

BHARAT HEAVY ELECTRICALS LIMITED
CFFP, BHEL, HARIDWAR
SUBCONTRACTING DEPTT.

Phone No.: - 01334-28-1082, 5357
Fax No.: - 01334-225892
Email: - shailen@bhel.in, jaspal@bhel.in

TENDER NOTICE

Dear Sir,

We are Pleased to invite offers **through tender Box** as per enclosed terms and condition for the under mentioned Items.

Tender No.	Description of Material	Drawing no.	TOTAL Qty.	Opening Date
FF/SC/21021/202100761	Rough Machining of Impeller Crown & Skirt Casting	0-204-07-21203/M Rev-00, 0-204-07-21203/M1 Rev-00, 0-204-07-21303/M Rev-00, 0-204-07-21303/M 1 Rev-00 0-204-07-21503/M Rev-00, 0-204-07-21503/M1 Rev-00	21 No.	16.07.2021 2.00 PM

Please submit your offer against this enquiry strictly in the following lines: -

- a) Offer to be submitted in two part: Part I- techno-commercial offer; Part II- Price Bid. Please refer attached Annexure B for details regarding submission of offer.
- b) Vendor to submit **per kg of Chip removal basis Gross machining charges** in Indian Rupees on FOR CFFP Basis. Transportation of item from CFFP to Vendor's works (To & Fro) shall be in scope and responsibility of Vendor. Transportation and insurance charges shall be borne by Vendor.
- c) Scrap (Chip) generated during machining is to be retained by vendor & same will be treated as sold to bidder by CFFP. Value of scrap and GST on same shall be recovered from the party.

Please note that the weights mentioned in tender enquiry are technological weights mentioned for indication only. However, quantum of Scrap for recovery from party shall be calculated on the basis of actual weight basis of casting (Difference of before and after machined weight). Weight measured at CFFP shall be considered as final for calculation of scrap retained by vendor. Recovery of scrap shall be based on actual chip retained by the vendor based on weight measured at CFFP.

Grade contains 3.5-4.5% Nickel.

For information only, present chip rate for May'21 to July'21 is Rs. 76.60 per Kg however chip rate as on date of material lifting shall be applicable for orders against this tender. Scrap rate shall be calculated as per annexure F.

Payment Term shall be: 100% within 30 days after receipt and acceptance of material at CFFP through E-Payment.

- d) Any other govt. duties to be paid by the party.
- e) Quotation not in accordance with our enquiry are liable to be rejected.
- f) In cases the prices indicated in words and figures are different, the values indicated in words shall be taken as final.

Please note following:

1. Please refer following attached annexures detail techno-commercial tender and conditions of this tender enquiry:

a. Annexure-53779/A1,53780/A2,53787/A1,53787/A2,53784/A1 & 53785/A1

b. Annexure-A

c. Annexure-B

d. Annexure-C

e. Annexure-D

f. Annexure-E

g. Drawing 0-204-07-21203/M Rev-00, 0-204-07-21203/M1 Rev-00, 0-204-07-21303/M Rev-00
0-204-07-21303/M 1 Rev-00, 0-204-07-21503/M Rev-00 & 0-204-07-21503/M1 Rev-00

Please submit dully filled, signed & stumped copies of above five annexures along with your offer.

2. Kindly read terms and conditions, offer not in accordance with the instructions may be disqualified or ignored.

Please send the following along with the Offer:

1. Company Name and Address Proof.

2. Copy of Company registration certificate.

3. Copy of GST certificate

4. Copy of PAN card

5. Copy of MSME Certificate (if Any)

All the above documents should be signed and stamped.

Please visit www.bhel.com or www.hwr.bhel.com for more details & corrigendum if any for the tender enquiry . offers are to be submitted in hard copy in tender box of tender room of CFFP.

For & On behalf of CFFP/BHEL, Haridwar



SNO

CODE

VENDOR

MAIL

1 09285

Due Date	No of items.	No of Vendors
16.07.2021	6	1

Please Quote Enquiry No. Date vendor code Due date and Material in all correspondence

This is only a request for quotation and not an order.

SL	Description	Issue of Matl. to Substore			Return of Material from		
S/C NO	IDEN NO	DRGNO / SIZE	QTY	WT/PC	DRGNO / SIZE	QTY	WT/PC
1	IMPELLER CROWN (PRR4&KL2P1)	0-204-07-21303/M	4	32300.0	0-204-07-21303/M	4	15460.0
		Rev-00			Rev-00		
2	IMPELLER SKIRT (PRR4&KL2P1)	0-204-07-21303/M1	4	21800.0	0-204-07-21303/M1	4	6860.0
		Rev-00			Rev-00		
3	IMPELLER SKIRT	0-204-07-21203/M1	2	23330.0	0-204-07-21203/M1	2	11980.0
		Rev-00			Rev-00		
4	IMPELLER CROWN (PRR1)	0-204-07-21203/M	3	36000.0	0-204-07-21203/M	3	24600.0
		Rev-00			Rev-00		
5	IMPELLER SKIRT (KL2P2)	0-204-07-21503/M1	4	24500.0	0-204-07-21503/M1	4	12980.0
		Rev-00			Rev-00		
6	IMPELLER CROWN (KL2P2)	0-204-07-21503/M	4	42000.0	0-204-07-21503/M	4	26300.0
		Rev-00			Rev-00		

Remarks & Conditions

Please quote your rates against this enquiry strictly in the following lines:-

- Processing Charges/rates to be quoted on per piece and F.O.R CFFP Basis *gnt*
- Payment Terms :- 100% after receipts and acceptance through e-mode within 30 days
- Scrap to be retained by party.
- GST on scrap value to be paid by the party.
- Any other govt duties to be paid by the party.
- Quotation not in accordance with our enquiry are liable to be rejected
- Conditions remaining unresponded in enquiry shall be treated as per enquiry
- Quantity may be increased to 2 times if required *gnt*
- CFFP/BHEL Reserves its right to get the material processed from more than 1 vendor/sub-cont.
- If you are unable to quote, Please send regret with reasons and return our drawings
- VALIDITY:- One Year from date of Tender Opening
- In case the prices indicated in words and figures are different, the values indicated in words shall be taken into consideration
- ~~In case more than one lowest bidder, vendor with higher SPR shall be treated as L-1 vendor.~~ *gnt*

Delivery Requirement: 4-6 WEEKS/PC *gnt*

*DELIVERY REQUIREMENT AS PER ANNEXURE *THE GRADE CONTAIN OF NI: 3.5-4.5%.

