

BHARAT HEAVY ELECTRICALS LIMITED

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429-002/A

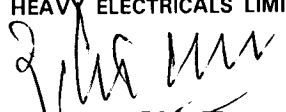
(A Government of India Undertaking)
HIGH PRESSURE BOILER PLANT
PURCHASE DEPARTMENT - FOSSIL BOILERS
THIRUCHIRAPALLI - 620014
TAMILNADU (INDIA)

PHONE :2577629
GRAMS : BHARATELEC
FAX NO: 2520719
E-mail: srchandran@bheltry.co.in
Web:

Enquiry No	Enquiry Date	Due Date for Quotation
2661400578 - 55	21.08.2014	19.09.2014
Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order		

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	7518D0702500 FRONT WALL CASTING - 2 AS PER DRG.NO. 4M-18D-07-20509, Note for sl.no. 10 to 90:- (1)Material: Heat Resistant Steel Casting, Grade 11, IS 4522. (2)Ceritificate for material composition from Govt. approved lab to be provided along with material supply. However BHEL will also check at BHEL lab for final acceptance. (3)The Drawing No. and Grade of Casting to be embossed in each casting for identification. (4)All the castings to be offered for inspection by BHEL before despatch at vendor's works.For that supplier should send pre- despatch inspection call letter to BHEL official. After receipt of pre despatch inspection call letter BHEL official will visit the supplier works within one week. (5) The offerer shall submit the offer in two part bid system. VENDOR QUALIFYING CRITERIA Only those vendors who satisfy the following conditions will get qualified to participate in the tender: 1.Vendor should have minimum 3 years experience in this field. 2.Previous PO details for supplying similar kind of items should be submitted along with offer.Otherwise offer will be rejected. 3.Company profile details has to be provided along with offer. 4.BHEL reserves the right to visit the vendor's works for verifying the manufacturing facilities and any other credential furnished by the vendor. In case the information furnished with the offers found to be false /incorrect, the offer shall be rejected.	NO	20.000	20.00	01.12.14
20	7518B0402300 FRONT WALL TOP CASTING AS PER DRG. No. 4M-18B-04-21507.	NO	15.000	15.00	01.12.14

The offers should reach us 30 minutes before the time of opening of tenders.
The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening.Late and delayed offers are liable to be rejected.

Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**

MANAGER / PURCHASE
(FOSSIL BOILERS)
Yours faithfully,

BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)
HIGH PRESSURE BOILER PLANT
PURCHASE DEPARTMENT - FOSSIL BOILERS
THIRUCHIRAPALLI - 620014
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Web:

2661400578 / 21.08.2014

30	7518D0702600 DOOR CASTING-1 AS PER DRG.NO. 4M-18D-07-20495	NO	3.000	3.00	01.12.14
40	7518D0702700 DOOR CASTING-3 AS PER DRG.NO. 4M-18D-07-20496	NO	3.000	3.00	01.12.14
50	7518D0702800 DOOR CASTING-2 AS PER DRG.NO. 4M-18D-07-20497 OF PART NO. DC-2, L = 280 MM,	NO	20.000	20.00	01.12.14
60	7518D0702900 DOOR CASTING-4 AS PER DRG.NO. 4M-18D-07-20497 OF PART NO. DC-4, L = 325 MM,	NO	17.000	17.00	01.12.14
70	7518D0703000 DOOR CASTING-5 AS PER DRG NO. 4M-18D-07-20498-01	NO	2.000	2.00	01.12.14
80	7518D0703100 DOOR CASTING-7 AS PER DRG NO. 4M-18D-07-20499	NO	2.000	2.00	01.12.14
90	7518D0703200 DOOR CASTING-6 AS PER DRG NO. 4M-18D-07-20500-01	NO	17.000	17.00	01.12.14

General Note:

GENERAL NOTE: PLEASE SUBMIT YOUR OFFER IN "TWO PART BID SYSTEM" AS PER THE ANNEXURES ENCLOSED.

ENCLOSURES: ANNEXURE II,III,IV,V,VI,VII.

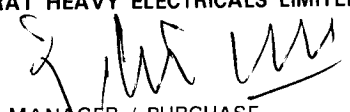
Enclosures:

"LD clause has to be confirmed without fail."

"Payment to vendors will be made only thro E-Payment mode"

The offers should reach us 30 minutes before the time of opening of tenders.
The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected.

Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**


MANAGER / PURCHASE
(FOSSIL BOILERS)
Yours faithfully,

CAPITAL PURCHASE
COMMERCIAL TERMS AND CONDITIONS

1.0 QUOTATIONS

The Bidders shall submit the offer in **TWO INNER ENVELOPES** as indicated below which shall be sealed in one outer envelope.

Envelope I This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid & annexure III. This envelope should be clearly marked **'Part I - Technical and commercial bid'**,

Indicating Enquiry No., Due Date and Address & Reference of the Bidder.

Envelope II This sealed envelope should contain **price as per Annexure-IV format**. This envelope should be clearly marked **"Part II - Price bid"**, indicating **Enquiry No., Due Date and Address & Reference of the Bidder**.

Both the envelopes (Part I & II) shall be put in one cover (**Envelope III**), duly sealed, superscribing as Part I and Part II of Enquiry No., due date of opening and the address and reference of the Bidder

The above offer should reach this office on or before the due date by 14.00 hours (IST). Late offers will not be considered.

Tender should not be addressed to any individual's name but only by designation to

**SENIOR MANAGER /PURCHASE/ CP & SP/ MM / MFG
BHARAT HEAVY ELECTRICALS LIMITED
HIGH PRESSURE BOILER PLANT
TIRUCHIRAPALLI - 620 014
TAMIL NADU**

Tenders should be free from **CORRECTION AND ERASURES**, Corrections if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.

Offers should be in **ENGLISH** and accompanied by detailed technical literature, catalogue and detailed dimensional drawings in **ENGLISH** or otherwise, the offers will not be considered.

2.0 OPENING OF TENDERS

The Part I - Technical & commercial bid alone would be opened on the Tender opening date.

The Part II - Price bid of technically suitable Bidders alone would be opened. The Technically Suitable Bidders would be informed about the tender opening date through e-mail.

