

Domain :	bhel.abcpurchase.com		
Parent department:	BHEL Trichy		
Unit name	: BHEL Trichy		
Purchase group	: FB Misc items CAP	RFQ/NIT/Enquiry Officer	: SUBRAMANIAN
Event ID	: 38446	RFQ/NIT/Enquiry no.	: 2691900020
Enquiry Date	: 18/12/2019 05:30:00		
Tender Description	: HEATING ELEMENTS FOR FURNACE BED MODIFICATION		
Terms & Conditions	: . <u>VENDOR QUALIFYING CRITERIA:</u> . The BIDDER / VENDOR have to compulsorily meet all the following requirements to get qualified for consideration of the technical offer for the Supply of SPARE HEATING ELEMENTS REQUIRED FOR FURNACES/OVEN in BHEL TRICHY. If the vendor does not qualify as per PRE- QUALIFICATION CRITERIA, the technical offer of such BIDDER(s)/ VENDOR(s) offer will not be evaluated. 1) The bidder should have supplied furnace heating Elements/coils to any PSU /Government / Semi Government Organization / Joint Venture company of PSUs or Govt. Organization or both/Private sector company registered under Companies Act 1956,in last three (03) years(on the date of opening of tender). *Copies of purchase order (s) is required to be submitted in support of above along with Contact details of the customer. . 2) Along with the Technical offer, the Vendor should submit one Performance certificate from the customer for the satisfactory performance of the heating elements supplied to them. . 3) The bidder shall confirm to produce Test certificate for material composition in the event of ordering along with material supply. . <u>Refer Attachments:</u> . <u>Annexure – II</u> - Terms and conditions of the enquiry . <u>Annexure – V</u> - CA Certificate (Applicable for MSME vendors)		
Product / service / work keywords	: Heating Element Repair,		
No. of Bid Parts	: Multiple	Envelope	: Techno-commercial bid , Price bid
Type of contract	: Goods	Project duration / delivery or completion period	: 16.03.2019

Download document	:	Before login	RFQ floated under the policy	:	PP-PURCHASE POLICY
Estimated Category	:	A	No. of items already attached	:	10
Delivery/Location At	:	BHEL STORES TRICHY	Delivery Date	:	16/03/2020 05:30:00
Inspection by Agency	:	BHEL INSPECTORS	Inspection Location	:	BHEL WORKS TRICHY
Min. bid required	:	3			

Bid submission configuration

Bid evaluation	:	Item wise	Bidding access	:	Open Tender
Base currency	:	INR	Bidding type	:	NCB/Indigenous

Key configuration

Pre-bid meeting	:	Don't allow
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Dates configuration

Document downloading start date	:	20/12/2019 16:05:00	Document downloading end date	:	31/12/2019 14:00:00
Bid submission start date	:	20/12/2019 16:05:00	Bid submission end date	:	31/12/2019 14:00:00
Bid opening date	:	31/12/2019 14:01:00			

Document / EMD / Security fee detail

Document fees	:	Not required	EMD	:	Not required
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Bidding forms

Price Bid
Price Bid

KINDLY QUOTE THE FIRM PRICE

MATERIAL CODE	ITEM NAME	UNIT OF MEASUREMENT	TOTAL QUANTITY
*	FIBROTHAL EMBEDDED HEATING ELEMENT	NO	4.00
*	KANTHAL A1 STRIP 15x2MM HEATING ELEMENT	NO	24.00
*	KANTHAL A1 WIRE (4.8MM) HEATING ELEMENT	NO	12.00
*	CERAMIC BOBBIN, WASHER & SS PIN SET	NO	700.00
*	CERAMIC TUBE L800xDia22xT3	NO	20.00
*	CERAMIC COLLER TUBE FOR TERMINAL STUD	NO	20.00

*	SS310 TERMINAL ROD 12MM DIA	NO	20.00
*	GROOVED CERAMIC BRICK ASSEMBLY	NO	10.00
*	U-TUBE EMBEDDED HEATING ELEMENT 1.67kW	NO	12.00
*	U-TUBE EMBEDDED HEATING ELEMENT 3.33kW	NO	6.00

Information for Online Participation

Bidder who wish to participate in this tender needs to procure Digital Certificate as per Information Technology Act-2000 using that they can digitally sign their electronic bids. Bidders can procure the same from any or the CCA approved certifying agencies, or they may contact e-Procurement Technologies Ltd. at below mentioned address and they will assist them in procuring the same. Bidders who already have a valid digital Certificate need not to procure the same. In case bidders need any clarification regarding online participation, they can contact,

e-Procurement Technologies Ltd.

Corporate Office:

Address : A-201/208, Wall Street - 2, Opp. Orient Club,
Nr. Gujarat College, Ellis Bridge,
Ahmedabad - 380006, Gujarat(INDIA)

Digital Certificate Contacts

Contact Person : Mr. Himalay Vaishnav

Cell : +91-9099090830

Phone Nos. : +91-9099090830

Fax No :

e-Mail : info@abcProcure.com

Support Team Contacts

Contact Person : BHEL Support Team Ahmedabad

Cell : +91-9265562819

Phone Nos. : +91-79-68136872/823/872/871

Fax No :

e-Mail : Bhel.Support@abcProcure.com

Bidder who wish to participate in e-Tender need to fill data in predefined forms of Price bid available in respective tender only. After filling data in predefined forms bidders need to click on final submission link to submit their encrypted bid. Bidder need to submit Document Fees, EMD & Reference Documents in hard copy if such instruction are given by tendering authority. As Per the new Inter-operability guidelines released by Controller of Certifying Authorities(CCA), the Secured Socket Layer(SSL) certificate for a e-procurement application is generated on a new algorithm, SHA2.

Also, the Digital Certificates that will be applicable for these platforms have to be SHA2 algorithm complaint. For the same, the users have to ensure that they have Windows XP(SP3)/Windows Vista/Windows7 installed in their respective PC/Laptop. In case of Windows XP Service pack - 3, if you get any issue you can install the SSL patch, which is available at our download section of our e-Tender/e-Auction Portal and also at our corporate website www.abcprocure.com just below the label of "Knowledge section".

Fraud Prevention

Bidder along with its associate/collaborators/sub-contractors/sub-vendors/consultants/service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL

Management about any fraud or suspected fraud as soon as it comes to their notice.

Preference to Make in India

For this procurement, Public Procurement (Preference to Make in India), order 2017 dated 15.06.2017 & 28.05.2018 and subsequent orders issued by the respective Nodal ministry shall be applicable even if issued after issue of this NIT but before finalization of contract/PO/WO against this NIT. In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and/ or local content in respect of this procurement, same shall be applicable. Default margin of purchase preference shall be 20% to local suppliers with default minimum local content of 50%.

**ENQUIRY / RFQ NO. 2691900020– HEATING ELEMENTS FOR FURNACE BED
MODIFICATION**

ITEMS AND DESCRIPTIONS

Item	Description	Unit	Quantity	Delivery Quantity	S
10	FIBROTHAL EMBEDDED HEATING ELEMENT Details of the Item: Refer Drawing No. BHEL:U2:001 and BHEL:U2:002 Item: Cylindrically formed Fibrothal board embedded heating element Inner diameter of the of the fibrothal insulation: 750mm Number of segments of the fibrothal board: 3 Thickness of the fibrothal board: 125mm Placement of heating element: In the grooves provided on the inner surface of the fibrothal board. Total power rating of the furnace: 36kW No of segments in the furnace: 3 Power rating of one segment: 12kW Rated voltage of one segment: 230Vac (star connection of all 3 segments) Element material: Kanthal A1 Operating temperature: 900 degree Celcius Element resistance: 4.135 Ohm Wire diameter: 5mm Coil Outer Diameter:30mm Coil inner diameter: 20mm Pitch: 8.4mm Total no of turns: 713 No of divisions of coil: 8 Distance between divisions: 80mm No of turns in each division: 89 Length of each division: 750mm Terminal strip dimensions: L275mm x W25mm x T3mm Kanthal A1 strip Note: 1. Mechanical assembly drawing(Drawing No: DRG:BHEL:U2:002) and heating element circuit drawing(Drawing No: DRG:BHEL:U2:001) is attached for reference. 2.One number of the item means one segment, and one segment means fibrothal embedded heating coil assembly consisting one third of the total cylindrical coil assembly. 3.Vendor may visit BHEL works to inspect the furnace before quoting for	NO	4.000	4.00	

the same.

4. Final drawings shall be submitted to BHEL for approval before manufacturing.

20	NO	24.000	24.00
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KANTHAL A1 STRIP 15x2MM HEATING ELEMENT

Item: Kanthal A1 - Formed Heating Element - ready to use.

Element Details: Refer Drawing No.

BHEL:U2:003A

1. Material: Kanthal A1 grade
 2. Cross section of the heating element (Width x Thickness) : 15mm x 2mm (rectangular)
 3. Cutting Length of Element strip (before forming) : 21.2668 metre
 4. Resistance of the element: 1.027184466 OHM
 5. Power rating of the element: 12.5kW (115Vac, 108.70A)
 6. Surface Load: 1.73W/sq.cm.
 7. Weight of element with terminal: 5169 gram
 8. Element connection in the furnace: Two elements are connected in series at outside of the furnace shell using dedicated short links, which forms a single element rated 25kW at 230Vac. Such three combination are connected in a "STAR connection with ungrounded neutral" rated for 75kW at 3Phase 415Vac. Such four STAR connected units are available in the furnace, which are divided into two zones with two set of such star connections each.
- Forming Details of the Element:
1. Corrugation Height: 145mm
 2. Pitch: 60mm
 3. Radius: 14mm
 4. No. of pitches: 66.42
 5. Corrugated Length: 3985mm
 6. Terminal detail: by joining 3 strips of 15x2mm Kanthal A1 strips by welding.

Note:

1. Detailed drawing of the heating element(Drg No:TE 3544ELE / DRG:BHEL:U2:003A) is attached for reference.
2. The tolerance for manufacturing the heating element is -3% to + 3% from the reference value.
3. As the elements are connected in STAR connection with ungrounded neutral, it is important to keep the resistance of all three phases exactly equal for balancing the load. So all the elements supplied should be manufactured should have resistance

tolerance within 2% from one another, considering the practical constraints in manufacturing.

4. Vendor may visit BHEL works to inspect the furnace before quoting for the same.

5. The element shall not have any welded joints in between.

6. Final drawings shall be submitted to BHEL for approval before manufacturing.

30	NO	12.000	12.00
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KANTHAL A1 WIRE (4.8MM) HEATING ELEMENT

Item: Kanthal A1 - Formed Heating Element - ready to use.

Element Details: Refer Drawing No.

BHEL:U2:005

1. Material: Kanthal A1 grade

2. Cross section of the heating element :dia 4.8mm wire

3. Power rating of the element: 7kW

@230Vac(Star Connection)

Forming Details of the Element:

1. Formation of element: By joining four divisions in series. Each

division of coil consist of 69 turns wound with turn OD-33mm along a

length of 690mm with pitch-10mm. 100mm of wire is left between divisions

for placement of coil in the oven.

2. Coil OD: 33mm

3. No of turns per division: 69

4. Pitch of coiling: 10mm approx.

5. Length of a coil: 690mm

6. No of division of coil per element: 4

7. Connection of divisions in the coil: series

8. Total no of turns in the coil = $4 \times 69 = 276$

9. spacing between divisions: 100mm

10. Length of wire at terminal end: 400mm

Note:

1. Detailed drawing of the heating element(Drg No:014-01-03 /

DRG:BHEL:U2:005) and the mechanical assembly drawing of the furnace (Drg

No: 014-01-01 / DRG:BHEL:U2:006) is attached for reference.

2. Vendor may visit BHEL works to inspect the furnace before quoting for the same.

3. The element shall not have any welded joints in between.

4. Final drawings shall be submitted to BHEL for approval before manufacturing.

40	NO	700.000	700.00
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CERAMIC BOBBIN, WASHER & SS PIN

SET

Items:(Drg No: DRG:BHEL:U2:004)

Ceramic Bobbin, Ceramic washer and SS Pin set.

Application: The ceramic bobbin and washer are inserted to studs to support heating element strip in M/s Therelek made 10Ton Electrical Resistance Heated Car Bottom Furnace. The SS PIN is inserted in the hole at the end of the stud to keep the bobbin and washer asseblly in place.

The heating element: Kanthal-A1 strip with 15x2mm cross section.

Working temperature of the furnace: 1050 degree Celcius.

