

**BHARAT HEAVY ELECTRICALS LIMITED
HEAVY ELECTRICAL EQUIPMENT PLANT
UTTARAKHAND,INDIA**

Enquiry No. &

Date:

Due Date:

Supplier's Ref.:

Date :

Annexure-I (Specification for six sided Granite master square)

Note:-

1. The 'Offered' Column and where applicable, the 'Deviations' & 'Remarks' Column of this format shall be filled in by the Vendor and submitted along with the offer. The offer containing Inadequate/incomplete, ambiguous or unsustainable information against any of the clause may be rejected.

2. The offer and all documents enclosed with offer should be in English language only.

Name & Address of the supplier:

Name & Address of the Authorized Supplier/retailer:

Telephone No.:

Telephone No.:

Fax No.:

Fax No.:

e-mail :

e-mail :

Scope: Supply of Granite master square complying with the following specifications.

Annexure to Indent No.: 20154531

Dated: 16-11-15

MATERIAL CODE NO.: ZWG061201014

S. No.	Description - BHEL's Requirement	Qty.	Specified	Offered	Deviations	Remarks
1.0.0	APPLICATION:					
1.1.0	The Granite master square (six sided) will be used to check the geometrical accuracy of the CNC and conventional machines .	.	Vendor to note and confirm			
1.2.0	Granite master square will be used along with other instruments like Granite Straight edge, electronic level, dial gauges etc. to aid in restoration of geometrical accuracies of machine.	.	Vendor to note and confirm			
2.0.0	SCOPE OF SUPPLY:					
2.1.0	Supply of Granite master square for measurement of straightness, Squareness, Flatness, and precision alignment of machine tools.	1 No.	Vendor to Comply and confirm			
3.0.0	TECHNICAL SPECIFICATIONS:					
3.1.0	Granite master square should have the following dimension	.	Vendor to Comply and confirm			

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3.1.1	Length = 1200 mm	-	Vendor to Comply and confirm			
3.1.2	width = 1200 mm	-	Vendor to Comply and confirm			
3.1.3	Height = 150 mm	-	Vendor to Comply and confirm			
3.2.0	Flatness and parallelism of all the faces of the master square on the overall surface	-	7 microns or less			
3.2.1	Perpendicularity all the faces of the master square	-	14 microns or less			
3.3.0	Number of working faces	-	6			
3.4.0	The granite used for the master square should be superior quality Indian Black Granite with natural grains having the physical properties as per IS7327-2003/ ISO8512-2-1990	-	Vendor to Comply and confirm			
3.5.0	Granite master square should have good resistance to wear	-	Vendor to Comply and confirm			
3.6.0	Granite master square should have Lapping on all the surfaces to ensure good surface finish	-	Vendor to Comply and confirm			
3.7.0	Detailed drawing is to be submitted along with offer with clear marking of the accuracy of the faces.	-	Vendor to Comply and confirm			
3.8.0	Granite master square should be supplied with suitable packing arrangements for transit and transport to avoid any type of breakage.	-	Vendor to Comply and confirm			
3.9.0	Granite master square should be provided with suitable cover/ case to keep it safe when not in use.	-	Vendor to Comply and confirm			
3.10.0	Granite master square should be provided with suitable lifting provisions and special accessories like eyebolts, D-shackle, special lifting ropes, rods or any other special item required for its lifting and shifting to other place as and when required.	-	Vendor to Comply and confirm			

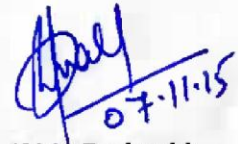
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3.11.0	Granite master square is to be properly calibrated for accuracy levels and calibration report (as per tolerance class 00 of DIN 875-2-2008 or equivalent confirming the accuracies as desired above) is to be submitted along with master square. The report is also to be shown to BHEL representative during PDI.	1 no.	Vendor to Comply and confirm			
4.0.0	Pre Dispatch Inspection- Pre- Dispatch Inspection will be carried out by BHEL engineers at vendor's works in India and following points shall be demonstrated by the vendor.		Vendor to note and confirm			
4.1.0	All the points as mentioned in sl. No. 3.1.0 to 3.11.0					
5.0.0	PERFORMANCE GUARANTEE:					
5.1.0	The master square shall have guarantee/warranty for a minimum period of 24 months from the date of acceptance of the item at our works.	-	Vendor to Comply and confirm			
6.0.0	SPECIAL INSTRUCTIONS:					
6.1.0	Vendor must submit point wise reply to specifications, Deviations if any must be separately submitted with reasons for each.	-	Vendor to Comply and confirm			
7.0.0	FINAL ACCEPTANCE					
7.1.0	The equipment shall be finally accepted by BHEL, Haridwar subject to fulfillment of all the above points.	-	Vendor to Comply and confirm			


 (R K Verma)
 Sr. Manager WEX- BI.1


 (Praveen Kumar)
 Manager (WEX-FE, CMW.OEE & CRN)


 (Shiv Prakash)
 Sr. Engineer (WEX-ERN/ERS)

Pre Qualifying requirements for six sided Granite master square (01 no.)