*RATES TO BE QUOTED AS PER KG OF CHIP REMOVAL BASIS CONSIDERING GROSS MACHINING CHARGES.

*FOR INFORMATION ONLY, PRESENT NI CHIP RATE FOR CALCULATING GST ON CHIP VALUE IS RS 76.06 PKG.

*INSPECTION BY CFFP/QC *FINISHED GOODS TO BE HANDED OVER TO SFDY.

*FOR OTHER TERM AND CONDITIONS OF TENDER PLEASE REFER ANNEXURE- A,B,C,D,E,F AND ANNEXURE 53779/A1,

*53780/A2,53787/A1,53787/A2,53784/A1 & 53785/A1 (ATTACHED HERewith)

*PLEASE NOTE THAT THE WEIGHTS MENTIONED IN TENDER ENQUIRY ARE TECHNOLOGICAL WEIGHTS MENTIONED

*FOR INDICATION ONLY.HOWEVER QUANTUM OF SCRAP FOR RECOVERY FROM PARTY SHALL BE CALCULATED ON THE

*BASIS OF ACTUAL WEIGHT BASIS OF CASTING (DIFFERENCE OF BEFORE AND AFTER MACHINED WEIGHT).

*WEIGHT MEASURED AT CFFP SHALL BE CONSIDERED AS FINAL FOR CALCULATION OF SCRAP RETAINED BY VENDOR.

*RECOVERY OF SCRAP SHALL BE BASED ON ACTUAL CHIP RETAINED BY THE VENDOR BASED ON WEIGHT

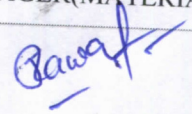
*MEASURED AT CFFP.

Dear sir,

Please submit your lowest quotation, subject to our terms and conditions overleaf for the above materials, so as to reach us on or before the Date 16.07.2021 by 2 P.M.

Franking Machine stamps will not be acceptable in deciding case of Late/Delayed tender. Please post well in time.

Yours Faithfully
for MANAGER(MATERIALS)



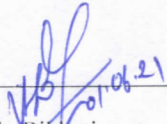
FF/SC/21021/202100761

MACHINING OF RUNNER CROWN**iii) PRE QUALIFICATION REQUIREMENT**

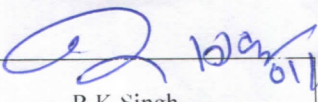
S.No.	BHEL Requirement	Vendor's Confirmation
1	Only those vendor should quote who have past experience of machining of similar jobs having max. dia. greater than 4000 mm and weight more than 29MT to the full satisfaction of the customer (Both criteria may be fulfilled through one or more jobs)	Vendor to Confirm and submit detail (including copy of P.O. & Inspection/Acceptance report along with the offer)
2	Vendor should have a Vertical Boring machine which can machine a job of dia. 5050 mm, height 800 mm and weight 36MT	Vendor to Confirm and submit detail
3	Vendor should have material handling capacity of 36MT or more	Vendor to Confirm and submit detail

iv) TECHNICAL REQUIREMENT

S.No.	BHEL Requirement	Vendor's Confirmation
1	Marking and Machining as per drawing no. 0-204-07-21203/M/R00	Vendor to confirm
2	Vendor to arrange all tools, templates & instruments required for machining and checking of the job	Vendor to confirm
3	Inspection of the machined job may be carried out by BHEL at vendor's works before despatch	Vendor to confirm
4	Delivery requirement: 5-7 weeks/pc from the date of lifting	Vendor to confirm
5	Identification details on the casting to be maintained	Vendor to confirm
6	Vendor to submit following with the offer:- c) Details of the Organization d) Details of the machine tools and other facilities installed in the company	Vendor to submit
7	Vendor to submit Filled Supplier Registration Form along with Requisite Documents to SDC Cell in MM Deptt. of CFFP, BHEL, Haridwar. If already registered at CFFP or any other unit of BHEL, then Vendor code may be furnished.	Vendor to submit
8	Vendor may plan a visit to CFFP for technical discussion.	Vendor to Note
9	BHEL team may visit vendor's works for facility/capacity verification.	Vendor to Accept


Vikalp Bibhuti
Dy. Manager (M/C Shop)


Md. Javed
DGM (M/C Shop)


R.K. Singh
SDGM (M/C Shop)

