivalent. Graphic Format Supported: PLT,DXF,DST,BMP,JPG,JPEG,PNG,TIF, etc.		
17	Control System: Best suitable Control system with control card and its application / controlling software, should be provided along with the interface of the designing software.		
18	Interface: USB 2.0 / 3.0 / higher Interface, or Ethernet. Online & Offline Operation: To transmit data from PC to machine by USB cable or transmit by Flash Memory Disk.		
19	Memory Buffer: 265MB or Higher		
20	Display Panel: Touch Panel for Graphical display with Parameter Setting		

21	Machine Base: Should be rigid for vibration damping along with levelling adjustment (if desired). Castor Wheels: Machine should be equipped with castor wheels to make it easier to move it around the workshop (when desired).		
22	Illumination: Inside cabin light, should have a viewing window through the main access door.		
23	Cooling: Air cooled		
24	Air Extraction System: External Exhaust System is to be equipped as desired to the specific model. Preferably on the back of the machine.		
25	Certification / Quality Assurance: CE Certificate, ISO9001:2008, FDA. All parts and accessories must be OEM products and certified.		
26	Warranty: Standard warranty of one year for machine and its accessories.		
27	Reference List: Tenderer shall furnish the Reference List of firms where they have supplied similar machine giving details like: a) Firm Address with Fax no. and Name of Contact Person, b) Model & c) Year of supply. If the model is not similar, it shall be mentioned specifically.		
28	In case the tenderer outsources certain important/essential process/parts/sub assemblies, the details of vendors/ sub contractor and facility available at their works shall be specifically furnished for purchaser to verify the same. In this regard the tenderer should furnish the complete address along with Name & designation of contact person of the vendor(s) / sub contractor(s). A written permission should be enclosed that purchaser's representatives are authorized to enter vendor's/sub contractor's works/premises for verification of the facilities and/or services being offered /given to the OEM tenderer.		
29	Training to be given in operation, and maintenance of the machine.		
30	At Firm's (tenderer) work (PDI):Technical acceptance as per firm's standard test chart (Geometrical test) with desired calibration.		
31	At National Council of Science Museums, Kolkata: Proving the machine parameters to specification. Technical acceptance as per firm's standard test chart of various parameters.		