Material of the Bobbin: High temperature refractory ceramic

Material of the Washer: High temperature refractory ceramic

Material of the Pin: SS310

Overall height of the bobbin: 50mm

Outer diameter of the bobbin: 50mm

Outer diameter of the washer: 50mm

Thickness of the washer: 10mm

Length and diameter of the SS Pin: 25mm

Length, 2mm Dia

Note:

1. The detailed drawing(Drg No: DRG:BHEL:U2:004) of the assembly is attached for reference.

2. One Number of the item means one set containing one number each of Ceramic Bobbin, Ceramic Washer and SS310 PIN.

3. Vendor may visit BHEL works to inspect the furnace before quoting for the same.

4. Final drawings shall be submited to BHEL for approval before manufacturing.

50		NO	20.000	20.00	1
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CERAMIC TUBE L800xDia22xT3

Item: Ceramic Tube (Drg No:

DRG:BHEL:U2:007)

Application: Heating element support in M/s Vibrant make high

temeperature flux baking oven

Maximum working temperature of the oven:

1100 degree Celcius

Length of the tube: 800mm

Outer diameter of the tube: 22mm

Inner diameter of the tube: 16mm

Thickness of the tube: 3mm

Note:

1. The drawing(Item no II in Drg No: DRG:BHEL:U2:007) of the ceramic tube is attached for reference.

2. As per the attached drawing, the wall

thickness of the tube is only 2mm. But the wall thickness of the tube should be ENHANCED to 3mm, keeping the outer diameter 22mm. So the tube should be produced with a wall thickness of 3mm, but keeping the outer diameter and the length of the tube as same as the attached drawing.

3. Vendor may visit BHEL works to inspect the furnace before quoting for the same.

4. Final drawings shall be submitted to BHEL for approval before manufacturing.

60	NO	20.000	20.00
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CERAMIC COLLAR TUBE FOR
TERMINAL STUD

Item: Ceramic Collar Tube for Terminal Rod of Oven (Drg No: DRG:BHEL:U2:007)

Application: Heating element support in M/s Vibrant make high temperature flux baking oven

Maximum working temperature of the oven: 1100 degree Celcius

Total Length of the tube: 170mm

Dimension of the tube: Single piece construction of L 20mm x OD 36mm + L 150mm x OD 20mm

Wall thickness: 3mm

Note:

1. The drawing (Item no III in Drg No: DRG:BHEL:U2:007) of the ceramic tube is attached for reference.
2. Vendor may visit BHEL works to inspect the furnace before quoting for the same.
3. Final drawings shall be submitted to BHEL for approval before manufacturing.

70	NO	20.000	20.00
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SS310 TERMINAL ROD 12MM DIA

Item: Stainless Steel Terminal Rod for High temperature Oven (Drg No: DRG:BHEL:U2:008)

Application: Stainless Steel Terminal Rod for M/s Vibrant make High temperature flux baking oven.

Maximum working temperature of the oven: 1100 degree Celcius

Material of the terminal rod: SS310

Diameter of the rod: 12mm

Total length of the rod: 395mm

Description of construction: Element connecting end of the rod: A Slot of 3mm width and 25mm depth should be cut at this end. And a through hole of dia 5.5mm shall be made

at the center of the slotted portion, in perpendicular to the slot, passing through the slot. This is for inserting the end of the element wire through the through hole and to weld fill the slot for attaching the element to the rod. From the slotted end, the first 344mm is of Dia 12mm, then it reduces to a squared cross section portion of 10mm x 10mm cross section for next 25mm of length and then it changes to a threaded portion of Dia 10mm for balance of 26mm of length for lectrical connection termination.

Note:

1. The drawing(Item no II in Drg No: DRG:BHEL:U2:008) of the terminal rod is attached for reference.
2. Vendor may visit BHEL works to inspect the furnace before quoting for the same.
3. Final drawings shall be submittted to BHEL for approval before manufacturing.

80	NO	10.000	10.00
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GROOVED CERAMIC BRICK ASSEMBLY
ITEM: (Drg No: DRG:BHEL:U2:009)
CERAMIC BRICK ASSEMBLY FOR HEATING ELEMENT SUPPORT FOR M/S VIBRANT MAKE HIGH TEMPERATURE FLUX BAKING OVEN. MAXIMUM WORKING TEMPERATURE OF THE OVEN: 1100 DEGREE CELCIUS
METERIAL: HIGH TEMPERATURE REFRACTORY CERAMIC
APPLICATION: SUPPORTING THE CYLINDRICALLY WOUND HEATING ELEMENT OF THE HIGH TEMPERATURE OVEN AS A REPLACEMENT TO CURRENTLY USED SUPPORT BOBBINS
CONSTRUCTION: THE BRICK SHALL BE CONSTRUCTED AS A SINGLE BLOCK OR CAN BE MADE AS PROPERLY INTERLOCKABLE STACKABLE UNITS OF SIZE NOT LESS 1/8 OF THE TOTAL LENGHT OF THE BRICK ASSEMBLY.

NOTE:

1. DETAILED DRAWING OF THE REQUIRED BRICK ASSEMBLY (DRG NO: DRG:BHEL:U2:009) AND THE MECHANICAL ASSEMBLY DRAWING (DRG NO:014-01-01 / DRG:BHEL:U2:006) OF THE OVEN IS ATTACHED FOR REFERENCE
2. THE BRICK ASSEMBLY IS MODIFIED VERSION OF THE BOBBIN SUPPORT USED IN THE OVEN. SO THE OEM SUPPLIED ASSEMBLY

DRAWING IS ATTACHED ONLY FOR REFERENCE OF INTERNAL DIMENSIONS AND REFRACTORY CONSTRUCTION OF THE OVEN

3. IN THE ATTACHED DRAWING OF THE BRICK ASSEMBLY, THE DIMENSIONS PROVIDED ARE APPROXIMATE FIGURES ONLY. THE ACTUAL DIMENSIONS WILL BE PROVIDED BEFORE MANUFACTURING OF THE BRICK.

4. Vendor may visit BHEL works to inspect the furnace before quoting for the same.

5. Final drawings shall be submitted to BHEL for approval before manufacturing.

90		NO	12.000	12.00
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U-TUBE EMBEDDED HEATING ELEMENT
1.67kW
SPECIFICATION OF THE ITEM (ITEM 01 OF DRG NO:3-M-19B06-16114)

ITEM: HEATING ELEMENT FOR IMMERSION WATER HEATER ASSEMBLY
POWER RATING OF HEATING ELEMENT: 1.67kW
RATED VOLTAGE: 230V AC, 50Hz
RESISTANCE OF THE ELEMENT: 32 OHM
OPERATING TEMPERATURE: 100 degree Celcius
MAX TEMPERATURE: 120 degree Celcius
Element wire material:
Element embedding tube material:
Cylindrical mounting block material:
LENGTH of the heater:
FORM FACTOR: U-shaped with short bending radius
CONSTRUCTION: The ceramic insulated heating element is embedded in a U-Shaped metallic tube of diameter 8 mm with bending radius as per the drawing . The electrical termination are made at the ends of the two parallel arms of the U-Tube using stud bolts M4 size. The two ends of the heating element embeded U-tube is inserted and through two holes provided in the face of a threaded brass cylindrical block, and welded together with the whole heating element portion on the one side and the electrical connection terminals on the other side.
MOUNTING: The heating element is mounted to the machine by the threaded on the brass cylinder outer periphery.
DETAILS OF THE HEATER ASSEMBLY

HEATER SPECIFICATION: 5kW IMMERSION WATER HEATER, 5kW 3PHASE-STAR CONNECTION
TOTAL NO OF ELEMENTS: 3

MAKE: KANTILAL CHUNILAL AND SONS
 APPLIANCES PVT LTD, SURAT
 MODEL: SPHEREHOT FHIMM 063
 NOTE:

1. THE DETAILED DRAWING (ITEM 01 OF DRG NO:3-M-19B06-16114) OF THE ITEM IS ATTACHED FOR REFERENCE.
2. THE DEVIATION OF THE RESISTANCE OF THE HEATING ELEMENT IS LIMITED TO LESS THAN -3% TO + 0% OF THE STATED VALUE. THE CONNECTION OF THE COILS IN THE MACHINE IS IN STAR WITH UNGROUNDED NEUTRAL, WHICH REQUIRES BALANCED LOAD IN EACH PHASE. SO THE RESISTANCE DIFFERENCE BETWEEN ALL THE SUPPLIED COILS OF SAME TYPE SHOULD BE WITHIN 2%, CONSIDERING THE PRACTICAL CONSTRAINTS IN MANUFACTURING.
3. Vendor may visit BHEL works to inspect the furnace before quoting for the same.
4. Final drawings shall be submitted to BHEL for approval before manufacturing.

100		NO	6.000	6.00
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U-TUBE EMBEDDED HEATING ELEMENT
 3.33kW
 SPECIFICATION OF THE ITEM
 (ITEM 02 OF DRG NO:3-M-19B06-16114)

ITEM: HEATING ELEMENT FOR IMMERSION
 WATER HEATER ASSEMBLY
 POWER RATING OF HEATING ELEMENT:
 3.33kW
 RATED VOLTAGE: 230V AC, 50Hz
 RESISTANCE OF THE ELEMENT: 16 OHM
 OPERATING TEMPERATURE: 100 degree Celcius
 MAX TEMPERATURE: 120 degree Celcius
 Element wire material:
 Element embedding tube material:
 Cylindrical mounting block material:
 LENGTH of the heater:
 FORM FACTOR: U-shaped with short bending
 radius
 CONSTRUCTION: The ceramic insulated heating
 element is embedded in a
 U-Shaped metallic tube of diameter 8 mm with
 bending radius as per
 drawing. The electrical termination are made at
 the ends of the two
 parallel arms of the U-Tube using stud bolts of
 size M4. The two ends of
 the heating element embeded U-tube is inserted
 and through two holes
 provided in the face of a threaded brass
 cylindrical block, and welded
 together with the whole heating element portion

on the one side and the electrical connection terminals on the other side.
 MOUNTING: The heating element is mounted to the machine by the threaded on the brass cylinder outer periphery.
 DETAILS OF THE HEATER ASSEMBLY

 HEATER SPECIFICATION: 20kW IMMERSION
 WATER HEATER, 2 X 10kW 3PHASE-STAR
 CONNECTION

TOTAL NO OF ELEMENTS: 6

MAKE: KANTILAL CHUNILAL < (> &<)> SONS

APPLIANCES PVT LTD, SURAT

MODEL: SPHEREHOT FHIMM 062

NOTE:

1. THE DETAILED DRAWING (ITEM 02 OF DRG NO:3-M-19B06-16114) OF THE ITEM IS ATTACHED FOR REFERENCE.

2. THE DEVIATION OF THE RESISTANCE OF THE HEATING ELEMENT IS LIMITED TO LESS THAN -3% TO + 0% OF THE STATED VALUE. THE CONNECTION OF THE COILS IN THE MACHINE IS IN STAR WITH UNGROUNDED NEUTRAL, WHICH REQUIRES BALANCED

LOAD IN EACH PHASE. SO THE RESISTANCE DIFFERENCE BETWEEN ALL THE SUPPLIED COILS OF SAME TYPE SHOULD BE WITHIN 2%, CONSIDERING THE PRACTICAL CONSTRAINTS IN MANUFACTURING.

3. Vendor may visit BHEL works to inspect the furnace before quoting for the same.

4. Final drawings shall be submitted to BHEL for approval before manufacturing.

PRE- QUALIFICATION CRITERIA

The BIDDER / VENDOR have to compulsorily meet all the following requirements to get qualified for consideration of the technical offer for the Supply of SPARE HEATING ELEMENTS REQUIRED FOR FURNACES/OVEN in BHEL TRICHY. If the vendor does not qualify as per PRE- QUALIFICATION CRITERIA, the technical offer of such BIDDER(s)/ VENDOR(s) offer will not be evaluated.

1)The bidder should have supplied furnace heating Elements/coils to any PSU /Government / Semi Government Organization / Joint Venture company of PSUs or Govt. Organization or both/Private sector company registered under Companies Act 1956,in last three (03) years(on the date of opening of tender).

*Copies of purchase order (s) is required to be submitted in Support of above along with Contact details of the customer.

2) Along with the Technical offer, the Vendor should submit one Performance certificate from the customer for the satisfactory performance of the heating elements supplied to them.

3) The bidder shall confirm to produce Test certificate for material composition in the event of ordering along with material supply.