MACHINING OF RUNNER SKIRT**i) PRE QUALIFICATION REQUIREMENT**

S.No.	BHEL Requirement	Vendor's Confirmation
1	Only those vendor should quote who have past experience of machining of similar job having max. dia. greater than 4000 mm and weight more than 19MT to the full satisfaction of the customer	Vendor to Confirm and submit detail (including copy of P.O. & Inspection/Acceptance report along with the offer)
2	Vendor should have a Vertical Boring machine which can machine a job of dia. 5050 mm, height 1100 mm and weight 24MT	Vendor to Confirm and submit detail
3	Vendor should have material handling capacity of 24MT or more	Vendor to Confirm and submit detail

ii) TECHNICAL REQUIREMENT

S.No.	BHEL Requirement	Vendor's Confirmation
1	Marking and Machining as per drawing no. 0-204-07-21203/M1/R00	Vendor to confirm
2	Vendor to arrange all tools, templates & instruments required for machining and checking of the job	Vendor to confirm
3	Inspection of the machined job may be carried out by BHEL at vendor's works before despatch	Vendor to confirm
4	Delivery requirement: 4-6 weeks/pc from the date of lifting	Vendor to confirm
5	Identification details on the casting to be maintained	Vendor to confirm
6	Vendor to submit following with the offer:- a) Details of the Organization b) Details of the machine tools and other facilities installed in the company	Vendor to submit
7	Vendor to submit Filled Supplier Registration Form along with Requisite Documents to SDC Cell in MM Deptt. of CFFP, BHEL, Haridwar. If already registered at CFFP or any other unit of BHEL, then Vendor code may be furnished.	Vendor to submit
8	Vendor may plan a visit to CFFP for technical discussion.	Vendor to Note
9	BHEL team may visit vendor's works for facility/capacity verification.	Vendor to Accept

Vikalp Bibhuti Dy. Manager (M/C Shop)	Md. Javed DGM (M/C Shop)	R.K.Singh SDGM (M/C Shop)
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MACHINING OF RUNNER CROWN**i) PRE QUALIFICATION REQUIREMENT**

S.No.	BHEL Requirement	Vendor's Confirmation
1	Only those vendor should quote who have past experience of machining of similar jobs having max. dia. greater than 3600 mm and weight more than 26MT to the full satisfaction of the customer (Both criteria may be fulfilled through one or more jobs)	Vendor to Confirm and submit detail (including copy of P.O. & Inspection/Acceptance report along with the offer)
2	Vendor should have a Vertical Boring machine which can machine a job of dia. 4600 mm, height 730 mm and weight 33MT	Vendor to Confirm and submit detail
3	Vendor should have material handling capacity of 33MT or more	Vendor to Confirm and submit detail

ii) TECHNICAL REQUIREMENT

S.No.	BHEL Requirement	Vendor's Confirmation
1	Marking and Machining as per drawing no. 0-204-07-21303/M/R00	Vendor to confirm
2	Vendor to arrange all tools, templates & instruments required for machining and checking of the job	Vendor to confirm
3	Inspection of the machined job may be carried out by BHEL at vendor's works before despatch	Vendor to confirm
4	Delivery requirement: 5-7 weeks/pc from the date of lifting	Vendor to confirm
5	Identification details on the casting to be maintained	Vendor to confirm
6	Vendor to submit following with the offer:- a) Details of the Organization b) Details of the machine tools and other facilities installed in the company	Vendor to submit
7	Vendor to submit Filled Supplier Registration Form along with Requisite Documents to SDC Cell in MM Deptt. of CFFP, BHEL, Haridwar. If already registered at CFFP or any other unit of BHEL, then Vendor code may be furnished.	Vendor to submit
8	Vendor may plan a visit to CFFP for technical discussion.	Vendor to Note
9	BHEL team may visit vendor's works for facility/capacity verification.	Vendor to Accept

For Indent No.: 20210061

Vikalp Bibhuti Dy. Manager (M/C Shop)	Md. Javed DGM (M/C Shop)	R.K.Singh SDGM (M/C Shop)
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MACHINING OF RUNNER SKIRT**iii) PRE QUALIFICATION REQUIREMENT**

S.No.	BHEL Requirement	Vendor's Confirmation
1	Only those vendor should quote who have past experience of machining of similar job having max. dia. greater than 3600 mm and weight more than 17MT to the full satisfaction of the customer	Vendor to Confirm and submit detail (including copy of P.O. & Inspection/Acceptance report along with the offer)
2	Vendor should have a Vertical Boring machine which can machine a job of dia. 4600 mm, height 1000 mm and weight 22MT	Vendor to Confirm and submit detail
3	Vendor should have material handling capacity of 22MT or more	Vendor to Confirm and submit detail

iv) TECHNICAL REQUIREMENT

S.No.	BHEL Requirement	Vendor's Confirmation
1	Marking and Machining as per drawing no. 0-204-07-21303/M1/R00	Vendor to confirm
2	Vendor to arrange all tools, templates & instruments required for machining and checking of the job	Vendor to confirm
3	Inspection of the machined job may be carried out by BHEL at vendor's works before despatch	Vendor to confirm
4	Delivery requirement: 4-6 weeks/pc from the date of lifting	Vendor to confirm
5	Identification details on the casting to be maintained	Vendor to confirm
6	Vendor to submit following with the offer:- c) Details of the Organization d) Details of the machine tools and other facilities installed in the company	Vendor to submit
7	Vendor to submit Filled Supplier Registration Form along with Requisite Documents to SDC Cell in MM Deptt. of CFFP, BHEL, Haridwar. If already registered at CFFP or any other unit of BHEL, then Vendor code may be furnished.	Vendor to submit
8	Vendor may plan a visit to CFFP for technical discussion.	Vendor to Note
9	BHEL team may visit vendor's works for facility/capacity verification.	Vendor to Accept

For Indent No.:

Vikalp Bihuti Dy. Manager (M/C Shop)	Md. Javed DGM (M/C Shop)	R.K. Singh SDGM (M/C Shop)
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[Int. 20210062]