Clarifications if any required by BHEL for Technical evaluation **would be** sought from Bidders before opening of Part II - price bid

For any queries clarifications the bidders may contact us through our FAX NO. +91 431 2520719 or through e-mail <mmcpmfg1@bheltry.co.in >&< chells@bheltry.co.in>

Bharat Heavy Electricals Limited, Tiruchirappalli -620 014 Annexure-III
MM: CP & SP
Annexure For Techno Commercial Bid
 Check List - to be filled and submitted along with Technical Bid

BHEL Commercial Terms and Conditions for Indigenous Supplies	Vendor's Confirmation / Comments
Technical confirmation to BHEL's Specification as called for in BHEL Format shall be furnished. If needed additional sheets shall be used.	
Prices shall be quoted item wise only as per the model format enclosed	
Prices shall be quoted on " FIRM PRICE " basis only The prices should be only on F.O.R / Despatching station basis with Packing & Forwarding charges if any. Applicable % of ED & Sales Tax, Freight & Insurance, Installation & Commissioning Charges should be clearly Indicated	
Validity of offer shall be for a minimum period of 120 days from the date of Tender opening	
Delivery period from the date of Letter of Intent / Purchase order shall be clearly mentioned in the offer	
Liquidated damages @ '0.5% per week subject to a maximum of 10% of the order value shall be applicable for delay in deliveries For Details Refer Annexure- v	
Following Risk Purchase clause shall be applicable 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 supplier has failed to deliver or dispatch within the time stipulated or if the same were not available, the best and the nearest available substitute therefore The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases	
Payment term for supply portion: Payment term is 100% direct payment after 45 days from the date of receipt and acceptance of materials For details Refer Annexure- v	
Erection / commissioning: (if applicable only) Erection / commissioning charges if any has been mentioned in the offer or else confirmation that Erection /commissioning shall be done at free of cost is available in the offer,	
The equipment shall be guaranteed for a period of 12 months from the date of commissioning	
Final inspection and acceptance of equipment will be after installation at BHEL, Trichy	
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	
Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL, Trichy basis.	
Offers should be submitted only in sealed cover super-scribing clearly the Enquiry reference and due date.	
% of Excise Duty with cess	
% of TAX (CST/VAT) (INGST with FORM-17 or CST with C-FORM)	
Packing & Forwarding Charges (if any in % only)	
Percentage of Freight& transit insurance charges, if any Freight charges from Dispatching station to BHEL, Tiruchirappalli • Supplier should quote for F.O.R-BHEL Trichy Stores.	
As per Commercial terms and conditions, acceptance for participation in Reverse auction (RA). Yes/No to be indicated	
Name of the person for participating reverse auction	
Land Line Number	
Fax Number	
Mobile Number	
E-mail ID	

NOTE:-

- It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.
- Your offer should be indicating applicable If any P&F Charges, % of ED, Sales Tax -CST or VAT, Service Tax), Freight, Insurance and Installation and Commissioning Charges etc., as per our Price Format
- Your specific acceptance to our Payment terms, LD & Risk Purchase Clause are essential for consideration of your offer. Other wise your offer is liable for rejection.
- No row shall be left blank. Please indicate NA, in case the item is "not applicable"

Payment Term (Indigenous)	
If materials are receivable at Stores/Trichy <u>without</u> PBG	Payment term is 100% direct payment after 45 days from the date of receipt and acceptance of materials.
If materials are receivable at Stores/Trichy <u>with</u> PBG	Payment term is 100% direct payment after 45 days from the date of receipt and acceptance of materials and against 10% PBG valid for the warranty period.
Any deviation in the above payment term will attract loading as mentioned below. “Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidders.	

Payment through Bank is not preferred. In case of Payment through Bank is opted by Supplier, BHEL prefers documents submission through bank with copy of LR and door delivery of Goods to Site/Stores with Consignee copy attached. In this case Loading will be 3% on the offered value.

Offers of indigenous Suppliers with payment terms as LC/Advance Payment are liable for rejection.

Liquidated Damages / Penalty -

Liquidated damages shall be 0.5% of the total order value per week or part thereof subject to a maximum of 10% of the total order value.

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).

Guarantee / Warranty Period – (if applicable)

Normally No deviation permitted and the deviated offers are liable for rejection.

Ranking-

BHEL will consider the ranking after the loading is applied as referred above wherever deviations are observed.

Performance Bank Guarantee – (if applicable)

Normally No deviation permitted and the deviated offers are liable for rejection.

NOTE:-

1. If the due date of tender opening happens to be a holiday, the tenders will be opened on the next working day.
2. BHEL reserves the right to go for a reverse auction (RA) instead of opening the submitted sealed bid which will be decided after technical evaluation. Information and general terms and conditions covering RA are given in commercial terms and conditions.
3. Corrigendum if any, with respect to this tender will be hosted only in the website <http://www.bhel.com> or <http://tenders.gov.in>. You are requested to visit the website regularly for updates.

Special Provisions for Micro and Small Enterprises (MSE)

1. 20% of the tendered quantity is earmarked for MSE suppliers in this tender.
2. Out of the 20% tendered quantity reserved for MSE suppliers, 4% shall be earmarked for procurement from MSE owned by SC/ST entrepreneurs.
3. 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.
4. "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 along with attested copy of a CA certificate (Format enclosed at Annexure -VII 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. No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer."

Certificate by Chartered Accountant on letter head

This is to Certify that MIS
(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:

- 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 6. 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
RsLacs forMicro I 6small (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
(dclimmiyyyy) which is within the period of 3 years from the date of graduation of such
enterprise from its original category as notified vide S.D. No. 3322(E) dated 01.11.2013
published in the gazette notification dated 04.11.2013 by Ministry of MSME.