Refer Attachments:

Annexure – II - Terms and conditions of the enquiry

Annexure – V - CA Certificate (Applicable for MSME vendors)

REF: BHEL/ELE/266/46

Annexure-II**BHARAT HEAVY ELECTRICALS LIMITED**

(A GOVT.OF INDIA UNDERTAKING)

HIGH PRESSURE BOILER PLANT

TIRUCHIRAPPALLI-620 014

TERMS AND CONDITIONS OF THE ENQUIRY (TWO PART BIDS)

1.	The tender will be operated on Two part bids basis i.e. Part I -Techno-Commercial Bid & Part II- Price Bid in EPS PORTAL ONLY .
2.	Techno-Commercial Bid: Containing Technical details, specifications, commercial terms and conditions Taxes, delivery terms, delivery schedule, validity of offer, payment terms (except price details), acceptance for LD clause, RP clause etc. as per ANNEXURE-II
3.	Price details Containing the price of all the quoted items in EPS PORTAL.
4.	This Tender is hosted in ABC portal & offer to be submitted through ABC portal only. You are requested to submit your 2 parts offer before due date & time given in RFQ through EPS PORTAL only.
5.	Tender should not be addressed to any individual's name / designation.
6.	Attached documents/tenders should be free from CORRECTION AND ERASURES. Any correction in any attached document should have been attested. If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date up to which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored
7.	Please submit point wise compliance to our specifications, terms and conditions. Otherwise it will be presumed that you are accepting BHEL's terms and conditions. Please ensure that all terms & conditions are filled. Commercial terms agreed in Part-1 Techno commercial Bid table of ABC portal is final, anywhere else mentioned will not be considered.
8.	Offer(s) received after due date and time as mentioned in EPS portal will not be considered under any circumstances.
9.	If the due date of tender opening happens to be a holiday, those tenders will be opened on future working day for which corrigendum will be issued.
10.	Documents submitted with the offer shall be signed and stamped in each page by authorized representative of the bidder
11.	The bidder shall submit his response through bid submission to the tender on e-procurement platform at https://bhel.abcprocure.com . The bidder would be required to register on the e-procurement market place https://bhel.abcprocure.com and submit their bids online. SEALED COVER BIDS / E-MAILS / FAX / MANUAL OFFERS WILL NOT BE ACCEPTED

12.	Normally offer to be submitted with in due date only. Any tender due extension request to be given on or before 48hrs of due date & time
13.	Validity of quoted rates should be maintained minimum for 120 days from the date of Tender opening for ordering (Technical Bid). The quoted/Finalized rates shall be Firm till completion of the supplies
14.	The rates are to be quoted on F.O.R. BHEL TRICHY STORES basis ONLY and Packing & marking charges, Freight & Transit Insurance charges which are payable to supplier. All the items should be supplied at our STORES, BHEL / TRICHY at your own cost. Offers with any other delivery conditions is not acceptable. IMPORTANT NOTE: Delivery condition like Ex-works / Ex-godown / Transportation of materials through transport carriers from your works up to the transport carrier's office at TRICHY and taking delivery of goods by BHEL from such office of transport carriers is not acceptable to us).
15.	<u>Payment Terms</u> <u>i). For Indigenous (Non-MSE) Bidders:</u> ○ Payment term is "100% direct EFT payment after 60 days from the date of receipt and acceptance (supply, installation & successful commissioning of the system, wherever if applicable) of materials at BHEL Stores". ○ Any deviation in the above payment terms, any other conditions in payment terms or any other Payment Terms will not be accepted and offer will not be considered. <i>Payment term is 100% direct EFT payment after 60 days from the date of receipt and acceptance of materials and against 10% PBG valid for the warranty period, wherever necessary.</i> The duplicate copy of the invoice meant for the transporters should accompany the material as stipulated under C.E. rules 52a and 173c (or) 57gg. A Photostat copy of the above invoice for each Delivery Chelan should be submitted along with the original bills routed through bank or submitted directly to BHEL. <u>i) For Imports :</u> ○ BHEL Payment term is 100% payment on CAD basis after 60 days from the date of receipt of documents, specified in PO, at BHEL bank. Respective bank charges to respective account. ○ If supplier insists for LC, only Usance LC with 60 days credit will be opened one month prior to material readiness, further loading will be considered @ 1.5% on the offered value. Hence supplier shall intimate the material readiness accordingly for opening of LC. LC validity period will be 90 days and for any extension, applicable charges will be to supplier's account. ○ Any deviation in the above payment terms, any other conditions in payment terms or any other Payment Terms will not be accepted and offer will not be considered ○ If the LC payment is insisted, TWO sets of original TCs/ Compliance Certificate to be submitted prior to dispatch and a certificate to that effect from BHEL should form a part of the documents to be negotiated. If this condition is not complied by the vendor, the offer may lead for rejection. <u>ii). New Suppliers :</u> ○ For new suppliers not registered with BHEL Trichy for the product, payment shall be made 60 days after receipt and acceptance of materials. In case of foreign supplier, first lot of mutually agreed quantity shall be supplied with payment as CAD basis after 60 days from the date of receipt and acceptance of material. If insisted for LC, after acceptance of first lot, only Usance LC with 60 days credit will be opened one month prior to material readiness.

16.	<u>Liquidated Damages / Penalty:-</u> The delivery of the goods specified in the purchase order should be made within the time prescribed. LD for delay in 'Supply' and/or 'E&C' (E&C wherever if applicable) will be applicable to the delays attributed to vendor. LD will be considered separately for 'Delivery' and 'E&C' (E&C wherever if applicable). Where the seller supplies or dispatches the goods, beyond the delivery period Liquidated damages shall be applicable 0.5% of the total order value per week or part thereof subject to a maximum of 10% of the total order value. ** In case of single delivery date , Order should be completed 100% for processing the bill, otherwise LD will be calculated based on Total PO Value restricted to Max % as mentioned in the PO Condition column Material Despatched after Due date: Once the delivery due date is crossed, bills have to be clubbed till final despatch and forwarded for processing of payment as a single bunch. LD percentage will be calculated from Delivery due date to final despatch date. The rate of LD for delayed E&C shall be @ 0.5% per week of delay of total PO value (Supply + E&C) in E&C subject to a maximum of 10% of total PO value (Supply + E&C). Penalty on delay in 'Supply' and/or 'E&C' will be applicable to the delays attributed to vendor. Penalty will be considered separately for 'Supply' and 'E&C'. The rate of penalty for delayed Supply shall be @ 0.5% per week of delay of total PO value (Supply + E&C) in supply subject to a maximum of 10% of total PO value (Supply + E&C). The rate of penalty for delayed E&C shall be @ 0.5% per week of delay of total PO value (Supply + E&C) in E&C subject to a maximum of 10% of total PO value (Supply + E&C). Maximum penalty for delay in Supply and E&C together shall be limited to 15% of total PO value (Supply + E&C). For staggered delivery schedule, LD shall be 0.5% of the undelivered portion per week of the delay or part thereof subject to a maximum of 10% of the total order value. Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value).
17.	<u>RISK PURCHASE:</u> The purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the previous supplier has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitutes therefore. The supplier shall be liable for any loss, which the purchaser may sustain by reason of such risk purchases in addition to penalty at the rate mentioned in our LD clause. Risk Purchase clause will be applicable. Deviated offers with non-acceptance of Risk Purchase clause will lead to rejection of offer.
18.	<u>PREFERENTIAL DELIVERY:</u> (Applicable in the case of BHEL's Enquiry specifies Preferential Delivery in the Special Instructions) It should be noted if a contract is placed on a higher tendered as a result of this invitation to tender in preference to the lowest acceptable offer in consideration of the earlier delivery, the seller will be liable to pay to the purchaser the difference between the contract rate and that of the lowest acceptable tender on the basis of final price F.O.R destination, including all elements of freights, Sales tax, duties and other incidents, incidental in case of failure to complete supplies in terms of such contract within the date of delivery specified in the tender and incorporated in the contract, such difference amount in addition to penalty at the rate mentioned in our LD clause.
19.	BHEL reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at any of BHEL projects / Units
20.	If Guarantee / Warranty period is applicable as per tender specification, No deviation permitted and deviated offers are liable for rejection
21.	Supplier has to ensure quoting of price very carefully in EPS PORTAL to avoid any discrepancies
22.	While quoting price, it will be ensured that all terms & conditions as per GST act is followed

23.	TAXES AND DUTIES: GST IN no, HSN CODE, GST rate for each items are to be quoted
24.	On the due date of tender opening, the technical bids will be opened . Bids will be evaluated by us and clarifications required, if any, will be called for from the bidders on technical and commercial points
25.	After tender opening Technical scrutinisation of the offers will be done.
26.	Vendors Meeting Our Technical Specification Will Be Essential For Consideration Of Offer.
27.	Tender evaluation will be carried out on the basis of Technical Specifications and Commercial Terms and Conditions specified in the tender documents and changes thereof (if any) will be communicated to all bidders
28.	For verification of data submitted towards evaluation of bidder's capability, BHEL may decide to visit the bidder(s) works. Any fact found deviating from submitted data shall make the bidder liable to be disqualified.
29.	The correspondence between the bidder and BHEL through email is considered as valid document Legally though not signed. It is treated as valid confirmations made on behalf of the respective company and comes under the legal ambit of the business transaction and hence binding on both the parties. If any difference is found in the terms in the Techno-commercial bid and price bid, the terms mentioned frozen after clarification sought through mail acceptable by BHEL will be considered
30.	<u>Cost Evaluation:</u> Evaluation will be done on the basis of "Landed cost to BHEL TRICHY". BHEL will consider the ranking after the loading is applied as referred above, wherever deviations are observed Ranking (L-1, L-2 etc.) will be done only for the Techno-Commercially acceptable offers. Normally BHEL reserves the right to place order for individual items with different vendors. At special circumstance ranking shall be done on compatible basis which will be indicated through Enquiry special instruction General Notes
31.	In the event of more than one vendor becoming L1 for any of the item / items, the enquiry quantity for those item / items will be shared equally among all the L1 vendors.
32.	If the quoted prices by the L1 suitable vendors for net cash out flow to BHEL is same and quantity splitting is not feasible, in such case revised price bid may be asked from those respective suppliers for the respective item/items. (Wherever, if applicable)
33.	BHEL reserves the right to increase or decrease the tender quantity and split up the tender quantity among more than one vendor at the lowest acceptable price to BHEL and place order accordingly in any proportion at our own discretion
34.	Lowest price received against BHEL tenders need not be the technically acceptable one and in that case BHEL reserves the right not to consider the same. The purchaser shall be under no obligation to accept the lowest or any other tender and shall be entitled to accept or reject any tender in part or full without assigning any reason whatsoever. (Wherever if applicable)
35.	BHEL reserves the right to negotiate or refloat the tender opened, if L1 price is not the lowest acceptable price to BHEL due to inter-alia other reasons. (Wherever if applicable).
36.	<u>IMPORTANT NOTE:</u> BHEL WILL CONSIDER THE RANKING AFTER THE LOADING IS APPLIED AS REFERRED ABOVE WHEREVER DEVIATIONS ARE OBSERVED
37.	The basic amount will be arrived by deducting the applicable GST taxes & duties, freight & insurance charges. GST Taxes& duties will be paid over total quoted amount. Including Packing , marking charges, Freight& insurance amount

38.	Any other conditions which might have been quoted by the seller and are in contravention to the terms prescribed in the order and which have not been specifically accepted by purchaser in written will not be applicable to the contract
39.	<u>Special Provisions for Micro and Small Enterprises (MSE)</u> The bidder may also be a Micro and Small Enterprises (MSE) vendor registered as per MSE act. As per the public procurement policy notified by the Central government. 25% of the tendered quantity is earmarked for MSE suppliers in this tender. Out of the 25% tendered quantity reserved for MSE suppliers, 4% shall be earmarked for procurement from MSE owned by SC / ST entrepreneurs. Also 3% shall be earmarked for procurement from MSE owned by women (Such enterprise will have to submit relevant document for proof of women ownership) (Note: vendor need to go through General note Of tender condition also for any special instruction & deviation from above.) In case MSE vendor participating in the tender quotes within the price band of L1 + 15%, they will be allowed to supply the portion of the requirement subject to acceptance of L1 price by MSE vendor. In case of more than one such MSE, the supply shall be shared proportionately. "MSE suppliers can avail the intended benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM, II) or valid NSIC certificate or EM II certificate with due validity or Udyog Aadhaar No along with attested copy of a CA certificate (where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non submission of such documents will lead to consideration of their bid at par with other bidders. In case any improper / lack of documents is there vendor on their own interest may submit all the relevant documents as stated above before tender opening. No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before tender opening. Documents should be notarized or attested by a Gazetted officer for consideration of MSE certificate. " Such Micro/Small Enterprises registered vendors must state the sub-category to which they belong and submit documentary proof for the same. The sub-categories: (a) Enterprises owned by Scheduled Castes. (b) Enterprises owned by Scheduled Tribes. (c) Enterprises owned by Women (d) Enterprises owned by other than above two categories The enterprises under (a), (b) & (c) means the proprietor in case of single owned firm and all partners in case of partnership firm and all directors in case of private/public limited must belong to SC/ST category or women (Such enterprise will have to submit relevant document for proof of SC/ST or women ownership category) (Note: vendor need to go through General note Of tender condition also for any special instruction & deviation from above.) If more than one valid MSE supplier stands with in rage of L1+15% range, 25% of quantity will be shared till quantity split is feasible & rest of 25% will be awarded to lowest quote of valid MSE supplier. Note: Wherever for splitting of order, if splitted quantity comes out <1, the splitting of order will not be feasible. (For MSE vendors). Further updates or any changes will be taken decision according to MSE procurement policy. Traders will be excluded from the above MSE benefit as per MSE public procurement policy. For MSE vendors getting award- In order to get benefit to MSE suppliers in Bill timely payment MSE supplier will have to send the original hard copy of Udyog Aadhaar No(UAN) supported by CA certificate of last fin yr .Scanned copy is not acceptable for MSE consideration. Payment for MSE Indigenous eligible vendors will be as per MSMED Act 2006 subject to fulfilment of above procedure
40.	Equipment will be inspected and proved at vendor's works prior to dispatch, if applicable as per tender condition. However final inspection and acceptance of equipment will be after installation at BHEL, TRICHY .
41.	<u>PACKING AND MARKING:</u> The supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit. (Wherever if applicable).

