

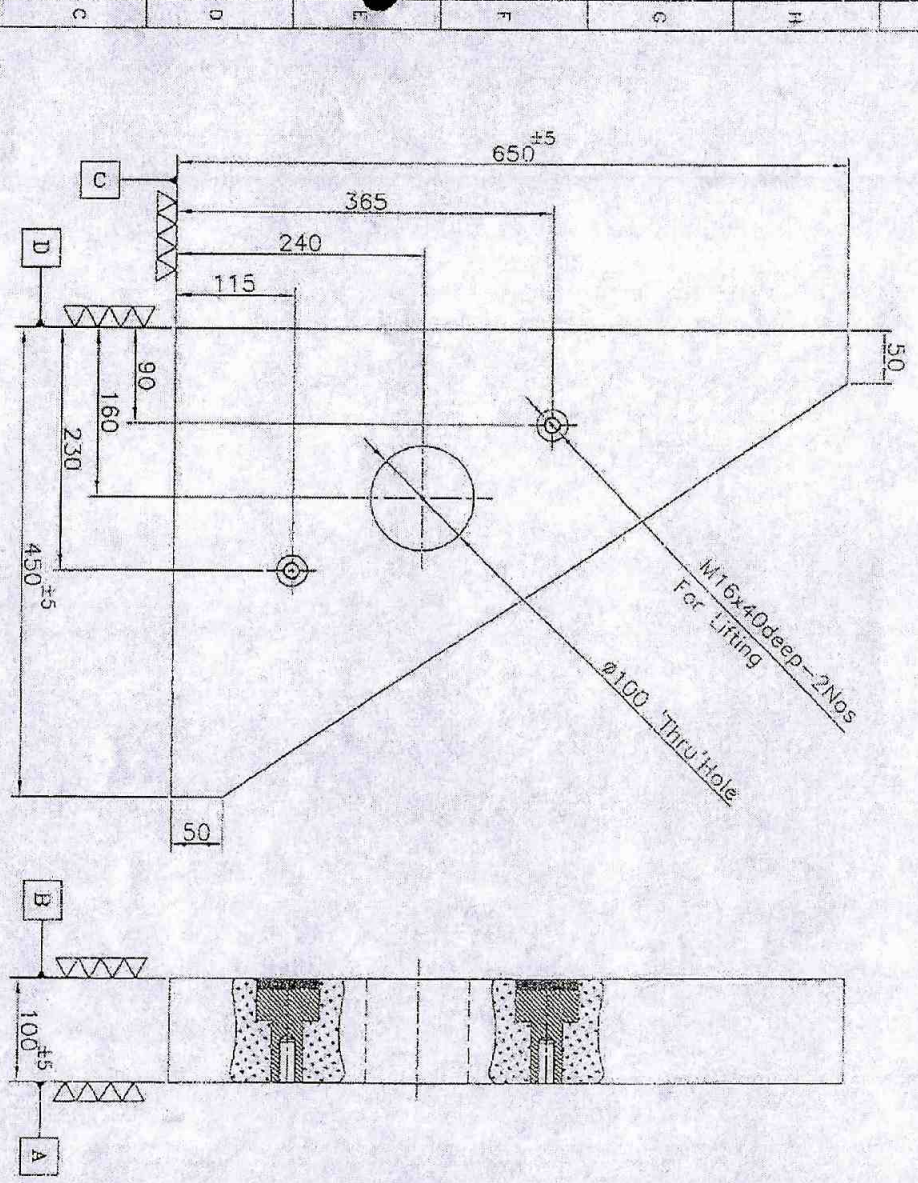
Specification of Granite measuring instruments

Sr No	Description	BHEL Specification	Vendor to Confirm	Deviation if any (Vendor to confirm)
1	Requirement/ Function	Granite measuring Instruments comprising of one Granite Triangle, one Granite Straight Edge & one Granite Rectangle	Vendor to confirm	
2	Specification			
A	Electronic Level	Make and Model to be quoted by vendor	Vendor to specify	
A-0	Qty	1 Lot Comprising of 01 number each of A-1 & A-2 & A-3	Vendor to confirm	
A-1	Granite Triangle	The Granite Triangular to should have 2 working faces i.e. Perpendicular & base having precision lapped finish. Hypotenuse to be as non working surface. The non working faces to be duly smooth polished for aesthetic point. Suitable Holes should be provided for lifting & handling. The Perpendicular height to be 600-650 mm, Base Length 400-450 mm, & Width of triangular to be 80-120 mm. The squareness of Perpendicular & base to be 3 microns or better	Vendor to confirm	
A-2	Granite Straight Edge	The Granite Straight Edge of "I" section, Length 2000mm, Height 200-225 mm, Width 75-100 mm. The straightness & parallelism to be within 5 micron or better	Vendor to confirm	
A-3	Granite Rectangular Piece	The Granite Rectangle having Length 500 mm, Height 50 mm, Width 50 mm. The straightness & parallelism to be within 5 micron or better	Vendor to confirm	
A-4	Material of all measuring instruments	Granite	Vendor to specify	
A-5	Accuracy	As specified categorically for all 3	Vendor to specify	
A-6	Accessories to be provided			
A-7		Individual Storage cases for all the instruments	Vendor to confirm	
3	Scope of Supply	Vendor has to supply the complete 01 Lot comprising of 01 number each, as mentioned from Point A-1 to A-3, with case as specified	Vendor to confirm	
3.1		All the measuring instruments to be supplied with Calibration certificate from NABL accredited Laboratory	Vendor to confirm	
4	Warranty	The supplied equipment should have warranty of 12 Months from date of supply.	Vendor to confirm	