Date:

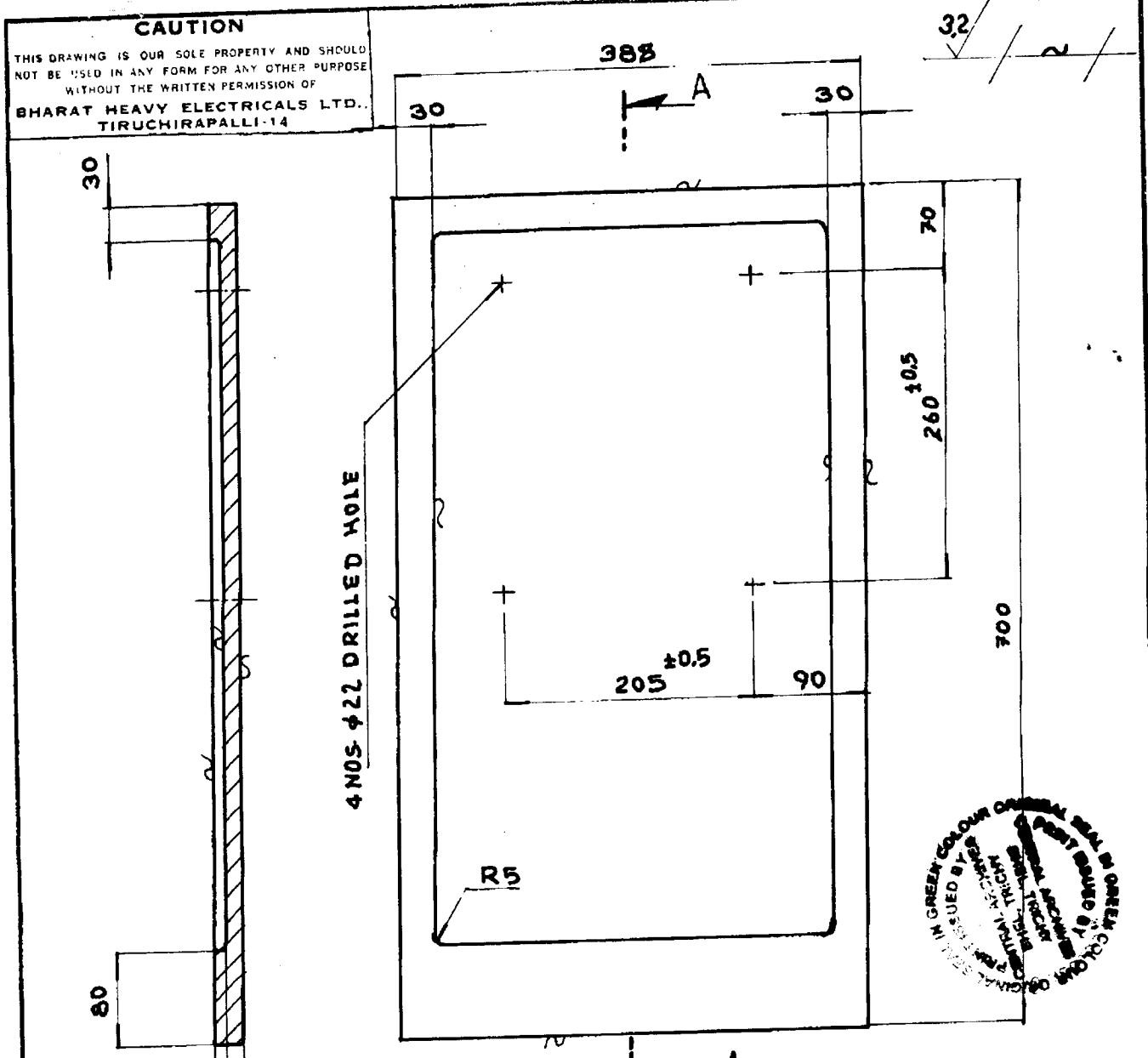
(Signature)

Name -

Membership number -

Seal of Chartered Accountant

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NOTE:-
 ALL RADII ARE 5mm UNLESS OTHERWISE SPECIFIED.
 ALL SHARP CORNERS TO BE ROUNDED R 2MM.

