

**SCOPE OF SUPPLY FOR UP-GRADATION OF  
UNIVERSAL GAS CUTTING MACHINE**

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S.N.	DESCRIPTION	COMPLIANCE /REMARKS
1.0	<b>CNC Controller having following features and suitable for Gas Cutting machine with 3 Axis ( X, Y1 &amp; Y2) and two nos. oxy-fuel torches.</b>	
1.1	Coloured LCD/TFT Monitor and Machine Control Panel with NC Key Board, ON/OFF and other controls for two burners.	
1.2	PLC Controller having minimum 24 Inputs & 24 Outputs along with external relay board.	
1.3	Analog Interface for servo motors (BALDOR, BSM80B-175AA) and digital interface for simulated encoder feedback from servo drives (BALDOR, FD2A05TB-RN20).	
1.4	24 VDC Power Supply of sufficient rating for the CNC controller and external I/Os.	
1.5	USB interface for program transfer.	
1.6	Kerf Compensation and Automatic Calculation of Cutting Parameters.	
1.7	Automatic Reversing from the end point to the start point.	
1.8	Nesting, Mirror imaging and Repositioning.	
1.9	Real Time Simulation and Motion Display for the Programmed piece.	
1.10	Variable & Settable Feed rate (100 - 800 mm/min) and Pre-heat / Pierce times.	
1.11	Co-ordinate system rotation and transformation.	
1.12	The CNC control should be able to access and execute programs in the ESSI format, generated by the existing MOST2D software, without any modification.	
1.13	Chain cutting feature for continuous cutting of different components / shapes without the need of repetitive piercing.	
1.14	Manual mode operation for Jogging of the axes and other manual functions.	
1.15	The CNC control should have in-built diagnostic facility having Alarm Text, troubleshooting and Status display of all PLC Inputs / Outputs and Axis service.	
<b>2.0</b>	<b>Manuals / Documents</b>	
2.1	Operation & Maintenance Manual of CNC Control.	
2.4	Complete back-up of CNC Control on CD/DVD/USB.	
<b>3.0</b>	<b>Commissioning</b>	
3.1	Interfacing of CNC Control with existing Servo Drives, commissioning and trial.	
<b>4.0</b>	<b>General Conditions</b>	
4.1	The new CNC control and its accessories shall be fitted in the existing Operator Panel (Height 600mm, Breadth 470mm & Depth 270mm).	
4.2	The CNC Control of MESSER/BURNY/FAGOR make shall be accepted only.	
4.3	The Vendor should quote the commissioning charges separately.	
4.4	The supplied Control shall be under warranty for a period of 18 months from the date of delivery or 12 months from the date of successful commissioning whichever is later.	
4.5	The Vendor should give point wise compliance to all the points of the annexure.	

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