MACHINING OF RUNNER CROWN**i) PRE QUALIFICATION REQUIREMENT**

S.No.	BHEL Requirement	Vendor's Confirmation
1	Only those vendor should quote who have past experience of machining of similar jobs having max. dia. greater than 4000 mm and weight more than 33MT to the full satisfaction of the customer (Both criteria may be fulfilled through one or more jobs)	Vendor to Confirm and submit detail (including copy of P.O. & Inspection/Acceptance report along with the offer)
2	Vendor should have a Vertical Boring machine which can machine a job of dia. 5150 mm, height 780 mm and weight 42MT	Vendor to Confirm and submit detail
3	Vendor should have material handling capacity of 42MT or more	Vendor to Confirm and submit detail

ii) TECHNICAL REQUIREMENT

S.No.	BHEL Requirement	Vendor's Confirmation
1	Marking and Machining as per drawing no. 0-204-07-21503/M/R00	Vendor to confirm
2	Vendor to arrange all tools, templates & instruments required for machining and checking of the job	Vendor to confirm
3	Inspection of the machined job may be carried out by BHEL at vendor's works before despatch	Vendor to confirm
4	Delivery requirement: 5-7 weeks/pc from the date of lifting	Vendor to confirm
5	Identification details on the casting to be maintained	Vendor to confirm
6	Vendor to submit following with the offer:- a) Details of the Organization b) Details of the machine tools and other facilities installed in the company	Vendor to submit
7	Vendor to submit Filled Supplier Registration Form along with Requisite Documents to SDC Cell in MM Deptt. of CFFP, BHEL, Haridwar. If already registered at CFFP or any other unit of BHEL, then Vendor code may be furnished.	Vendor to submit
8	Vendor may plan a visit to CFFP for technical discussion.	Vendor to Note
9	BHEL team may visit vendor's works for facility/capacity verification.	Vendor to Accept

Vikalp Bishnuthi Dy. Manager (M/C Shop)	Md. Javed DGM (M/C Shop)	R.K.Singh SDGM (M/C Shop)
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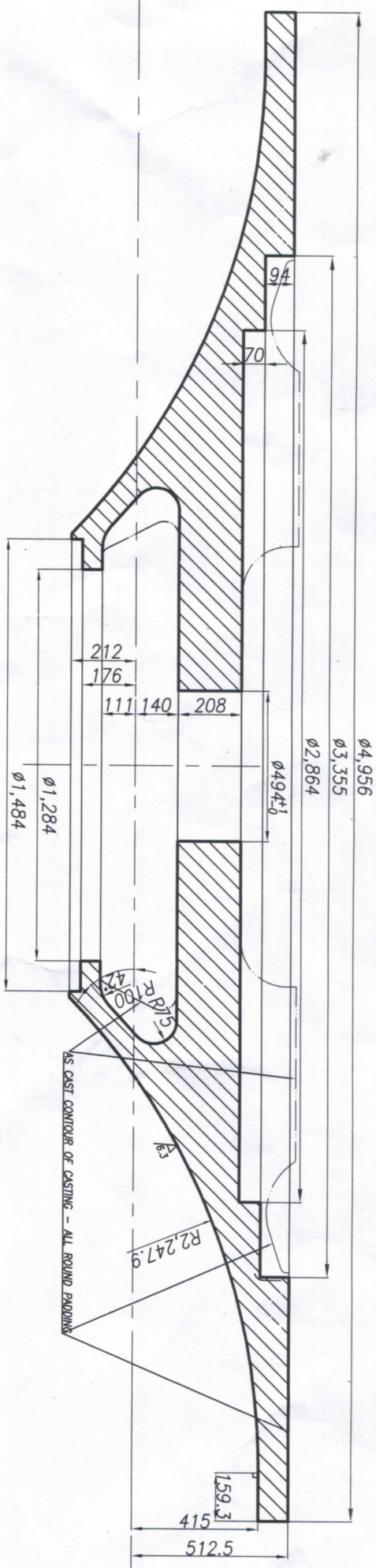
MACHINING OF RUNNER SKIRT**i) PRE QUALIFICATION REQUIREMENT**

S.No.	BHEL Requirement	Vendor's Confirmation
1	Only those vendor should quote who have past experience of machining of similar job having max. dia. greater than 4000 mm and weight more than 19MT to the full satisfaction of the customer	Vendor to Confirm and submit detail (including copy of P.O. & Inspection/Acceptance report along with the offer)
2	Vendor should have a Vertical Boring machine which can machine a job of dia. 5150 mm, height 1100 mm and weight 25MT	Vendor to Confirm and submit detail
3	Vendor should have material handling capacity of 25MT or more	Vendor to Confirm and submit detail

ii) TECHNICAL REQUIREMENT

S.No.	BHEL Requirement	Vendor's Confirmation
1	Marking and Machining as per drawing no. 0-204-07-21503/M1/R00	Vendor to confirm
2	Vendor to arrange all tools, templates & instruments required for machining and checking of the job	Vendor to confirm
3	Inspection of the machined job may be carried out by BHEL at vendor's works before despatch	Vendor to confirm
4	Delivery requirement: 4-6 weeks/pc from the date of lifting	Vendor to confirm
5	Identification details on the casting to be maintained	Vendor to confirm
6	Vendor to submit following with the offer:- a) Details of the Organization b) Details of the machine tools and other facilities installed in the company	Vendor to submit
7	Vendor to submit Filled Supplier Registration Form along with Requisite Documents to SDC Cell in MM Deptt. of CFFP, BHEL, Haridwar. If already registered at CFFP or any other unit of BHEL, then Vendor code may be furnished.	Vendor to submit
8	Vendor may plan a visit to CFFP for technical discussion.	Vendor to Note
9	BHEL team may visit vendor's works for facility/capacity verification.	Vendor to Accept