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5	Pre qualification criteria			
5.1	Only OEM of Precision Electronic measuring instrument/Precision mechanical instrument or their authorized dealer can participate in the enquiry. The Precision instrument should have accuracy of 5 Microns or better. Dial gauges/Vernier callipers/Micrometers are NOT included in this list	Dealer has to produce valid authorization certificate along with technical bid.	Vendor to confirm	
5.2	Vendor has to submit 1 No of PO copy of similar item (either by OEM or by dealer) supplied in last 5 year.		Vendor to confirm	
5.3	The Performance Certificate of the supplied instrument to be provided.		Vendor to confirm	
5.4	Pre Delivery Inspection	Pre Delivery Inspection (PDI) will be done at suppliers works before despatch of material	Vendor to confirm	
	Note:	L1 will be decided on combined value of all the 3 measuring instruments with case	Vendor to confirm	

REV. NO.	0	1	2	3	4	5	6	7	8	9
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Note:

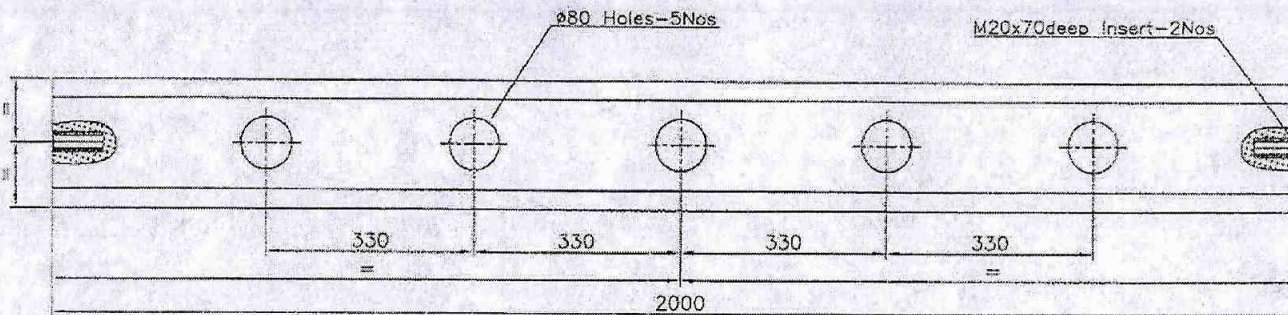
- * Flatness, Perpendicularity and parallelism of faces A,B,C&D are maintained within 3 micrometer accuracy.
- * Accuracy as per DIN 875:1981 & DIN 876:1984
- * Mass of the granite triangle approximately 55 Kgs.
- * M16 Eye bolt-2Nos supply by us.
- * All sharp edge min 5R.

Customer: M/s. BHEL, Bhopal.

CHAMFER 1x45° UNLESS OTHERWISE SPEC.									
Designation: GRANITE TRIANGLE Group: 650x450x100 Machine: _____									
ALTERATION									
INDEX AREA DATE NAME Qty Assy No. Scale: 1:1000 Drawn: 04.09.2018 V.GOP1 Checkd: 04.09.2018 R.S Appd: 04.09.2018 V.S Material: GRANITE Treatment: _____ Drawn: _____ Checked: _____ Approved: _____									
GUINDY MACHINE TOOLS LIMITED - METROLOGY DIVISION HOSUR - 635 126, TAMILNADU, INDIA 02-08-01-78									

FOR UNSPECIFIED TOLERANCE REFER : MEDIUM CLASS OF IS 2102-1969

सुरेन्द्र कुमार गौड़ / Surendra Kumar Gaur
 Design Engineer / Sr. Design Engineer
 धर्म इंजीनियरिंग / WEX - (GMA)
 भोपाल, मध्य प्रदेश / Bhopal, Madhya Pradesh



- * Flatness, Perpendicularity, Parallelism of All faces A,B,C&D are maintained within 5 micrometer of accuracy.
- * Accuracy as per DIN 875:1981 & DIN 876:1984
- * Chamfer all edges 3x45°
- * Mass of the granite straight edge approx 100Kgs.
- * M20 Eye Bolt-2Nos supply by us.
- * M20 Insert-2Nos bonded with epoxy.

ALTERATION		INDEX	AREA	DATE	NAME	Qty	Assy. No.
Designation	GRANITE STRAIGHT EDGE	Scale	Drawn	01.04.2018	V.GOPAL	Materials	
Group	2000X200X100 Machine I-SECTION	NTS	Checked			Treatment	
Snp. Replaces							
Drg. Replaced by							
GUINDY MACHINE TOOLS LIMITED-METROLOGY DIVISION HOSUR - 535 126						GMIT 01-04-101-104	

REV. NO.	0	1	2	3	4	5	6	7	8	9

FOR UNSPECIFIED TOLERANCE REFER TO MEDIUM CLASS OF IS 2102-1969

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN MM

GUINDY MACHINE TOOLS LIMITED / Metrology Division
 Hosur (Karnataka) / India
 535 126
 01-04-101-104
 V.GOPAL, Manager / BHEL, BHOPAL