Indent No.- 20154531 Dtd. 16-11-15

S. No.	Description - BHEL's Requirement	Specified	Offered	Deviations	Remarks
PRE-QUALIFYING CONDITION:					
1	Offers can be submitted by any of the following i) OEM of the Item. ii) Authorized supplier/ distributor/retailer/ stockist/ channel partner of the OEM.	Vendor to Comply and confirm			
2	Vender/supplier must submit the document that OEM of the Item will provide the services during warranty period.	Vendor to Comply and confirm			
3	Vendor should agree that Pre dispatch inspection will be done at his works in INDIA and he should have all the equipments and facilities to demonstrate the straightness, flatness, squareness and parallelism accuracies of the granite master square.	Vendor to Comply and confirm			
4	Vendor should have supplied at least one granite master square (six sided) of 1000X1000X150 mm (or bigger) in the last 7 years from the date of floating of tender. Vendor has to attach the copy of the purchase order to support his claim.	Vendor to Comply and confirm			
	OR				
	Vendor should have supplied at least two granite master square (six sided) of 600X600X100 mm (or bigger) in the last 7 years from the date of floating of tender. Vendor has to attach the copy of the purchase order to support his claim.				
	OR				

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	Vendor should have supplied at least three granite master square (six sided) of 500X500X80 mm (or bigger) in the last 7 years from the date of floating of tender. Vendor has to attach the copy of the purchase order to support his claim.				
5	The Vendor must have calibration, service and technical support in India.	Vendor to Comply and confirm			
6	BHEL reserves the right to verify any of the documents submitted along with the offer	Vendor to Comply and confirm			

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(R K Verma)

Sr. Manager WEX- Bl.1

(Praveen Kumar) 7.11.15

Manager (WEX-FE, CMW.OEE &CRN)

07.11.15

(Shiv Prakash)

Sr. Engineer (WEX-ERN/ERS)

**BHARAT HEAVY ELECTRICALS LIMITED
HEAVY ELECTRICAL EQUIPMENT PLANT
UTTARAKHAND,INDIA**

Enquiry No. &
Date:
Due Date:
Supplier's Ref.:
Date :

Annexure-II (Specification for Granite straight edge)

Note:-

1. The 'Offered' Column and where applicable, the 'Deviations' & 'Remarks' Column of this format shall be filled in by the Vendor and submitted along with the offer. The offer containing inadequate/incomplete, ambiguous or unsustainable information against any of the clause may be rejected.

2. The offer and all documents enclosed with offer should be in English language only.

Name & Address of the supplier:

Name & Address of the Authorized Supplier/retailer:

Telephone No.:

Telephone No.:

Fax No.:

Fax No.:

e-mail :

e-mail :

Scope: Supply of Granite straight edge complying with the following specifications.

Annexure to Indent No.: 2015453 Dated: 16-11-15

MATERIAL CODE NO.: ZWG061301019

S. No.	Description - BHEL's Requirement	Qty.	Specified	Offered	Deviations	Remarks
1.0.0	APPLICATION:					
1.1.0	The Granite straight edge will be used to check the geometrical accuracy of the CNC and conventional machines in long span.		Vendor to note and confirm			
1.2.0	Granite straight edge will be used along with other instruments like Granite master square, electronic level, dial gauges etc. to aid in restoration of geometrical accuracies of machine.		Vendor to note and confirm			
2.0.0	SCOPE OF SUPPLY:					
2.1.0	Supply of Granite straight edge for measurement of straightness, Squareness, Flatness, and precision alignment of machine tools.	1 No.	Vendor to Comply and confirm			
3.0.0	TECHNICAL SPECIFICATIONS:					
3.1.0	Granite straight edge (I- section / Rectangular type) should have the following dimensions		Vendor to Comply and confirm			