Vikalp Bishuti Dy. Manager (M/C Shop)	Md. Javed DGM (M/C Shop)	R.K.Singh SDGM (M/C Shop)
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- NOTE:-
1. CASTING TO BE ROUGH MACHINED TO THE DRG. DIMENSIONS ON ALL THE SURFACES TO THE FINISH OF 12.5 MICRONS AND TOLERANCE OF +2 ON OD & HT AND -2 ON ID, UNLESS OTHERWISE SPECIFIED -0
 2. THIS DRG. IS ISSUED FOR THE PURPOSE OF ROUGH MACHINING ONLY, FOR ALL OTHER DETAILS PLEASE REFER COMPONENT DRG. NO. 0-204-07-21203 REV 00
 3. CASTING MACHINED TO THIS DRAWING SHALL BE USED FOR FABRICATION OF IMPELLER AT BHEL BHOPAL,
 4. WT OF CASTING BEFORE MACHINING : 36000 KGS
WT OF CASTING AFTER MACHINING : 24600 KGS

CONTROLLED COPY
Foundry Technology
C.No. SF/...../14
Date.....22 MAY 2021

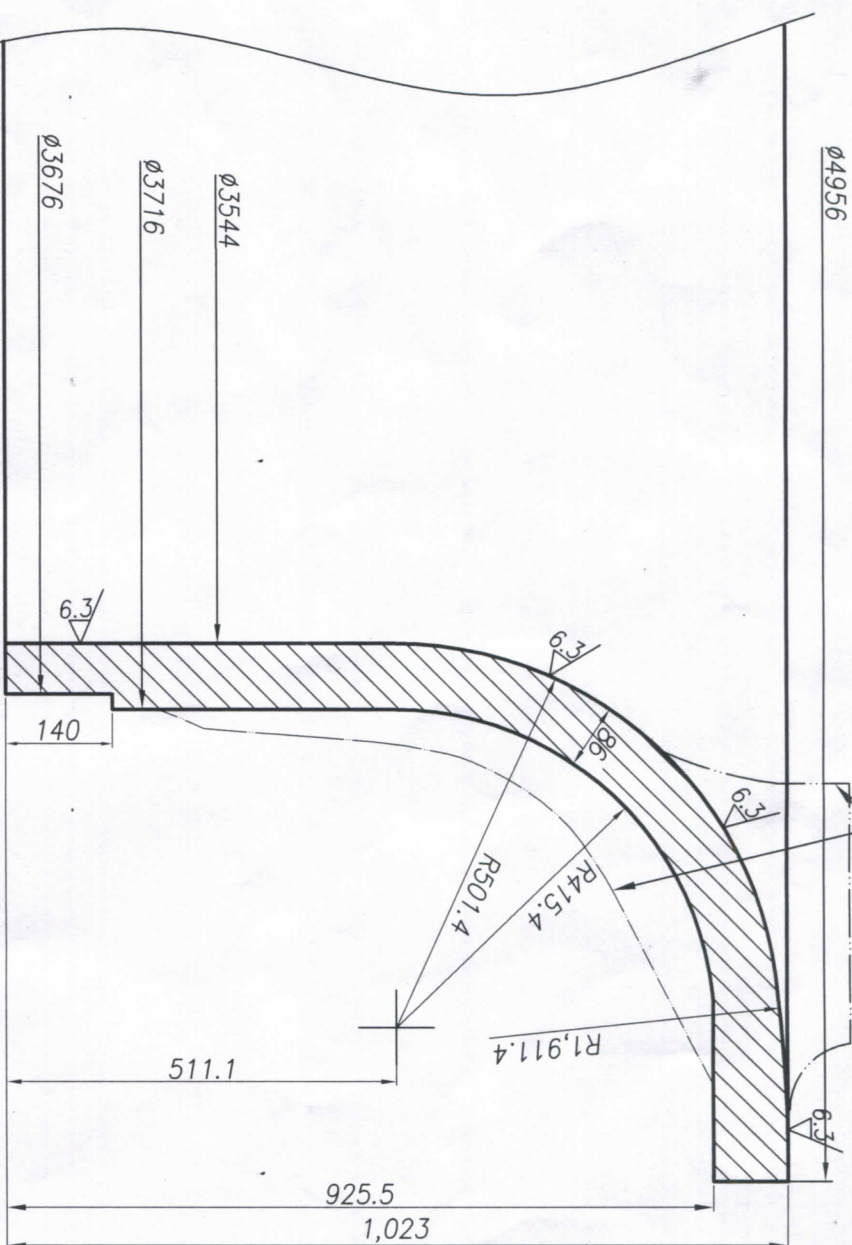
REV	DATE	ALTERED	REV	DATE	ALTERED	REV	DATE	ALTERED	REV	DATE	ALTERED
ZONE	CHECKED		ZONE	CHECKED		ZONE	CHECKED		ZONE	CHECKED	

BHARAT HEAVY ELECTRICALS. LTD.		RANIPUR HARDWARE	
CENTRAL FOUNDRY FORCE PLANT			
DEPT. FDI/TECH.		SCALE N.T.S.	
TITLE		WEIGHT IN KGS	
ROUGH M/C DRG FOR			
CROWN OF IMPELLER			
PROJECT AND CUSTOMER NAME		TECHNOLOGY NO	
PALMARU RANGAREDDY 1		0-204-07-21203/M	
BHEL-BHOPAL		23608	
SHEET NO.- 1		NO. OF SHEETS-1	
DRN	WRO	CHD	APRD
723/P R REDDY/23487/M	NAVEEN	NK GAURAV	R LAKRA
50 18 27	50 18 27	50 18 27	50 18 27
NAME	SIGN	DATE	

21021

CONTOUR OF CASTING BEFORE MACHINING

ALL OVER
12.5/EXCEPT AT SHOWN



1. CASTING TO BE ROUGH MACHINED TO THE DRG. DIMENSIONS ON ALL THE SURFACES TO THE FINISH OF 12.5 MICRONS AND TOLERANCE OF +2 ON OD & HT AND -2 ON ID..