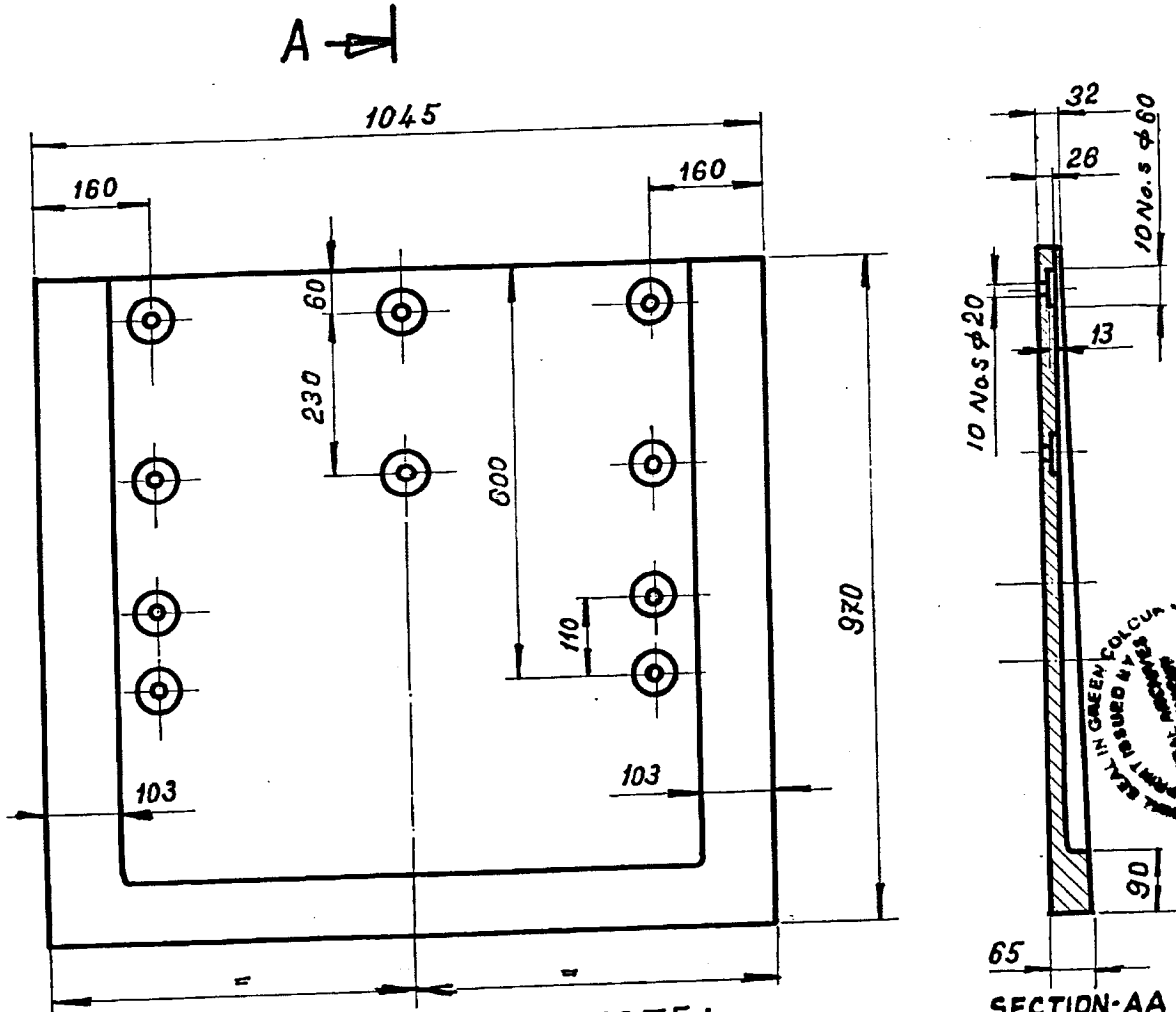
SEC. AA

MATL. ~~C-02-100-01~~, ~~94-21-100~~
~~C-02-100-01~~

16	HEAT RESISTANT CASTINGS	IS:4522	48.78	2.M.18d.3748	02				
NO. OF PIECES	DESCRIPTION	SEMI-PRODUCT	FINAL MATERIAL	INITIAL MATERIAL	GROUP	NET WT (kg)	GROSS WT (kg)	DRAWING NO.	ITEM NO.
REMARKS									
SCALE	DRAWN	REFERENCE		ALTERATIONS		DATE	SIGNATURE	INDEX	
1:5	V. Jayaraman	8007/PH/404-2		MATERIAL WAS C.I. GR. 20: IS: 20509 = 4 2		21.9.81			
MACHINE PLATE HEATING FURNACE									
TITLE: FRONT WALL CASTING - 2									
TYPE 150T-VULCAN									
DRAWING NO. 07									
4.M.18d.20509									
NO. OF SHEETS									
SHEET NO.									

CAUTION

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BHARAT HEAVY ELECTRICALS LTD.,
TIRUCHIRAPALLI-14



NOTE:

SECTION-AA

HEAT RESISTANT STEEL CASTING			
* CHEMICAL COMPOSITION			
C	Cr	Mn MAX.	Si MAX.
0.2-0.4	6.0-8.0	1.0	2.0



6			* SEE NOTE (Z)			2653	1.M.18B-0901	05	
NO. OF PIECES	DESCRIPTION	SEMI-PRODUCT	FINAL MATERIAL	INITIAL MATERIAL	SCRAP SORT	NET WT (KG)	GROSS WT (KG)	DRAWING NO.	ITEM NO.
REMARKS			TOTAL NET WT (KG)		CC:00 / EC:04				
SCALE 1:10	DRAWN	G. G. RAJ.		REFERENCE	ALTERATIONS		DATE	SIGNATURE	INDEX
	CHECKED	K. U. B. Sanyal			MATL. CHANGED		06-08-87	[Signature]	(Z)
	APPROVED	[Signature]							
	STDS. OFFICER								
DATE		16. 02. 1984			TYPE: WELLMAN 4GT.		INV. NO.		
MACHINE		PLATE HEATING FURNACE.		DRAWING NO.		NO. OF SHEETS			
TITLE:		FRONT WALL TOP CASTING.		4. M. 18B-21507.		SHEET NO.			

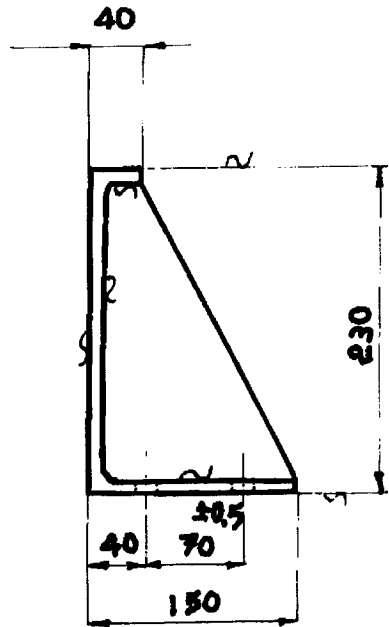
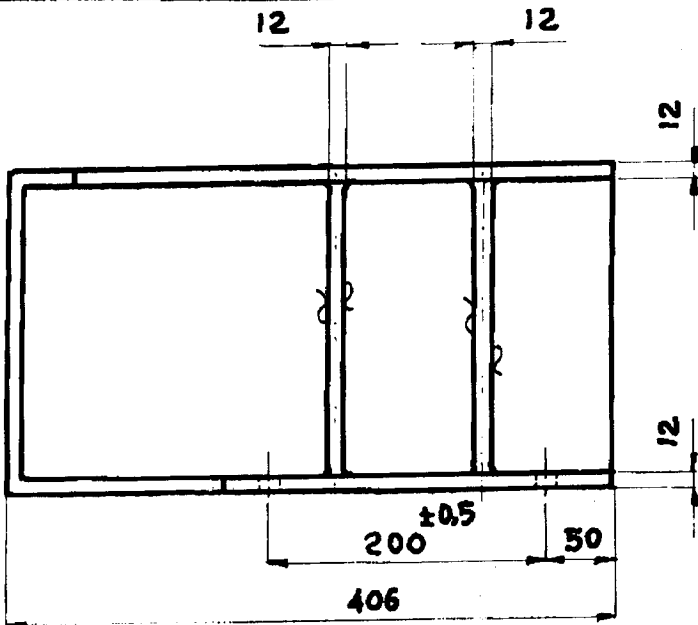


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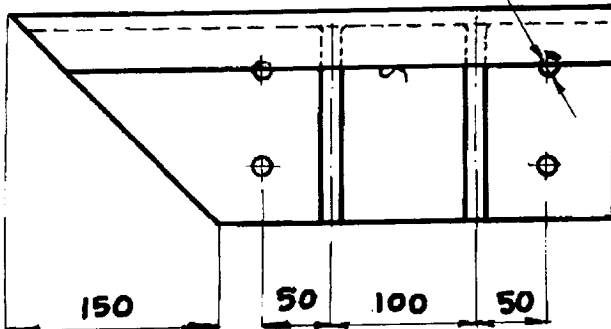
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 TIRUCHIRAPALLI-14

32/ / ~ /



4 NOS. $\phi 18$ HOLE



MATL.