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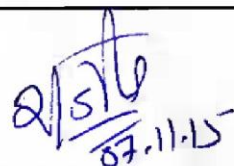
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3.1.1	Length = 3000 mm	-	Vendor to Comply and confirm			
3.1.2	width = 150 mm	-	Vendor to Comply and confirm			
3.1.3	Height = 200 mm	-	Vendor to Comply and confirm			
3.2.0	Straightness and flatness of the opposite surfaces of straight edge in the overall length		12.5 microns or less			
3.2.1	Parallelism of the opposite surfaces of straight edge		25 microns or less			
3.3.0	No. of working faces (top and bottom along the length)		2			
3.4.0	The granite used for the straight edge should be superior quality Indian Black Granite with natural grains having the physical properties as per IS7327-2003/ ISO8512-2-1990		Vendor to Comply and confirm			
3.5.0	Granite straight edge should have good resistance to wear		Vendor to Comply and confirm			
3.6.0	Granite straight edge should have Lapping on all the working surfaces to have ensure surface finish		Vendor to Comply and confirm			
3.7.0	Detailed drawing is to be submitted along with offer with clear marking of the accuracy of the faces.		Vendor to Comply and confirm			
3.8.0	Granite straight edge should be supplied with suitable packing arrangements for transit and transport to avoid any type of breakage.		Vendor to Comply and confirm			
3.9.0	Granite straight edge should be provided with suitable cover/ case to keep it safe when not in use.		Vendor to Comply and confirm			
3.10.0	Granite straight edge should be provided with suitable lifting provisions and special accessories like eyebolts, D- shackle, special lifting ropes, rods or any other special item required for its lifting and shifting to other place as and when required.		Vendor to Comply and confirm			

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3.11.0	Granite straight edge is to be properly calibrated for accuracy levels and calibration report (as per Tolerance class 000 of standard DIN874-3-2008 or equivalent confirming the accuracies as desired above) is to be submitted along with straight edge. The report is also to be shown to BHEL representative during PDI.	1 no.	Vendor to Comply and confirm			
4.0.0	Pre Dispatch Inspection- Pre- Dispatch Inspection will be carried out by BHEL engineers at vendor's works in India and following points shall be demonstrated by the vendor.		Vendor to note and confirm			
4.1.0	All the points as mentioned in sl. No. 3.1.0 to 3.11.0					
5.0.0	PERFORMANCE GUARANTEE:					
5.1.0	The Granite Straight Edge shall have guarantee/warranty for a minimum period of 24 months from the date of acceptance of the item at our works.	-	Vendor to Comply and confirm			
6.0.0	SPECIAL INSTRUCTIONS:					
6.1.0	Vendor must submit point wise reply to specifications, Deviations if any must be separately submitted with reasons for each.	-	Vendor to Comply and confirm			
7.0.0	FINAL ACCEPTANCE					
7.1.0	The equipment shall be finally accepted by BHEL, Haridwar subject to fulfillment of all the above points.	-	Vendor to Comply and confirm			


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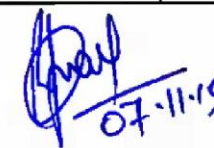
(R K Verma)

Sr. Manager WEX- BI.1


07.11.15

(Praveen Kumar)

Manager (WEX-FE, CMW.OEE &CRN)


07.11.15

(Shiv Prakash)

Sr. Engineer (WEX-ERN/ERS)

Pre Qualifying requirements for granite straight edge (01 No.)

Indent No.- 20154531 Dtd. 16-11-15

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S. No.	Description - BHEL's Requirement	Specified	Offered	Deviations	Remarks
PRE-QUALIFYING CONDITION:					
1	Offers can be submitted by any of the following i) OEM of the Item. ii) Authorized supplier/ distributor/retailer/ stockist/ channel partner of the OEM.	Vendor to Comply and confirm			
2	Vendor/supplier must submit the document that OEM of the Item will provide the services during warranty period.	Vendor to Comply and confirm			
3	Vendor should agree that Pre dispatch inspection will be done at his works in INDIA and he should have all the equipments and facilities to demonstrate the straightness, flatness, squareness and parallelism accuracies of the granite Straight edge.	Vendor to Comply and confirm			
4	Vendor should have supplied at least one granite straight edge of 2400 mm (or bigger) in the last 7 years from the date of floating of tender. Vendor has to attach the copy of the purchase order to support his claim.	Vendor to Comply and confirm			
	OR				
	Vendor should have supplied at least two granite straight edge of 1500 mm (or bigger) in the last 7 years from the date of floating of tender. Vendor has to attach the copy of the purchase order to support his claim.				
	OR				

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	Vendor should have supplied at least three granite straight edge of 1200 mm (or bigger) in the last 7 years form the date of floating of tender. Vendor has to attach the copy of the purchase order to support his claim.			
5	The Vendor must have calibration, service and technical support in India.	Vendor to Comply and confirm		
6	BHEL reserves the right to verify any of the documents submitted along with the offer	Vendor to Comply and confirm		


(R K Verma)

Sr. Manager WEX- Bl.1


(Praveen Kumar)

Manager (WEX-FE, CMW.OEE &CRN)


07.11.15

(Shiv Prakash)
Sr. Engineer (WEX-ERN/ERS)