 $\frac{+}{0}$

UNLESS OTHERWISE SPECIFIED

2. THIS DRG. IS ISSUED FOR THE PURPOSE OF ROUGH MACHINING ONLY. FOR ALL OTHER DETAILS PLEASE REFER COMPONENT DRG. NO. 0-204-07-21203 REV00

3. CASTING MACHINED TO THIS DRAWING SHALL BE USED FOR FABRICATION OF IMPELLER AT BHEL BHOPAL,

4. WT OF CASTING BEFORE MACHINING : 23300 KGS
WT OF CASTING AFTER MACHINING : 11980 KGS

REV	DATE	ALTERED
ZONE		CHECKED

REV	DATE	ALTERED
ZONE		CHECKED

REV	DATE	ALTERED CHECKED
ZONE		

REV	DATE	ALTERED
ZONE		CHECKED

DEPT.	FDY. TECH.	SCALE	WEIGHT IN Kgs	NAME	SGN	DATE
		N.T.S.				

DR. A. K. SINGH, D.D.
DIRECTOR

CENTRAL FOUNDRY FORGE PLANT
RANPUR HARDWAR

DRAWN 23/P R REDD/23/60M

ROUGH M/C DRG FOR SKIRT OF IMPELLER

PROJECT AND CUSTOMER NAME _____

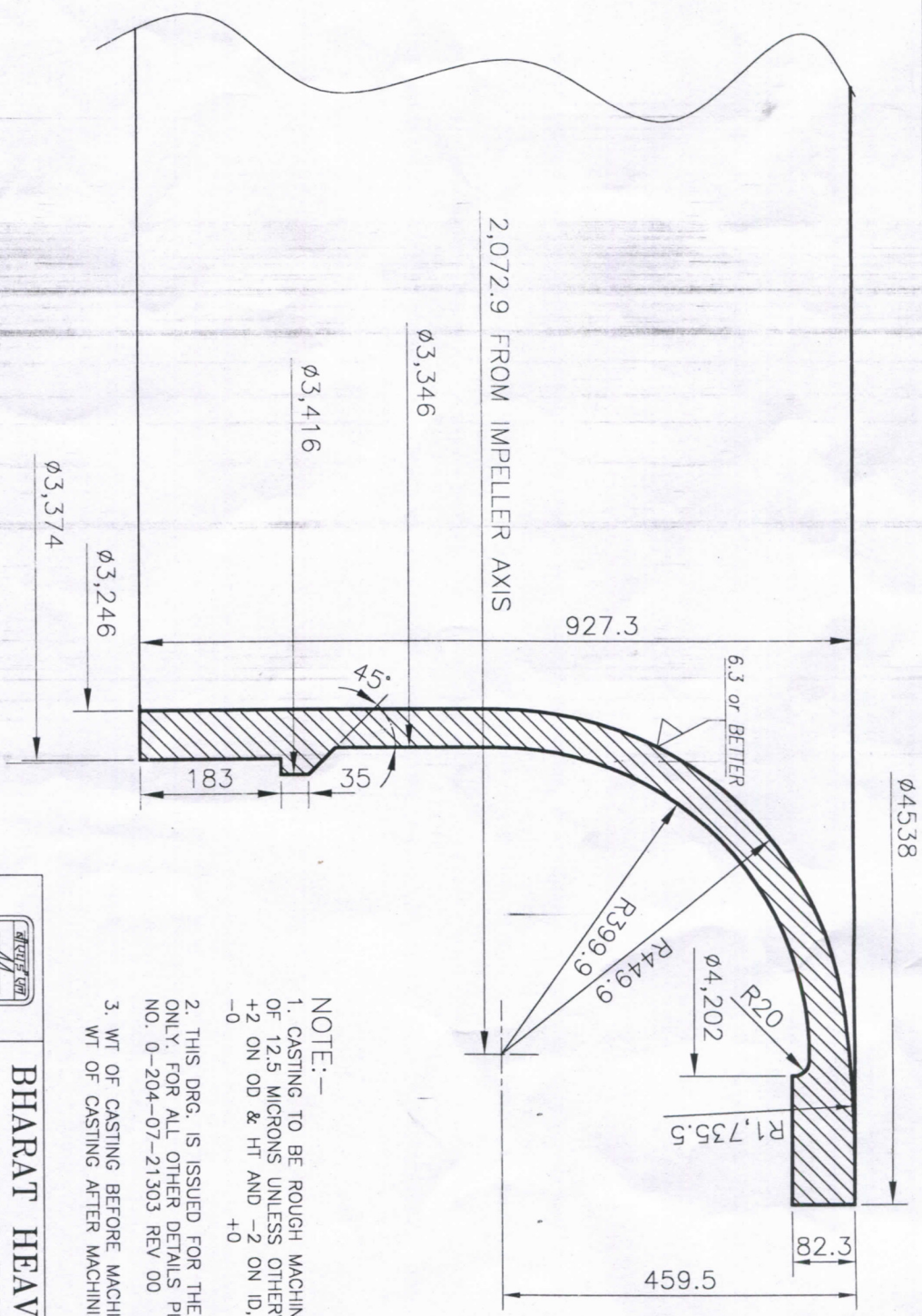
**P R REDDY I
BHEL BHOPAL**

TECHNOLOGY NO	DRAWING NO	
23609	0-204-07-21203/M1	
	SHEET NO. - 1	NO. OF SHEETS-1

CONTROLLED COPY
Foundry Technology
C.No. SF/ 21
Date 22 MAY 2021

21021

FIRST ANGLE PROJECTION (ALL DIMENSIONS ARE IN mm)