~~CI GR 20 0.4~~

~~CI GR 20 0.8~~

~~NI 1% MAX~~

~~SI 2% MAX~~



NOTE:

ALL RADII ARE 5mm UNLESS OTHERWISE SPECIFIED.
 ALL SHARP CORNERS TO BE ROUNDED BY RADIUS: 2MM

3	HEAT RESISTANT GASTINGS		IS: 4522	15.8	3-M-182-044 70 01
	NO. OF PIECES	DESCRIPTION	SEMI-PRODUCT	INITIAL MATERIAL SORT	NET GROSS WT.(KG)
REMARKS			TOTAL NET WT.(KG)	47.4	
SCALE: 1:5	DRAWN: <i>V. Jayaraman</i>	REFERENCE: 8007/PH/405-2	ALTERATIONS: MATL WAS CI GR 20 IS: 210	DATE: 3-3-98	SIGNATURE: <i>[Signature]</i>
	CHECKED: <i>[Signature]</i>				INDEX: 2
	APPROVED: <i>[Signature]</i>				
	STDS. OFFICER:				
	DATE: 10.8.81				
MACHINE: PLATE HEATING FURNACE			TYPE: 150T	-YULCANV. NO.	
TITLE: DOOR CASTING			DRAWING NO. 4.M.18d.20495		
1			NO. OF SHEETS		
			SHEET NO.		

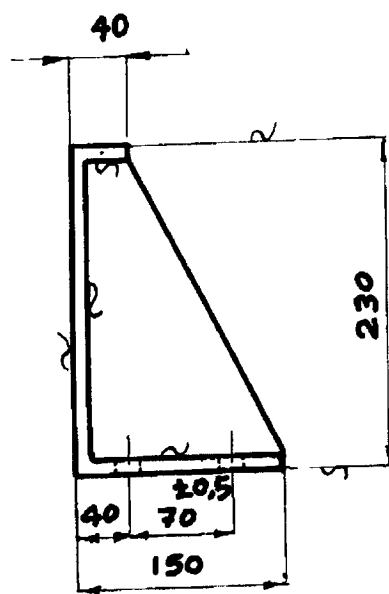
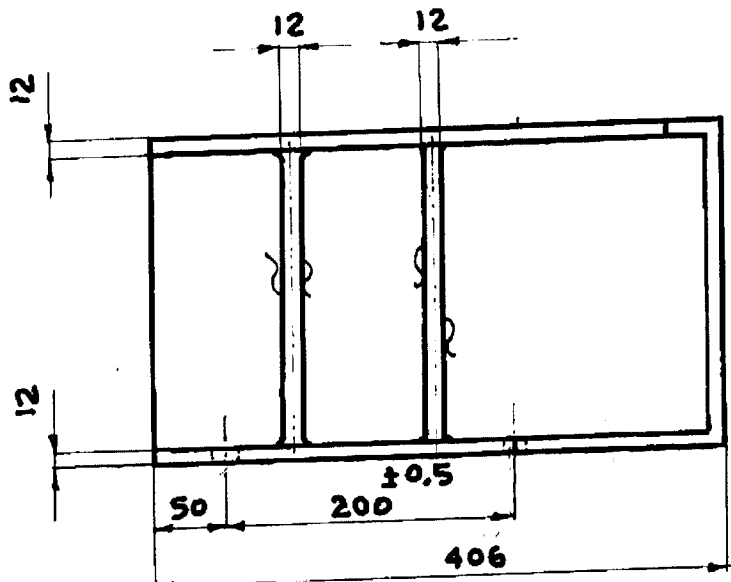


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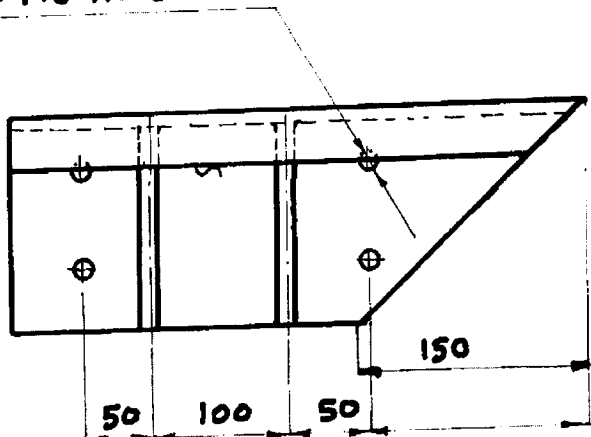
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32 / 2 /



4 NOS. $\phi 18$ HOLE



NOTE

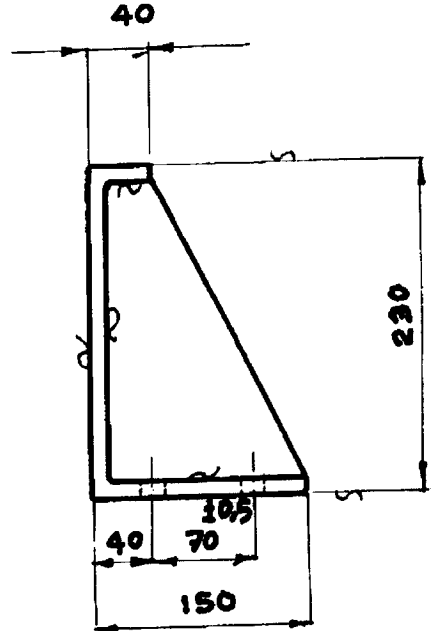
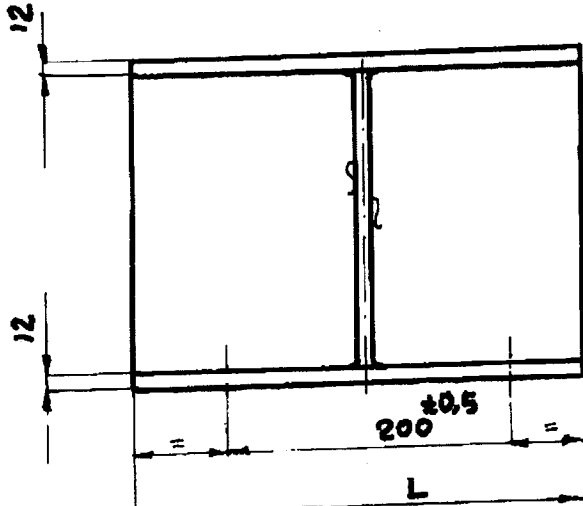
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ALL SHARP CORNERS TO BE ROUNDED BY RADIUS: 2 MM