42.	Erection / commissioning charges , if applicable as per tender condition will be clearly mentioned in the offer or else confirmation that Erection / commissioning shall be done at free of cost is available in the offer
43.	Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL, TRICHY basis
44.	The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost
45.	In case of any short shipment in the main equipment / spares, where separate rates are not available in the contract, the customs duty levied on such supplies, shall be borne by the supplier / Indian agent.(For import supplies)
46.	ARBITRATION: All disputes or differences whatsoever which may arise at any time during execution of the Contract shall be mutually settled by BHEL Trichy and Vendor as per provision of the Contract. However, in the event such disputes cannot be settled mutually, such disputes shall be settled as per the Arbitration and conciliation Act, 1996 of the Govt. of India and its subsequent amendments. In case of disputes with the Central PSUs, the same shall be settled at Tiruchirappalli as per the Guidelines of the Govt. of India. However, during the period such disputes are settled either by mutual discussions between the parties or by legal means, Vendor shall continue to do the work as per terms & conditions of Contract. Any dispute arising out of or in connection with this Agreement shall be finally settled by binding arbitration in accordance with the Arbitration and Conciliation Act, 1996 as may be amended from time to time. Executive Director / BHEL, Trichy – 620 012 or his authorized representative shall be the Sole Arbitrator and his decision shall be final and binding on both the parties. The place of arbitration shall be Tiruchirappalli, and the language shall be English. The courts at Tiruchirappalli shall have exclusive jurisdiction on any dispute arising out of or in connection with this Agreement, if intervention of court is warranted, subject to the arbitration provided above.
47.	The quality of the supplies should strictly conform to Technical specifications applicable for the item. The offer should specifically confirm this
48.	If any quality problem is pointed out by any BHEL unit w.r.t. supplied material, the same shall be settled and corrected immediately with the concerned BHEL unit, by the supplier. If the material cannot be accepted by BHEL, supplier has to replace the material with no extra cost. Collection of rejected material will be sole responsibility of the supplier. If there is any failure by the supplier to settle such quality problems, the matter will be considered very seriously and appropriate penal action may be initiated against the respective supplier
49.	BHEL shall be at liberty to accept any tender, part or in full, at their discretion without giving any reason
50.	Unloading at BHEL Unit / Site has to be done by the SUPPLIERS only. BHEL will not be in a position to provide any handling / unloading facilities.
51.	The supplier shall arrange for securely protecting and packing the material to avoid loss or damages during transit.
52.	There is no minimum quantity for placement of purchase order.
53.	BHEL shall be at liberty to cancel the requirement as per tender partially or fully at any stage, without giving any reasons partially or fully.
54.	In case of receipt of order vendor will need to send consignment/material as indicated in PO. In case of dispatch by courier/ Lorry kindly put/paste the Delivery challan (extra copy) on the top of packed consignment box & another copy of DC inside the box. Consignment should be forwarded to the PO consignee address only along with extra/Xerox copy of invoice (wherever applicable) .It should be supported with Delivery challan copy. (Kindly do not forward any consignment to purchase dept. or do not address the consignment to the name of any official)

55.	Vendor's confirmation for any terms & conditions should be uniform throughout the offer. In case any discrepancies is found in the quoted term & condition & Vendor's own format of quotation BHEL reserves the right to consider terms mentioned in Annexure-II
56.	Vendor may View Bill Status in www.bheltry.co.in -> materials management systems - > login id - Vendor Code and Password
57.	<u>For the New vendors-</u> In case of ordering bills against the PO shall be processed only on receipt of the following: - Send the hard copy of EFT Format (will be informed at the time of PO) duly filled-in in a Single Page with all the certification formalities by you & your bankers - One Cancelled cheque of your account (from the concerned bank) must be sent. - The Vendor's code as per PO & address must be as per billing address mentioned in PO.
58.	If winning bidder who gets the order are unable to login or still if you have any difficulty kindly let us know
59.	<u>Authorization for participation in EPS portal through DSC: E-Tender.</u> <u>Participation requirements :</u> Either Principal or authorized agent shall register their Digital Signature Certificate (DSC) (Class 3- SHA2- 2048 BIT- SIGNING & ENCRYPTION). Suppliers are advised to go through the FAQ available in the web portal (https://bhel.abcpocure.com). DSC shall be registered for the authorized person and all transaction done using that DSC against our tenders shall be taken as valid communication and shall be binding on principal/agent and is valid legally. <u>For foreign Principal</u> In case of Principal (being foreigner), they may apply for DSC through Indian embassy at their country and can register with us for participating in E-tenders. Details of the applicable procedure is available in the webpage http://www.cca.gov.in/cca/. <u>For Indian agent</u> In case of agents participating/registering their DSC (of authorized person), it will be at the sole authorization of principal to their agents to participate on their behalf and all transactions done using that DSC against our tenders shall be known as valid communication and shall binding on principal and is legally valid.
60.	Since GST is implemented, the taxes & duties will prevail as per the government notification/ guidelines .Our Provisional GST registration no.33AAACB4146P2ZL. However, it will be mandatory to confirm from BHEL for this mentioned GST no. Suppliers may quote their GST no with valid proof in the quotation .Also before quoting of tender it is suggested to consider all the factors before quoting the tender in line with GST guidelines for input tax credit to arrive ranking of quoted suppliers.
61.	<u>GST compliance for Indigenous suppliers:</u> - In Response to Tenders for Indigenous supplier will be entertained only if the vendor has a valid GST registration no which should clearly mentioned in the offer. If any specific exemption is available, a declaration with due supporting documents need to be furnished for considering the offer.. - Supplier shall mention their GSTN registration number in all their invoices and invoices shall be in the format as specified/prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice no, commercial invoice no etc., then the Invoice No which is linked/uploaded in GSTN network shall be clearly indicated), item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, etc. - All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code). - A declaration to the effect that all invoice particulars are/were uploaded in the GSTN network/ portal & all tax liability as per GST rules and regulations have been and will be discharged, shall be mentioned in the invoice. If not mentioned in the invoice, a separate declaration shall be submitted as per the requirement of BHEL. - All documents like Mill Test Certificate, LR copy, Guarantee/Warrantee certificate, work completion certificate, any other document mentioned in PO, shall be sent along with the vehicle/consignment. For all consignments received within the calendar month, input credit will be availed within that month in line with monthly returns filing cycle. In case of any discrepancy in the

document or non-submission of documents mentioned in the PO, then BHEL will not be able to accept or account the material, in such case availing of tax credit will be deferred to next month or so.

- f. In case of discrepancy in the data uploaded by supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note (details to be uploaded in GSTN portal) for the shortages or rejections in the suppliers, within the calendar month notified by BHEL.
- g. For any such delay in availing of tax credit for reasons attributable to supplier (as mentioned above), interest (calculated @ SBI Base Rate + 6%) along with penalty if any will be deducted for the delayed period i.e. from the month of receipt till the month tax credit is availed, from the running bills.
- h. Under GST regime, BHEL has to discharge GST liability on LD recovered from suppliers/contractors. Hence applicable GST shall also be recoverable from suppliers/contractors on LD amount. For this Debit note will be issued by BHEL indicating the respective supply invoice number.
- i. This is to inform that GST portion of invoice, Shall be released only upon Vendor declaring such invoice in his GSTR-1 and receipt of goods and Tax invoice by BHEL and Confirmation of payment of GST thereon by vendor on GSTN portal. Alternatively, BG of appropriate value may be obtained from vendor which shall be valid At least one month after the confirmation of date of payment of GST by vendor on GSTN portal and receipt of Tax invoice and receipt of goods, whichever is later. Above is subject to receipt of goods/service and tax invoice thereof along with vendor declaring invoice in his return and paying GST within timeline prescribed for availing ITC by BHEL.
- j. That in case vendor delays Declaring such invoice in his return and GST credit availed by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST law shall be recoverable from vendor/contractor along with interest levied/ leviable on BHEL.

62. Tender terms for GST in line with new GST Return System:

For supplies after implementation of New GST Return System i.e. from 01/10/2019, the following conditions will apply and supplier shall fully comply to the below points.

Indigenous suppliers:

1. *Response to Tenders for Indigenous supplier will be entertained only if the vendor has a valid GST registration No (GSTIN) which should be clearly mentioned in the offer. If the dealer is exempted from GST registration, a declaration with due supporting documents need to be furnished for considering the offer. Dealers under composition scheme should declare that he is a composition dealer supported by the screen shot taken from GST portal. The dealer has to submit necessary documents if there is any change in status under GST.*
2. *Supplier shall mention their GSTIN in all their invoices (incl. credit Notes, Debit Notes) and invoices shall be in the format as specified/prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice no, commercial invoice no etc., then the Invoice No. which is linked/uploaded in GSTN network shall be clearly indicated), Billed to party (with GSTIN) & Shipped to party details, item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, Place of Supply etc.*
3. *All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code).*
4. ***Invoices** will be processed only upon completion of statutory requirement and further subject to following:*

Vendor declaring such invoice in Form GST ANX-1

Receipt of Goods or Services and Tax invoice by BHEL

5. *As the continuous uploading of tax invoices in GSTN portal (in GST ANX-1) is available for all (i.e. both Small & Large) tax payers under proposed new GST Return System, all invoices raised on BHEL may be uploaded immediately in GST portal on despatch of material /rendering of services. The supplier shall ensure availability of Invoice in GST portal before submission of invoice to BHEL. Invoices will be admitted by BHEL only if the invoices are available in GSTN portal (in BHEL's GST ANX-2).*
6. *In case of discrepancy in the data uploaded by the supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note or debit note (details also to be uploaded in GSTN portal) for the shortages or rejections in the supplies or additional claims, within the calendar month informed by BHEL.*
7. *In cases where invoice details have been uploaded by the vendor but failed to remit the GST amount to GST Department (Form PMT-08 or Form GST RET-01 to be submitted) within stipulated time, then GST paid on the invoices pertaining to the month for which GST return not filed by the vendor will be recovered from the vendor along with the applicable interest (currently 24% p.a) and all subsequent bills of the vendor will not be processed till filing of the GST return by the vendor*
8. *In case GST credit is denied to BHEL due to non-receipt or delayed receipt of goods and/ or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount claimed in the invoice shall be disallowed to the vendor.*
9. *Where any GST liability arising on BHEL under Reverse Charge (RCM), the vendor has to submit the invoices to BHEL well within the timeline prescribed in GST Law, to enable BHEL to discharge the GST liability. If there is a delay in submission of invoice by the vendor resulting in delayed payment of GST by BHEL along with Interest, then such Interest payable or paid shall be recovered from the vendor.*
10. *Under GST regime, BHEL has to discharge GST liability on LD recovered from suppliers/contracts. Hence applicable GST shall also be recoverable from suppliers/contractors on LD amount. For this Tax Invoice will be issued by BHEL indicating the respective supply invoice number.*

GST TDS will be deducted as per Section 51 of CGST Act 2017 and in line with Notification 50/2018 – Central Tax dated 13.09.2018. GST TDS certificate which will be generated in GST portal subsequent to vendor accepting the TDS deduction in the GST portal, will be issued to the vendor.

63. Imports and Input Tax Credit (ITC):

In GST regime, input tax credit of the integrated tax (IGST) and GST Compensation Cess shall be available to the importer and later to the recipients in the supply chain, however the credit of basic customs duty (BCD) would not be available. In order to avail ITC of IGST and GST Compensation Cess, an importer has to mandatorily declare GST Registration number (GSTIN) in the Bill of Entry. Provisional IDs issued by GSTN can be declared during the transition period. However, importers are advised to complete their registration process for GSTIN as ITC of IGST would be available based on GSTIN declared in the Bill of Entry. Input tax credit shall be availed by a registered person only if all the applicable particulars as prescribed in the Invoice Rules are contained in the said document, and the relevant information, as contained in the said document, is furnished in FORM GSTR-2 by such person. Customs EDI system would be interconnected with GSTN for validation of ITC. Further, Bill of Entry data in non-EDI locations would be digitized and used for validation of input tax credit provided by GSTN.

Customs EDI system would be interconnected with GSTN for validation of ITC. Further, Bill of Entry data in non-EDI locations would be digitized and used for validation of input tax credit provided by GSTN.