ALL OVER
12.5 EXCEPT AS SHOWN

CONTROLLED COPY
Foundry Technology
C.No. SF/...../7
Date...22 MAY 2021

NOTE:-

1. CASTING TO BE ROUGH MACHINED ALL OVER TO THE FINISH OF 12.5 MICRONS UNLESS OTHERWISE STATED AND TOLERANCE OF +2 ON OD & HT AND -2 ON ID, UNLESS OTHERWISE SPECIFIED -0
2. THIS DRG. IS ISSUED FOR THE PURPOSE OF ROUGH MACHINING ONLY. FOR ALL OTHER DETAILS PLEASE REFER COMPONENT DRG. NO. 0-204-07-21303 REV 00
3. WT OF CASTING BEFORE MACHINING : 21800 KGS
WT OF CASTING AFTER MACHINING : 6860 KGS

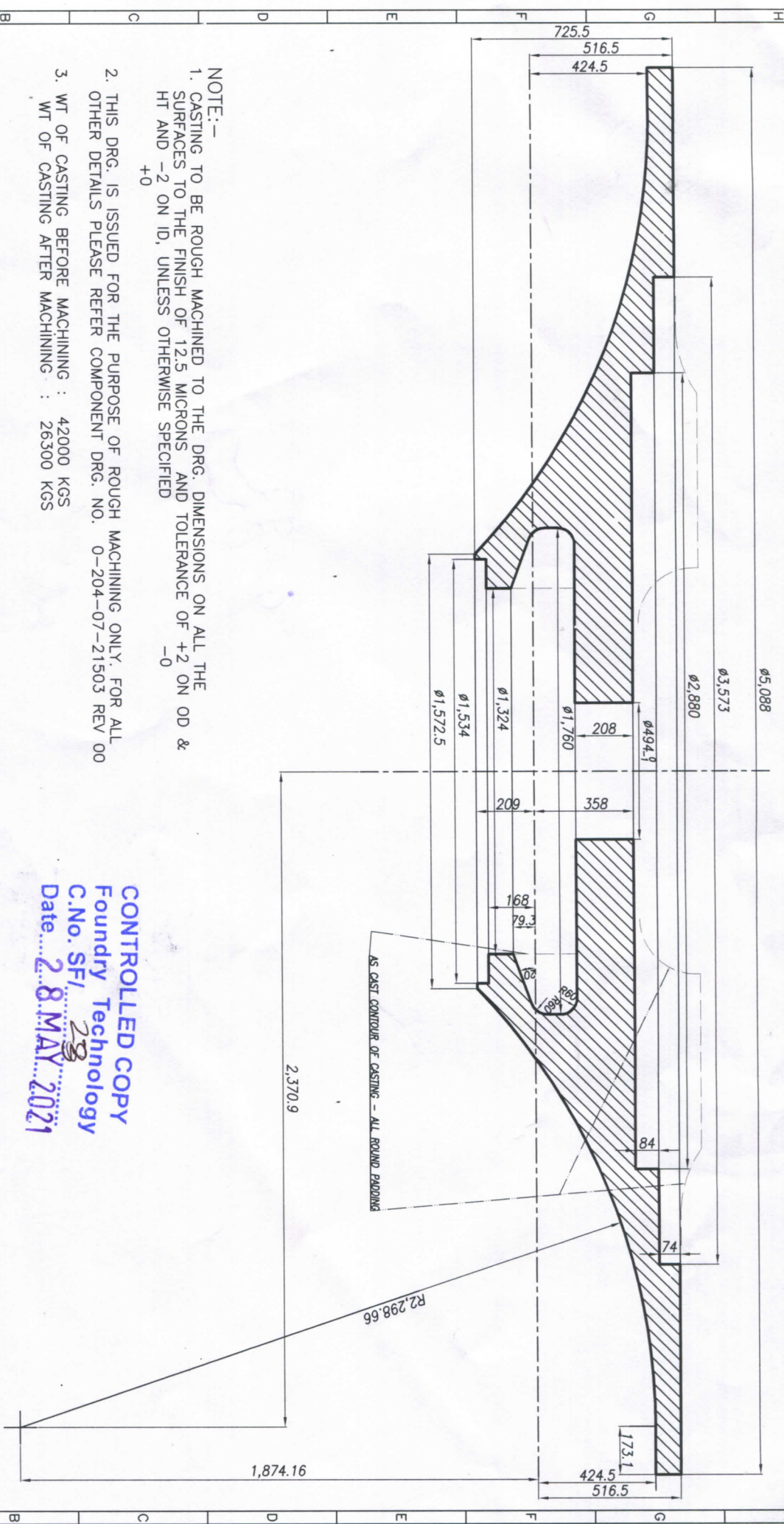


BHARAT HEAVY ELECTRICALS. LTD.
CENTRAL FOUNDRY FORCE PLANT
RANIPUR HARDWAR

REV	DATE	ALTERED	CHECKED

DEPT. - FDR. TECH	SCALE	WEIGHT IN KG.	NAME	SIGN	DATE
TITLE	ROUGH M/C DRG FOR	IMPELLER SKIRT	DRN	/23/23616M/DWG	
PROJECT AND CUSTOMER NAME	PALAMURU RANGAREDDY & KALESHWARAM L2P1	TECHNOLOGY NO.	WKD	NK GAURAV	Sd 10.5.21
BHEL BHOPAL	23616	DRAWING NO.	CHD	L AGRAWAL	Sd 10.5.21
		SHEET NO.	APPD	R LAKRA	Sd 10.5.21