3		HEAT RESISTANT GASTINGS	IS: 4522	15.8	2-M-182-04470	03
NO. OF PIECES	DESCRIPTION	SEMI-PRODUCT	INITIAL MATERIAL	SCRAP SORT	NET WT (KG)	GROSS WT (KG)
					47.4	
REMARKS		REFERENCE	ALTERATIONS	DATE	SIGNATURE	INDEX
SCALE	1:5	B007/PH/405-2	MATH WAS	3-3-98	[Signature]	02
CHECKED	[Signature]		CI. GR 20+TS. 210			
APPROVED	[Signature]					
STDS. OFFICER						
DATE	10.8.81					
MACHINE PLATE HEATING FURNACE			TYPE: 150 T - VULCAN INV. NO.			
TITLE: DOOR CASTING-3			DRAWING NO. 07			
4.M.18d.20496			NO. OF SHEETS			
[Logo]			SHEET NO.			

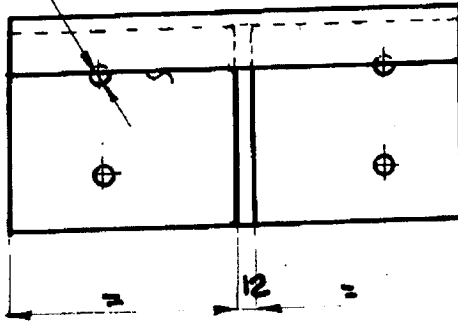
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TIRUCHIRAPALLI-14

32 / *W*



4 NOS. Ø18 HOLE



PART NO	L
DC-2	280
DC-4	325



NOTE:

ALL RADII ARE 5mm UNLESS OTHERWISE SPECIFIED.
ALL SHARP CORNERS TO BE ROUNDED BY RADIUS: 2mm

20	DC-2		HEAT RESISTANT CASTINGS	15: 4522 Gr. 11	10.5	2-M-18D07-4470	02		
17	DC-4		37	"	12.4	2-M-18D-04470	04		
NO. OF PIECES	DESCRIPTION	SEMI-PRODUCT	FINAL MATERIAL	INITIAL MATERIAL	SCRAP SORT	NET WT(KG)	GROSS WT(KG)	DRAWING NO.	ITEM NO.
						420.8			
REMARKS				ALTERATIONS		DATE	SIGNATURE	INDEX	
SCALE	DRAWN	REFERENCE		MATERIAL WAG		3-3-98	<i>[Signature]</i>	01	
1:5	CHECKED	8007/PH/		C.I. GR. 20 IS: 210					
	APPROVED	405-2							
	STDS. OFFICER								
	DATE	10.8.81							
MACHINE PLATE HEATING FURNACE				TYPE: 150T-VULCAN		INV. NO.			
TITLE:				DRAWING NO.		07			
DOOR CASTING				4-M.18d.20497					
2 & 4				NO. OF SHEETS		SHEET NO.			

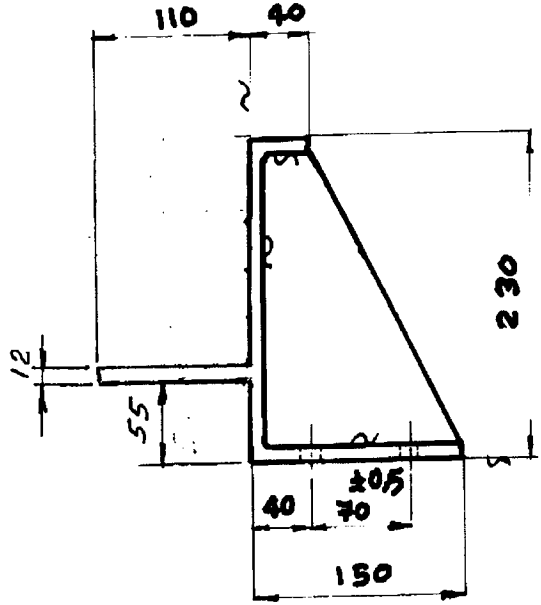
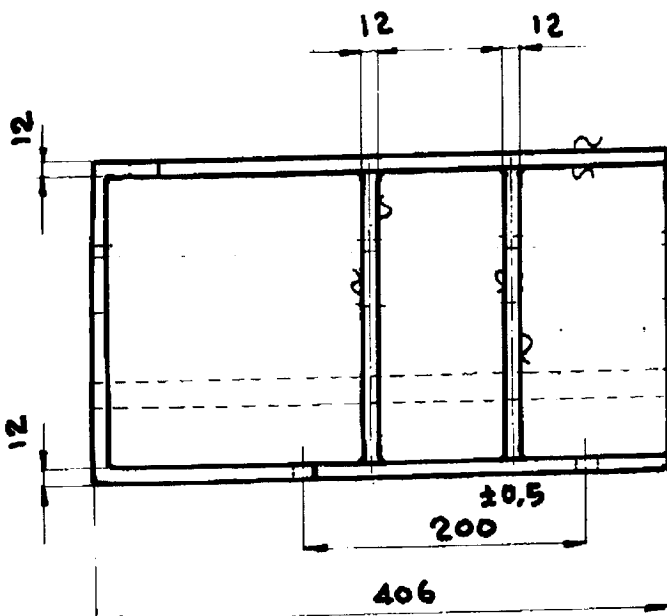