Note: In cases where imported goods are liable to Anti-Dumping Duty or Safeguard Duty, calculation of Anti-Dumping Duty or Safeguard duty would be as per the respective notification issued for levy of such duty. It is also clarified that value for

	calculation of IGST as well as Compensation Cess shall also include Anti-Dumping Duty amount and Safeguard duty amount
64.	High sea sales for import supply would not be accepted
65.	Wherever Service is associated in the tender scope (For cases Service PO is released – Supplier has to pay GST for all charges including transportation, boarding etc)
66.	Suppliers will have to fill& send the SRF (Supplier registration form) if applicable.
67.	BHEL reserve the right for asking sample / drawing approval / Pre-Dispatch Inspection before bulk supply of the materials (If required)
68.	GST CREDIT: Suppliers are advised to get registered to GSTN portal. Tenderer under "GST credit" shall be preferred
69.	Pay procedure will be initiated after acceptance of full lot of material & final submission of Bill in line with PO instructions & conditions, GST regulations. Also Pay procedure will be initiated only if the GST return is filed against submitted invoice to BHEL.
70.	<u>BILL PROCESSING METHOD</u> "Supplier has to ensure the full quantity of material delivery within given PO delivery date to process the bill for payment. In case supplier fails to deliver full quantity within delivery date, bills received after PO delivery date will be processed after final despatch of the total pending supply. Further, bills will be clubbed and forwarded for payment processing as a single bunch".
71.	For any clarification you can contact to mpiraja@bhel.in , subramanian.s@bhel.in Contact nos. 0431254750 / 04312577427
72.	For more details please refer to Ref. NIT of BHEL's website http://www.bhel.com (tender notification page) or from the govt. tender website http://tender.gov.in (Public Sector Units Bharat Heavy Electricals Limited page) <u>Important:</u> All updates, amendments, corrigendum etc., if any will be posted only on the above website as and when required. There will be no publication of the same through any other media.
73.	The bidder along with its associate / collaborators / sub-contractors / sub-vendors / consultants /service providers shall strictly adhere to BHEL fraud prevention policy displayed on BHEL website http://www.bhel.com and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.

ANNEXURE - V**Certificate by Chartered Accountant on letter head**

This is to Certify that M/S
 (Hereinafter referred to as 'company') having its registered office at
 is registered under MSMED Act 2006, (Entrepreneur Memorandum No (Part—II)
 dtd Category: (Micro/Small)). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as per the **latest audited financial year** as per MSMED Act 2006 is as follows:

1. For Manufacturing Enterprises: Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No,S.O.1722(E) dated October 5, 2006 : Rs.....Lacs.

2. For Service Enterprises: Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006: Rs.....Lacs

(Strike off whichever is not applicable)

The above investment of Rs.....Lacs is within permissible limit of Rs..... Lacs for..... Micro / Small **(Strike off which is not applicable)**
 Category under MSMED Act 2006.

Or

The company has been graduated from its original category (Micro/ Small) **(Strike off which is not applicable)** and the date of graduation of such enterprise from its original category is..... (dd/mm/yyyy) which is within the period of 3 years from the date of graduation of such enterprise from its original category as notified vide S.O. No. 3322(E) dated 01.11.2013 published in the gazette notification dated 04.11.2013 by Ministry of MSME.

Date:

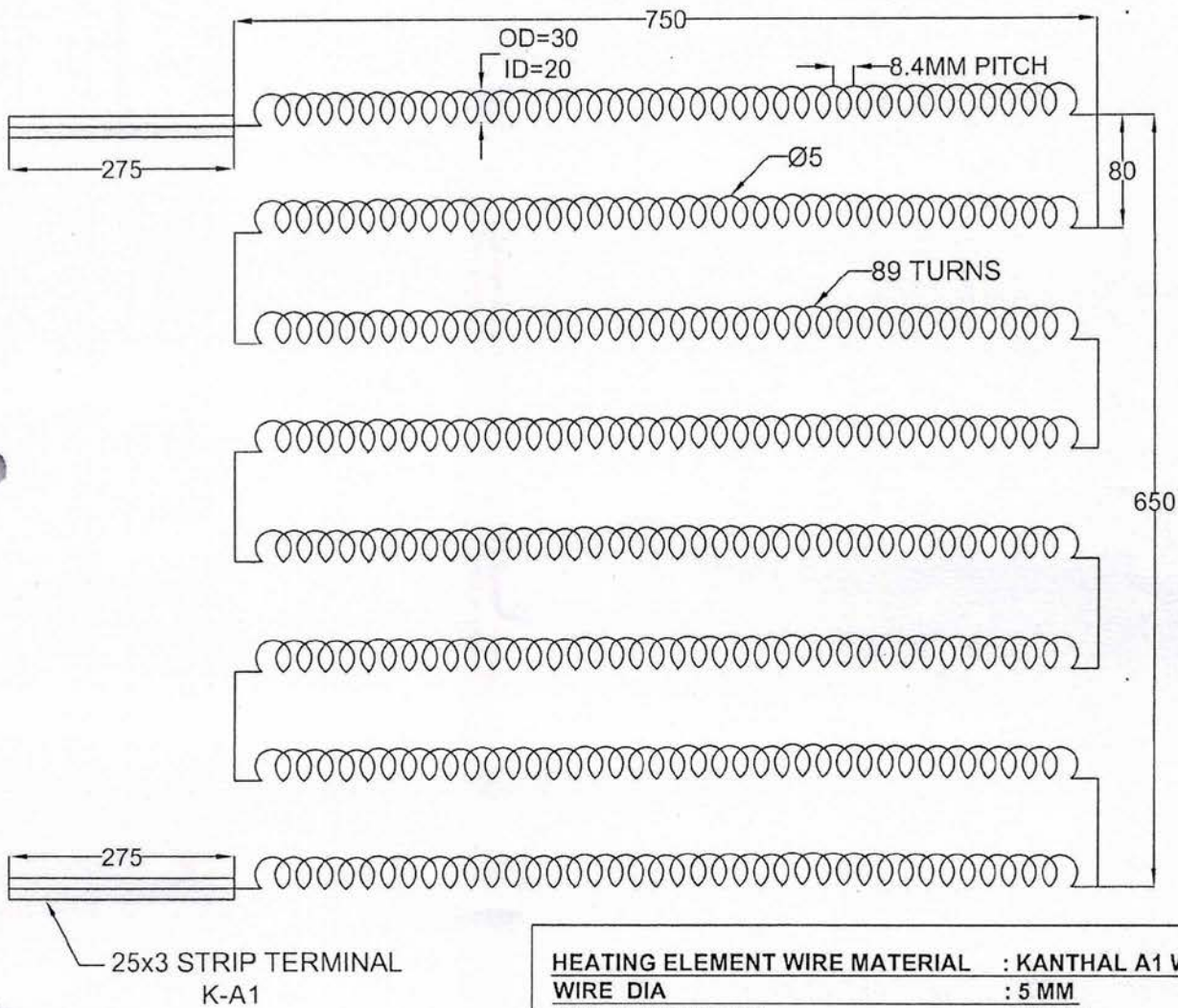
(Signature)

Name –

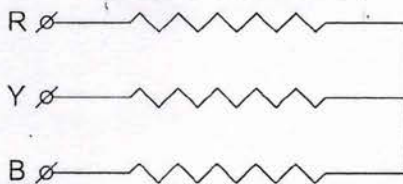
Membership number –

Seal of chartered accountant

COIL TYPE HEATING ELEMENT DIAGRAM



Element Wiring
Connection Diagram



HEATING ELEMENT WIRE MATERIAL	: KANTHAL A1 WIRE
WIRE DIA	: 5 MM
COIL OUTSIDE DIA	: 30 MM
COIL INNER DIA	: 20 MM
PITCH	: 8.4 MM
LENGTH OF EACH DIVISION	: 750 MM
NO. OF TURNS IN EACH DIVISION	: 89Nos
NO. OF DIVISION	: 8Nos
TOTAL NO. OF TURNS	: 713Nos
TERMINAL STRIP SIZE	: 25x3MM
VOLTAGE / ELEMENT	: 230V,AC
POWER / ELEMENT	: 12 KW
TOTAL POWER RATING	: 36 KW
RESISTANCE / ELEMENT	: 4.135 OHMS
MAXIMUM TEMPERATURE	: 900°C
OPERATING TEMPERATURE	: 750°C
NO. OF ELEMENT	: 3Nos

MAJOR SPECIFICATIONS

CHAMBER SIZE	: Ø750MM x 630MM H
MAXIMUM TEMPERATURE	: 900°C
POWER RATING	: 36KW
NUMBER OF ZONES	: 1NO
POWER SUPPLY	: 415V,3PH,50HZ,AC

THERELEK ENGINEERS PVT LIMITED
BANGALORE - 58

CUSTOMER

WORK ORDER : TE-3726

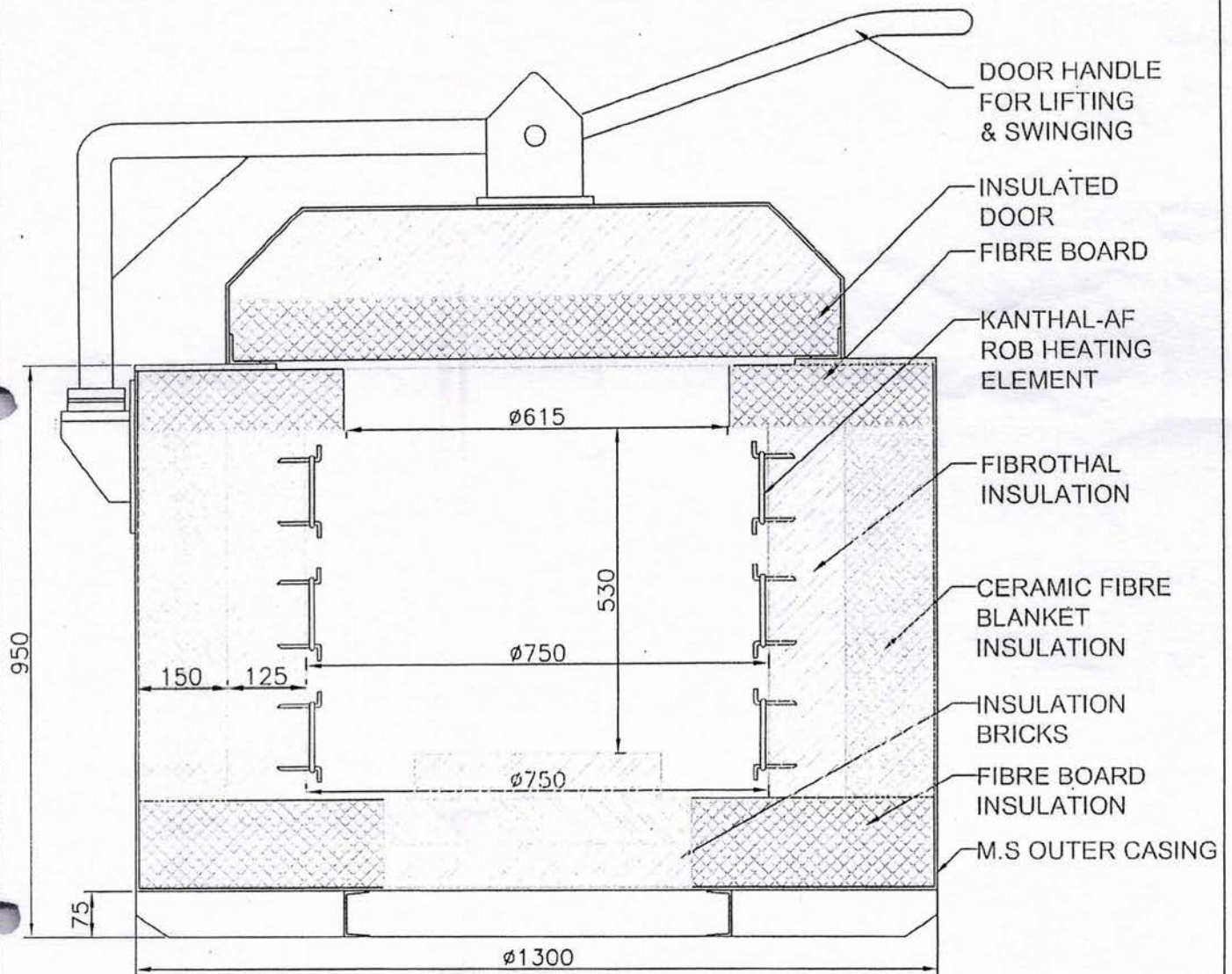
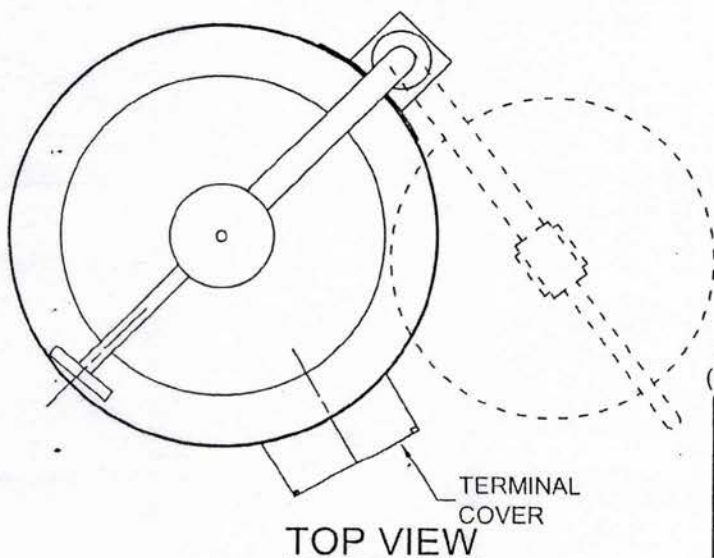
DIRECTOR NAME
SYS1/T/JESSYFILE NAME
3728

