



PART LIST

ORDER No: SHEET No : 05

MACHINE : CASE GAUGING M/C-5.56mm.
 GROUP : ELECTRICAL ASSY.
 SUB GROUP : GENERAL ASSY.

ASSEMBLY DRAWING No :
 MTSK - 207 - 9000

MACHINE TOOL PROTOTYPE FACTORY, AMBERNATH

PART No	NO / GROUP	DESCRIPTION	MATERIAL	STD	DIM	REMARKS
41	1No.	<p>Programming Logic Controller with 64DI; 64DO; 12AI; 1Pt-100 Temp input</p> <p>a) Scanning time NOT more than 5ms for programming steps of 1500-2000.</p> <p>b) All digital inputs should be of NPN/PNP supported from field inputs.</p> <p>c) All digital outputs should be of NPN/PNP to drive the relay cards.</p> <p>d) Analog input should be universal and of 12 bit minimum</p> <p>e) Temperature module should support Pt-100 input and should be controlled thru PID logic.</p> <p>f) PLC system should have ethernet port built into CPU or separate module to connect to PC for high speed data collection.</p> <p>g) All the I/O should come with the cables, connectors and other supporting tools.</p> <p>h) CPU should have the replaceable battery and should support external memory card for data collection.</p> <p>i) PLC should support the ladder, structural, script programming etc.</p> <p>j) Necessary license software along with the cables to be included in the package.</p> <p>k) PLC should be of a latest configuration</p> <p>All software tools required for program the PLC shall be in the scope of supply.</p> <p>Make: Siemens</p>				
42	1 No.	<p>HMI with latest configuration to suit above mentioned PLC at sl No. 41</p> <p>keypad as well as touch screen operator interface</p> <p>Screen size - 15" or more, with licensed software</p> <p>Make : Siemens</p>				
43	15Nos.	<p>High accuracy inductive gauging sensor with controller with following features</p> <p>1) Full scale measuring range – 0 to 2mm. 2) Sensor mounting size M8 to M10</p> <p>3) Cable length – 10Mtrs. 4.) Linearity of +/- 0.3% of F.S. (0 – 2mm.)</p> <p>5.) Repeatability of 0.02% of F.S. 6.) Least count of NOT more than 1 micron</p> <p>7.) Ultra high speed sampling of 25 micro second i.e. 40000 samples per second</p> <p>8.) Analog output of +/- 5VDC. 9.) Resistance against harsh environment: IP67</p> <p>10.) Analog output voltage impedance of 100 ohm with response time of 0.075ms (at max. speed)</p> <p>11.) Tolerance limit memory function – up to 4 upper/lower tolerance limit setting can be stored.</p> <p>12.) Controller should be Din rail mountable or panel mounted 13.) Versatile measurement modes to accept Aluminium, Steel, Brass etc as target 14.) The sensor and controller output should compatible to branded PLCs.</p> <p>The scope of work includes installation, programming, commissioning and interfacing with PLC, HMI, sensors & field I/Os to Sl. No. 41 to 43 as per requirement of the machine with full system training are in the scope.</p> <p>Five set of drawings & manuals includes equipment documentation, required after completion and proving of the system.</p>				

DATE: 25/11/2014
 FOR: JWM/MTA

SIGN: *[Signature]*
 OU = ORDERED UNMACHINED S = STOCK
 OP = ORDERED PREMACHINED N = TO BE ALTERED

ALTERATION