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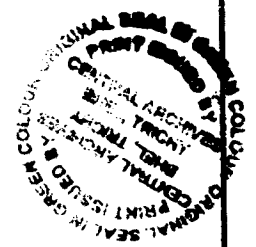
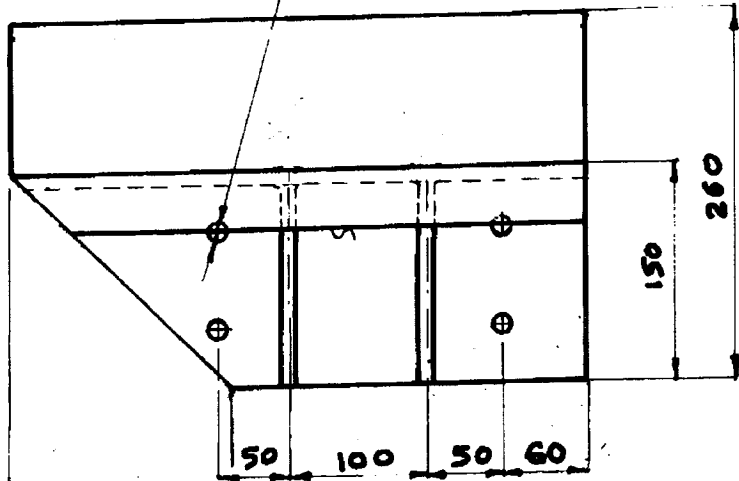
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3.2 / 2 /



4 NOS ϕ 18 HOLE



MATL:
 C - 0.2 TO 0.47.
 Mn - 6 TO 8%.
 Hn - 17. Max.
 P - 2% Max.

NOTE: ALL RADII ARE 5mm UNLESS OTHERWISE SPECIFIED.
 ALL SHARP CORNERS ARE TO BE ROUNDED BY RADIUS: 2MM

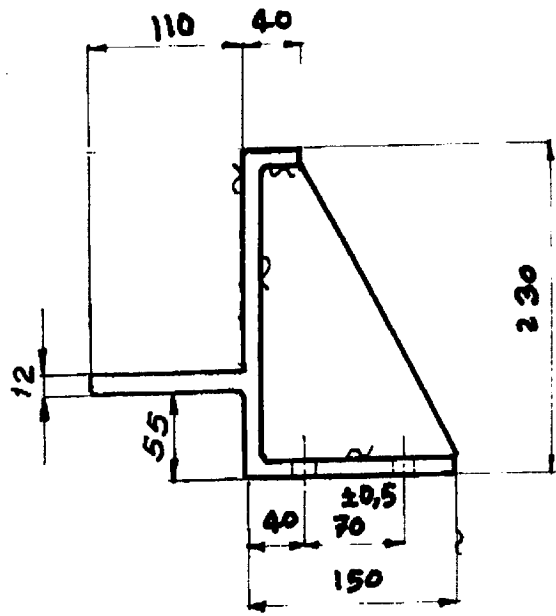
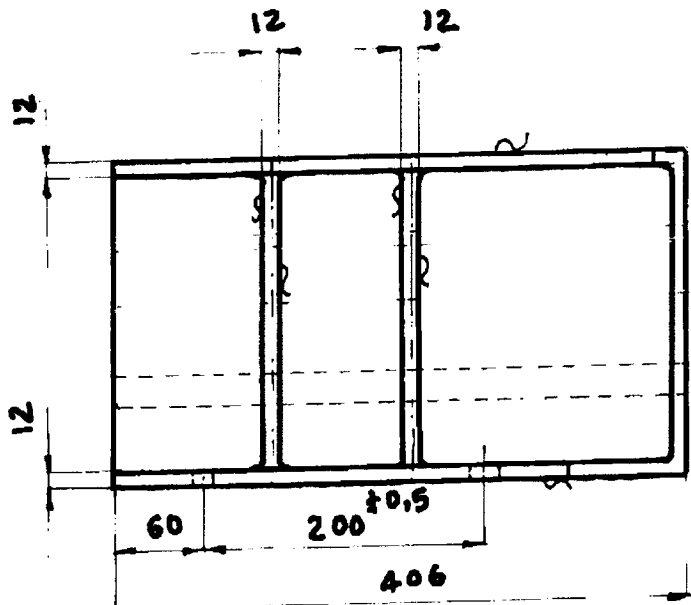
NO. OF PIECES		DESCRIPTION		SEMI-PRODUCT	FINAL MATERIAL	INITIAL MATERIAL	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING NO.	ITEM NO.
1		HEAT RESISTANT CASTINGS				JS: 4522	18.3			2-M-18P-04470	05
REMARKS		SCALE		DRAWN		CHECKED		APPROVED		DATE	
1:5		10.8.81		J. Jayaraman		S. Srinivasan		K. Srinivasan		33-98	
MACHINE		TITLE		REFERENCE		ALTERATIONS		DATE		SIGNATURE	
PLATE HEATING FURNACE		DOOR CASTING-5		8007/PH/405-2		MATERIAL WAS		33-98		# 01	
TYPE: 150 T - VULCAN		DRAWING NO.		NO. OF SHEETS		SHEET NO.					
INV. NO.		4.M.18d.20498		07						01	

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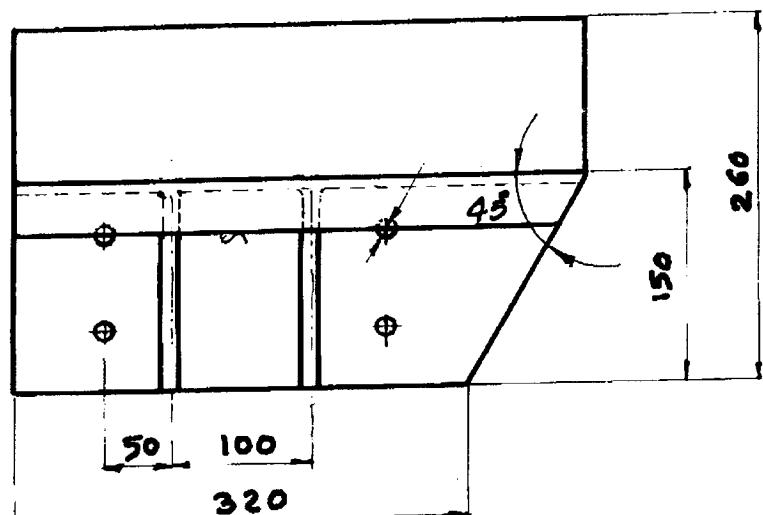
CAUTION

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BHARAT HEAVY ELECTRICALS LTD.,
 TIRUCHIRAPALLI-14

3.2 / 2 / -



4 NOS. $\phi 18$ HOLE



MATL.
 C = 0,2 TO 0,4 %
 Cr - 6 TO 8 %
 Mn - 1 % Max.
 Si - 2 % Max.