PRODUCTION

TITLE

THERELEK ELECTRICALLY HEATED
POST WELDING FURNACE

NAME	DATE
DRWN	11-08-08
CHECKED	APR/08
APPROVED	APR/08
SCALE	1:1
ALL DIMENSIONS ARE IN MM	
DWG NO	
SHEET NO	1/1
REV NO	00

ELECTRICALLY HEATED FURNACE**FRONT SECTIONAL VIEW****TOP VIEW****MAJOR SPECIFICATIONS:**USEFUL CHAMBER : $\phi 600 \times 530$ MM Ht

MAX TEMP: 900°C

OPERATING TEMP: 850°C

POWER RATING : 39 kW

POWER SUPPLY : 415V, 3 ϕ , 50Hz AC**THERELEK ENGINEERS, BANGALORE**70/71, THIRD PHASE, PEENYA INDUSTRIAL AREA, BANGALORE-56.
PH. 080-28395101/02 FAX. 28395103 WEB. www.therelek.com

CUSTOMER: BHEL, Trichy

FILE: S-3/ D/ WORK ORDER

DRG. No: T-002

DATE: 17/10/06

REV. No: 00

CAR BOTTOM FURNACE : ELEMENT DISTRIBUTION DETAILS

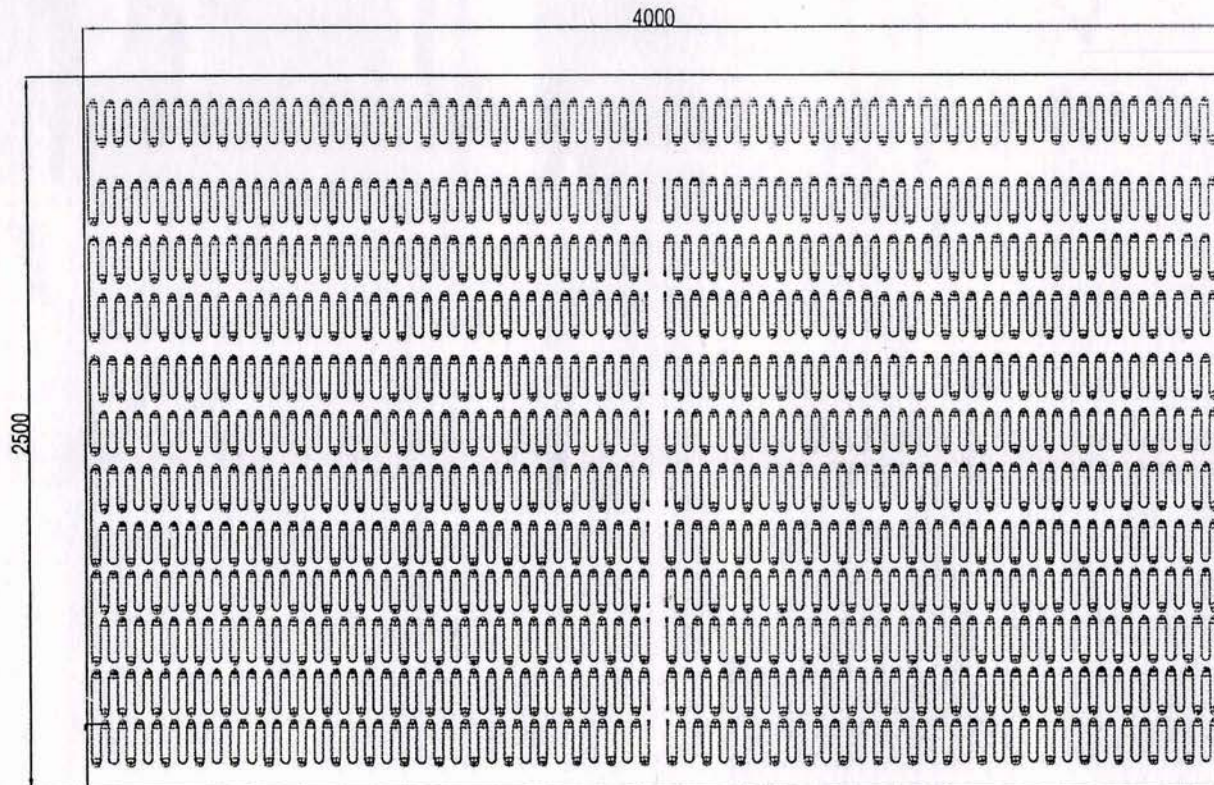
Rev No Revision Date

Date

Signature checked

All dimensions are in millimeters

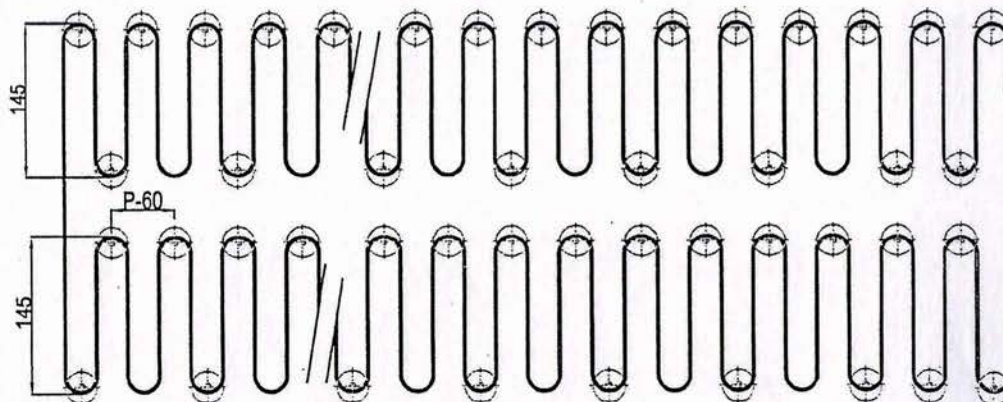
DRG: BHEL: V2: 003A



Resistance Per
- element: 1.02718446 Ω
length of element: 21.2668 m
No. of pitches = 66.42

Item No. 20

ITEM No: 20



ELEMENT



ELEMENT MATERIAL: KANTHAL A1 STRIP

ELEMENT CROSS SECTION: 15x2 MM

CORRUGATION HEIGHT: 145 MM

PITCH: 60 MM

TERMINAL: BY JOINING 3 STRIPS OF 15x2, K-A1

total No. elements = 24 Nos.

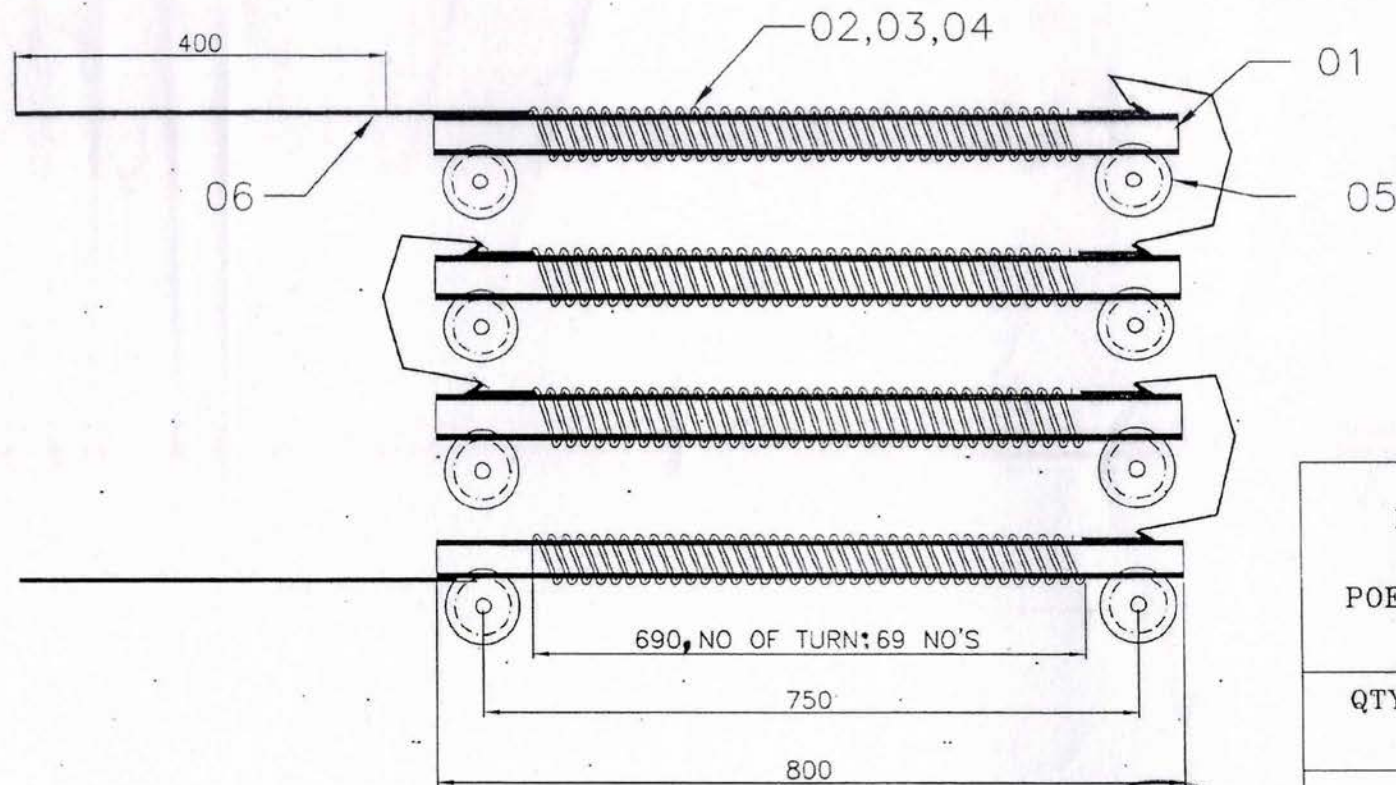
THERELEK ENGINEERS (P) Ltd. BANGALORE

e-mail: info@therelek.com
phone: 91-080-28395101/02

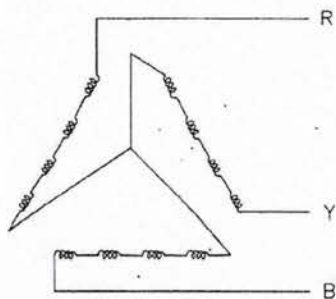
Designed by	Approved by - date	File name	Date	Scale
		TE-3544 D	12-06-2007	NTS
ELEMENT DISTRIBUTION DETAILS		THIS DRAWING / DESIGN IS THE PROPERTY OF THERELEK ENGINEERS (P) Ltd AND MUST NOT BE COPIED OR LENT WITHOUT PRIOR PERMISSION IN WRITING		
CUSTOMER: M/s. B.H.E.L TRICHY		DRG. No. TE:3544ELE	Sheet 1/1	REV No: 1/1

DRG: BHEL: UL: 005

ITEM NO. 30



MATERIAL = APM / A1
 QTY :- 6 NO'S
 POWER : 6 X 7 = 42 KW
 ONE FURNACE
 QTY :- 6 + 6 = 12 NO'S
 TWO FURNACE
 QTY :- 4 NO'S
 SPARE



STARE CONNECTION

- 01. CERAMIC TUBE = OD22,L800
- 02. HEATING COIL = KANTHAL A1 GARDE
- 03. COIL OD = 33 MM
- 04. WIRE DIA = .4.8 MM
- 05. BOBIN
- 06. THERMINAL ROD



NOTE:
 DESIGN & DIMENSIONS ARE SUBJECT TO
 CHANGE DUE TO CONTINUOUS IMPROVEMENT

		TITLE		
		HEATING HELEMENT DETAIL		
		CLIENT		
		BHEL - TRICHY		
	NAME	SIGN	DRAWING No.	REV.
DRN	JN		014-01-03	00
CHD	SV		SCALE N.T.S	TOTAL WT.Kg. -
APPD	SV		SHEET No. 1	No. OF SHEETS 3

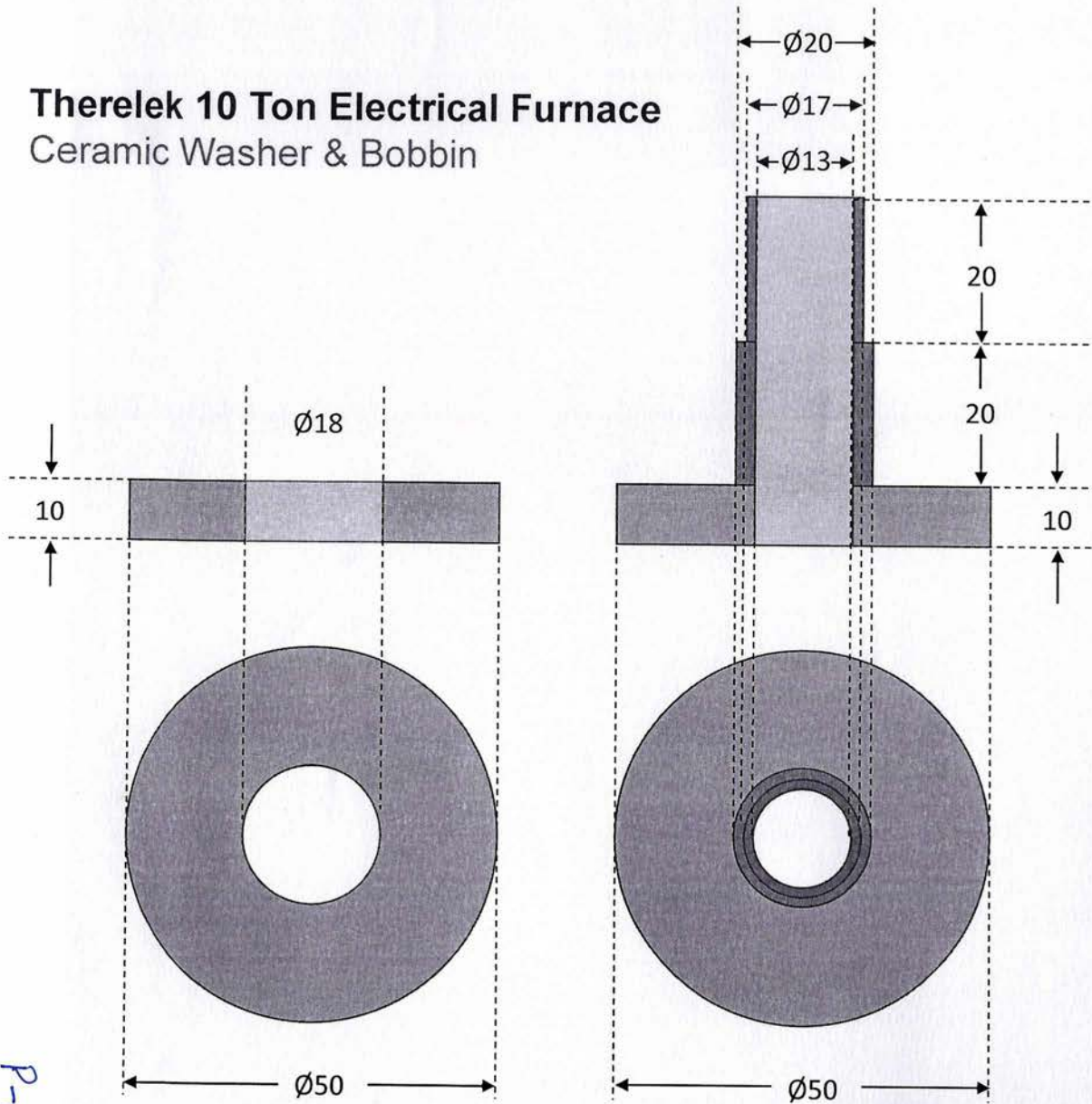
ITEM No:30

P-4

ITEM NO. 40

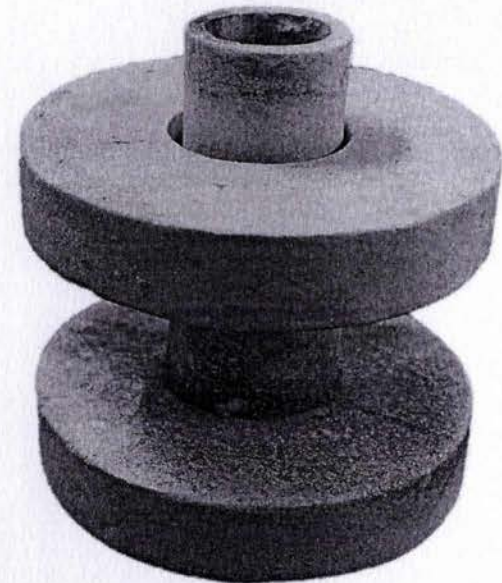
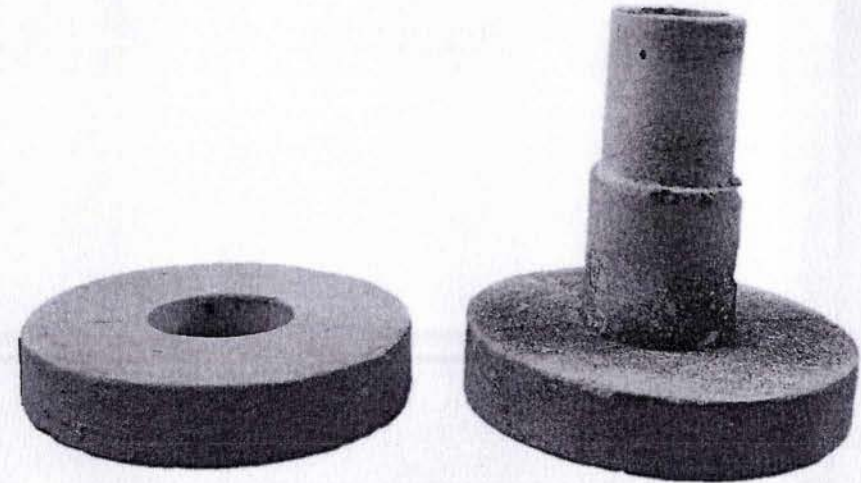
DRG: BHEL:U2:004

Therelek 10 Ton Electrical Furnace
Ceramic Washer & Bobbin



All dimensions are in mm

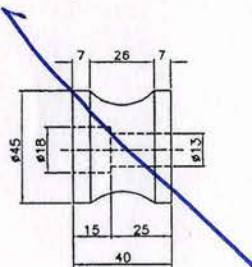
Actual image of the ceramic Bobbin & Washer



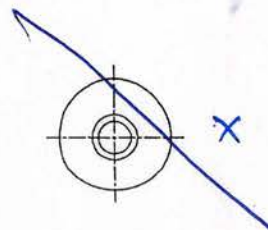
ITEM NO: 40

P-5

I
(not required)

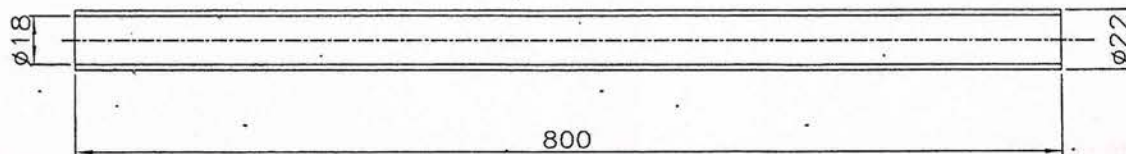


BABIN:- $\phi 45$, 40MM LONG
MATERIAL :- CERAMIC



DRG: BHEL: U2: 007

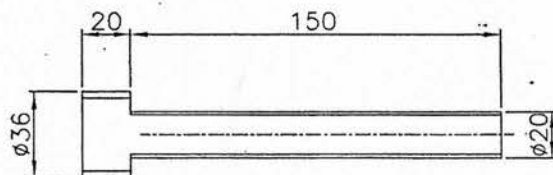
II



CERAMIC TUBE
MATERIAL :- CERAMIC

ITEM 50

III



COLLER TUBE
MATERIAL :- CERAMIC

ITEM 60



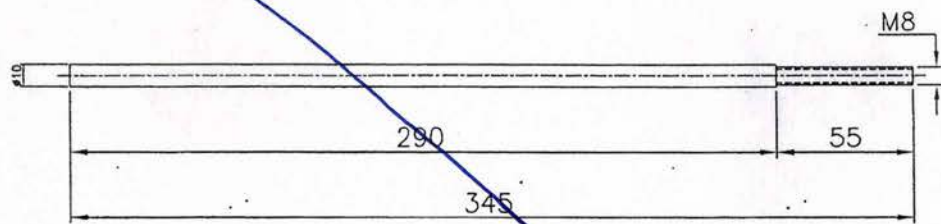
VIBRANT THERMAL ENGINEERING		VIBRANT THERMAL ENGINEERING 11/27, NORTH MADA STEET POONAMALLEE CHENNAI-56		
		TITLE HEATING HELEMENT DETAIL		
		CLIENT BHEL - TRICHY		
	NAME	SIGN	DRAWING No.	REV.
DRN	JN		014-01-03	00
CHD	SV		SCALE N.T.S	TOTAL WT.Kg. -
APPD	SV		SHEET No. 2	No. OF SHEETS 3
DATE	07-10-2013			

ITEM No: 50, 60

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PRU: BHEL: V2: 008

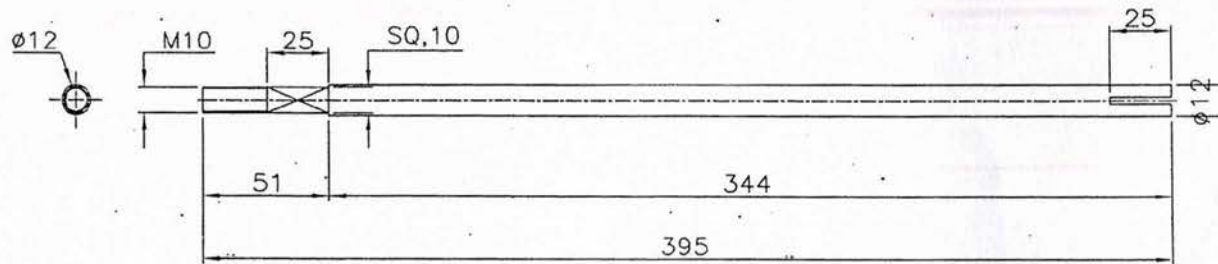
I
(not required)