NOTE:

ALL RADII ARE 5mm UNLESS OTHERWISE SPECIFIED.
ALL SHARP CORNERS ARE TO BE ROUNDED BY RADIUS: 2MM

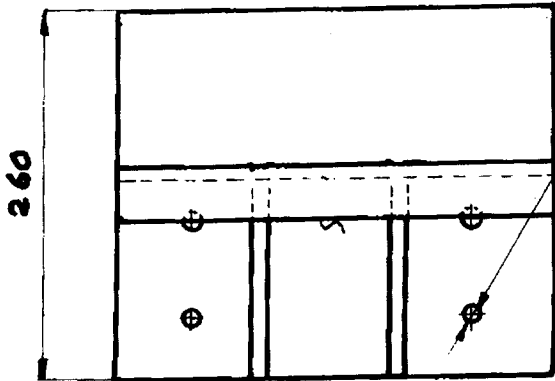
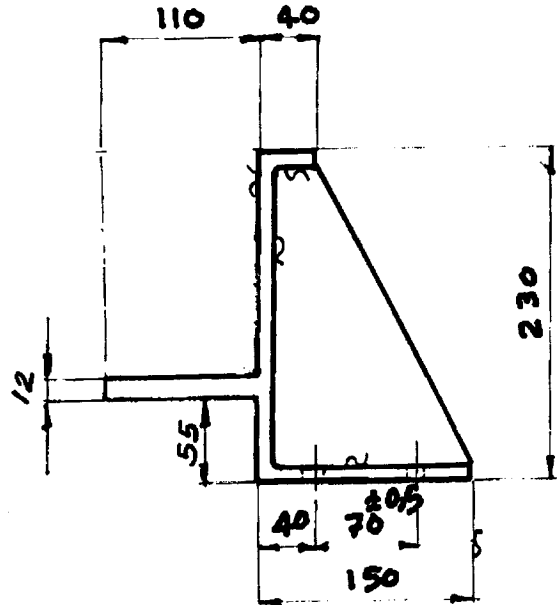
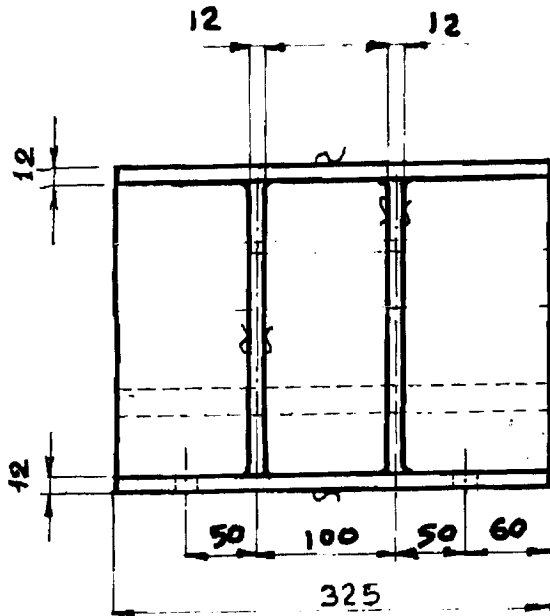
1		HEAT RESISTANT CASTINGS, GRH 15:4522			10.3	2-M-182-0447007	
NO. OF PIECES	DESCRIPTION	SEMI-PRODUCT	FINAL MATERIAL	INITIAL MATERIAL	SCRAP SORT	NET Wt (kg)	GROSS Wt (kg)
						18.3	
REMARKS		REFERENCE		ALTERATIONS	DATE	SIGNATURE	INDEX
SCALE	DRAWN	V. Jayaraman					
1:5	CHECKED	S. Sivarajam					
	APPROVED	Kandam		8007/PH/			
	STDS. OFFICER			405-2			
	DATE	10.8.81					
MACHINE PLATE HEATING FURNACE				TYPE: 150 T - VULCAN INV. NO.			
TITLE: DOOR CASTING-7				DRAWING NO. 4.M.18d-20499			
NO. OF SHEETS				SHEET NO.			

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3.2 / 1 / 2



4 NOS. $\phi 18$ HOLE

MATL.

C.O.2 TO 0.4%
 C 7 .6 TO 8%
 Mn 1% MAX.
 Si 2% MAX.



NOTE:

ALL RADII ARE 5MM UNLESS OTHERWISE SPECIFIED.
ALL SHARP CORNERS ARE TO BE ROUNDED BY RADIUS: 2 MM

17	HEAT RESISTANT CASTINGS. GY. 11			15:4522	20.8	2-M-182-0447006			
NO. OF PIECES	DESCRIPTION	SEMI-PRODUCT	FINAL MATERIAL	INITIAL MATERIAL	SCRAP SORT	NET WT (KG)	GROSS WT (KG)	DRAWING NO.	ITEM NO.
						353.8			
REMARKS			TOTAL NET WT (KG) 353.8						
SCALE	DRAWN	REFERENCE	ALTERATIONS		DATE	SIGNATURE	INDEX		
1:5	V. Jayaraman	3007/PH/405-2	MATL. WAS C:1 GY 20		33.98		01		
	CHECKED		13: 210						
	APPROVED								
	STDS. OFFICER								
	DATE	10.8.81							
MACHINE PLATE HEATING FURNACE			TYPE: 150 T-VULCAN		INV. NO.				
TITLE: DOOR CASTING-6			DRAWING NO. 4.M.18D07-20500		01				
NO. OF SHEETS			SHEET NO.						

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