STUD
MATERIAL:- $\phi 10$ SS310 ROD

X

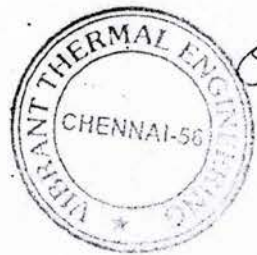
II



THERMANEL ROD
MATERIAL :- $\phi 12$ SS310

ITEM 70

ITEM NO: 70

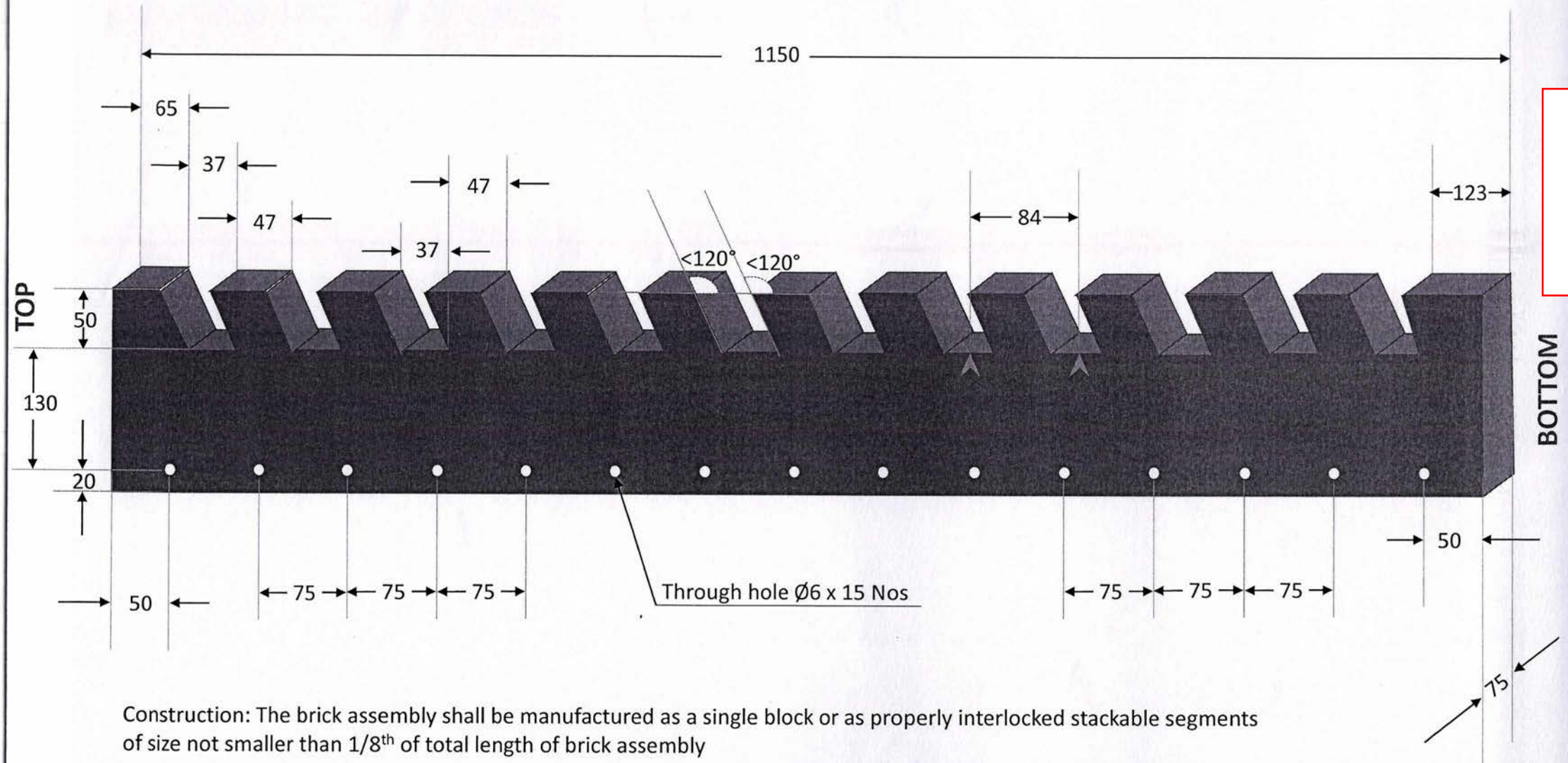


 VIBRANT THERMAL ENGINEERING		VIBRANT THERMAL ENGINEERING			
		11/27, NORTH MADA STEET POONAMALLEE CHENNAI-56			
TITLE		HEATING HELEMENT DETAIL			
CLIENT		BHEL - TRICHY			
DRAWING No.		014-01-03		REV	
DRN	JN			00	
CHD	SV	SCALE N.T.S		TOTAL WT.Kg. -	
APPD	SV	SHEET No. 3		No. OF SHEETS 3	

P-7

DRG: BHEL: U2: 009

Drawing: **Ceramic/refractory brick assembly for heating element support**, Total no of such brick assembly: **6 Nos per oven**

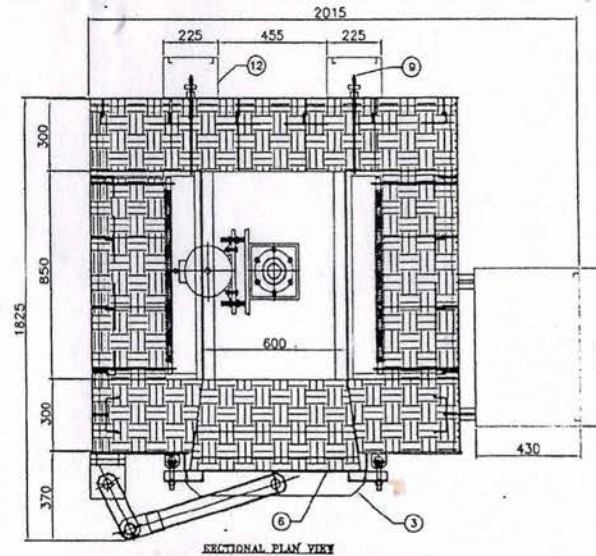


Drawing NOT TO SCALE. All linear and angular dimensions are in mm and degrees respectively

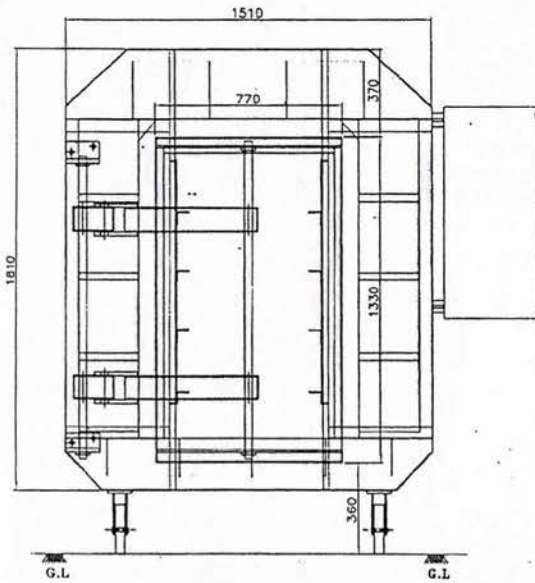
P-8

TECHNICAL SPECIFICATION:

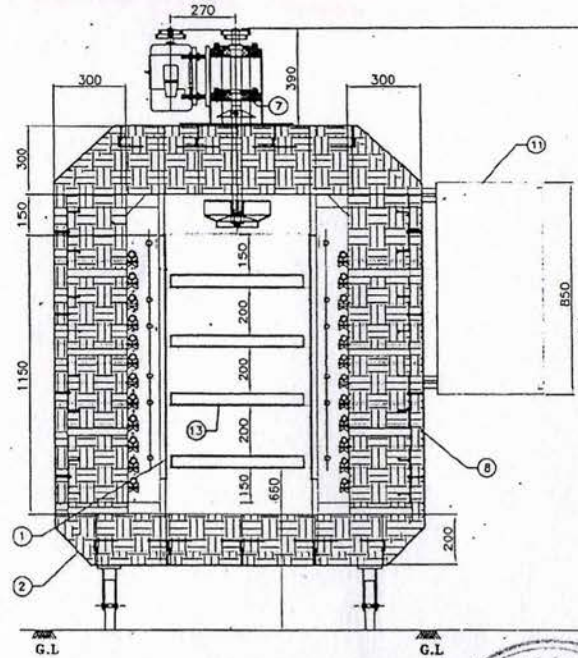
INNER SIZE	850 x 600 x 1150 (D*W*H)
OPERATING TEMPERATURE	: 1100° C
POWER	: 42 KW (MAX)
No. OF ZONES	: 1
FAN MOTOR	: 2 HP MOTOR
POWER SUPPLY	: 415 V, AC, 3 PH.
OVEN	: DOUBLE CHAMBER



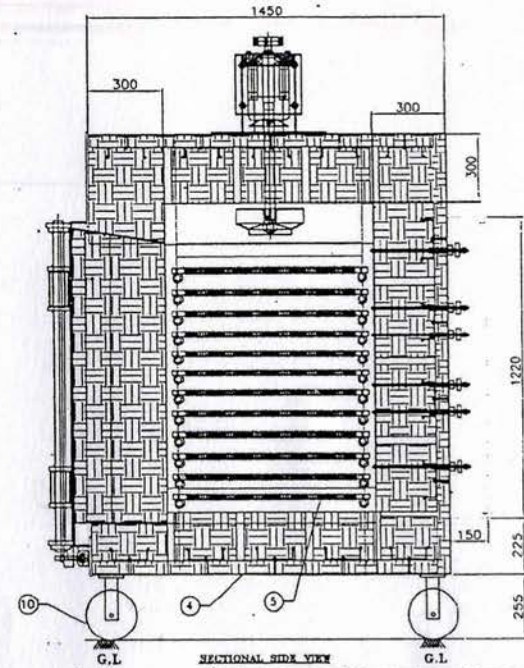
SECTIONAL PLAN VIEW



SECTIONAL ELEVATION VIEW



SECTIONAL ELEVATION VIEW



SECTIONAL SIDE VIEW



VIBRANT THERMAL ENGINEERING 11/27, NORTH MADA STREET POONAMALLEE CHENNAI-56			
TITLE GA PD TRAY TYPE FLUX HEATING OVEN			
CLIENT BHEL - TRICHY			
DRAWING No. 014-01-01		REV. 00	
NAME JN	SIGN	SCALE N.T.S	TOTAL W.K.G
CHD SV		SHEET No. 1	No. OF SHEETS 1
DATE 07.10.2013	ALL DIMENSIONS ARE IN MM		

S.No.	DESCRIPTION	REMARKS
01	BAFFLE - SS310	2 OR 3 MM SHEET
02	OVEN OUTER PLATE - MS	4 MM SHEET
03	DOOR PLATE - MS	4 MM SHEET
04	CERAMIC FIBER	300 MM
05	COIL TYPE HEATER ELEMENT	A1
06	DOOR	HINGED, MANUAL LOCK
07	RECIRCULATION FAN - (KEC)	2 HP MOTOR
08	STUD	SS310
09	THERMAL ROD	SS310
10	WHEEL	CAST
11	CONTROL PANEL	MS
12	TERMINAL BOX	MS
13	TRAY	SS 310

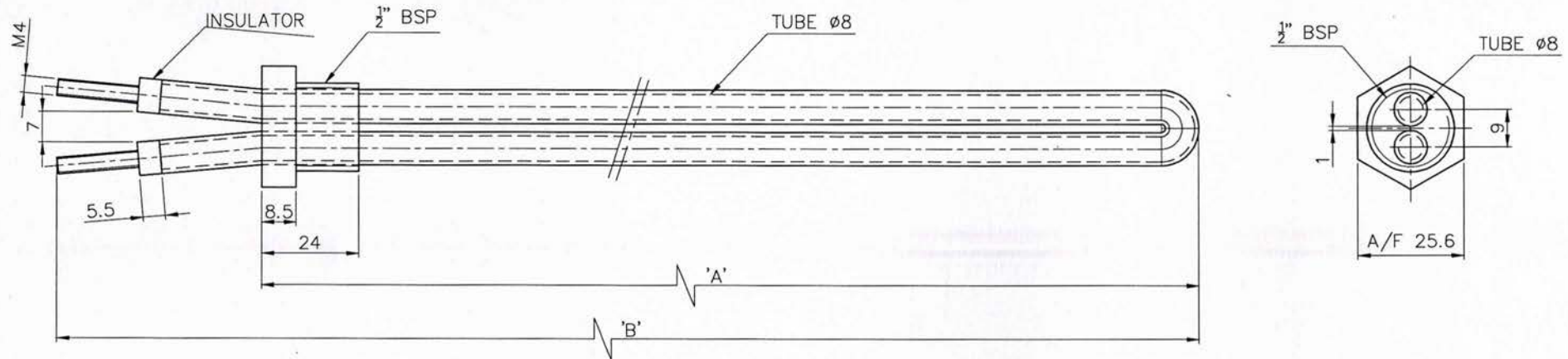
ASSEMBLY DRAWING FOR REFERENCE ONLY

ITEM NO. 30, 50, 60, 70, 80

P-10

ALL DIMENSIONS ARE IN MILLIMETRES

DRAWING NO: 3-M-19B06-16114



ITEM	POWER	OHMS	'A'	'B'	THREAD SIZE	TUBE LENGTH	TUBE Ø	A/F
01	1.67 KW	32Ω	905	955	1/2" BSP	1860	Ø8	25.6
02	3.33 KW	16Ω	1300	1350	1/2" BSP	2650	Ø8	25.6

ITEM NO. 90

ITEM NO. 100

NOTE: -

01. TUBE OUTSIDE NICKEL PLATED

APPLICATION:

WATER HEATING UPTO 100° C

REV	DATE	ALTERED	CHECKED	APPROVED
ZONE				

CAUTION: THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT
			MATL SPEC	QTY
EQPT: FLUSHING STATION - SECONDARY SIDE / PSI - ENGG				
 Bharat Heavy Electricals Ltd HIGH PRESSURE BOILER PLANT TIRUCHIRAPALLI - 620014		DRN	C.PONNUSAMY	SIGNATURE <i>C. Ponnusamy</i>
CHD	A.DANASEKAR	SIGNATURE <i>A. Danasekar</i>	DATE 07/11/19	
APPD	A.DANASEKAR	SIGNATURE <i>A. Danasekar</i>	DATE 08/11/19	
DEPT	M&S	GRADE OF UNTOL DIM	SCALE	WEIGHT (Kg)
CODE	2597	Ø/M/F IS: 2102	1:1	
TITLE		REF TO ASSY DWG NO		ITEM
HEATING ELEMENTS (SECONDARY SIDE)		REF TO OLD DWG NO		
CARD CODE	DRAWING NO :			REV
U 01	3-M-19B06-16114			00

A3-SIZE