12.5
ALL OVER



NOTE:-
1. CASTING TO BE ROUGH MACHINED TO THE DRG. DIMENSIONS ON ALL THE SURFACES TO THE FINISH OF 12.5 MICRONS AND TOLERANCE OF +2 ON OD & HT AND -2 ON ID, UNLESS OTHERWISE SPECIFIED
+0
-0

2. THIS DRG. IS ISSUED FOR THE PURPOSE OF ROUGH MACHINING ONLY. FOR ALL OTHER DETAILS PLEASE REFER COMPONENT DRG. NO. 0-204-07-21503 REV 00
3. WT OF CASTING BEFORE MACHINING : 42000 KGS
WT OF CASTING AFTER MACHINING : 26300 KGS

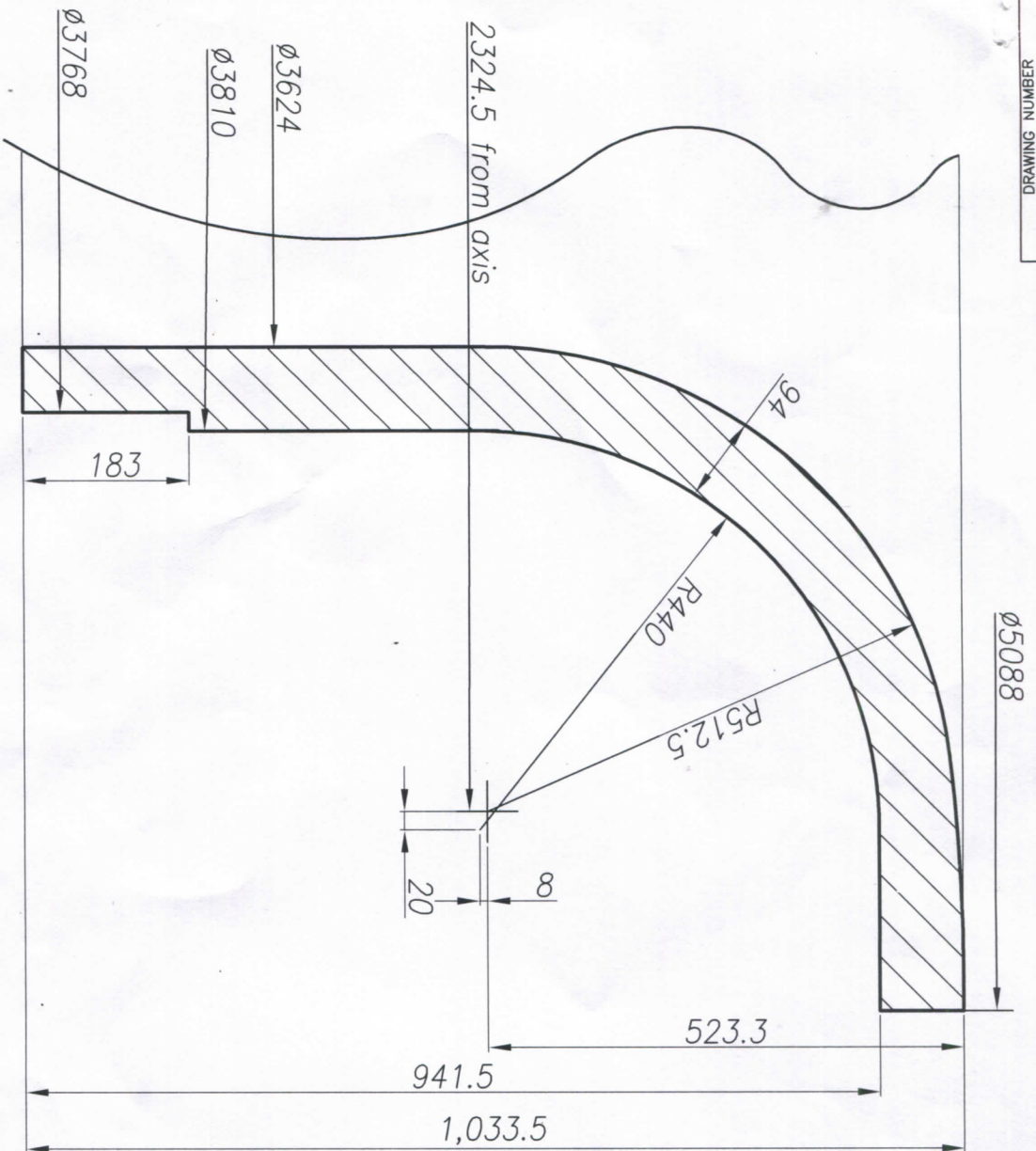
CONTROLLED COPY
Foundry Technology
C.No. SFI/28
Date 28 MAY 2021

REV	DATE	ALTERED	REV	DATE	ALTERED	REV	DATE	ALTERED	REV	DATE	ALTERED
ZONE	CHECKED		ZONE	CHECKED		ZONE	CHECKED		ZONE	CHECKED	

		BHARAT HEAVY ELECTRICALS. LTD. CENTRAL FOUNDRY FORGE PLANT RANIPUR HARDWAR	
DEPT. FDY. TECH.	SCALE N.T.S.	WEIGHT IN KGS	NAME
ROUGH M/C DRG FOR IMPELLER CROWN		TECHNOLOGY NO	DRAWING NO
PROJECT AND CUSTOMER NAME	23611	0-204-07-21503/M	NO. OFF SHEETS-1
KALESHWARAM L2P2 BHEL-BHOPAL			
DRN	CHK	APPD	DATE
1/23/KALESHWARAM L2P2	1/23/GAURAN	1/23/AGRAWAL	27/5/21
27/5/21	27/5/21	27/5/21	

21021

12.5
ALL OVER



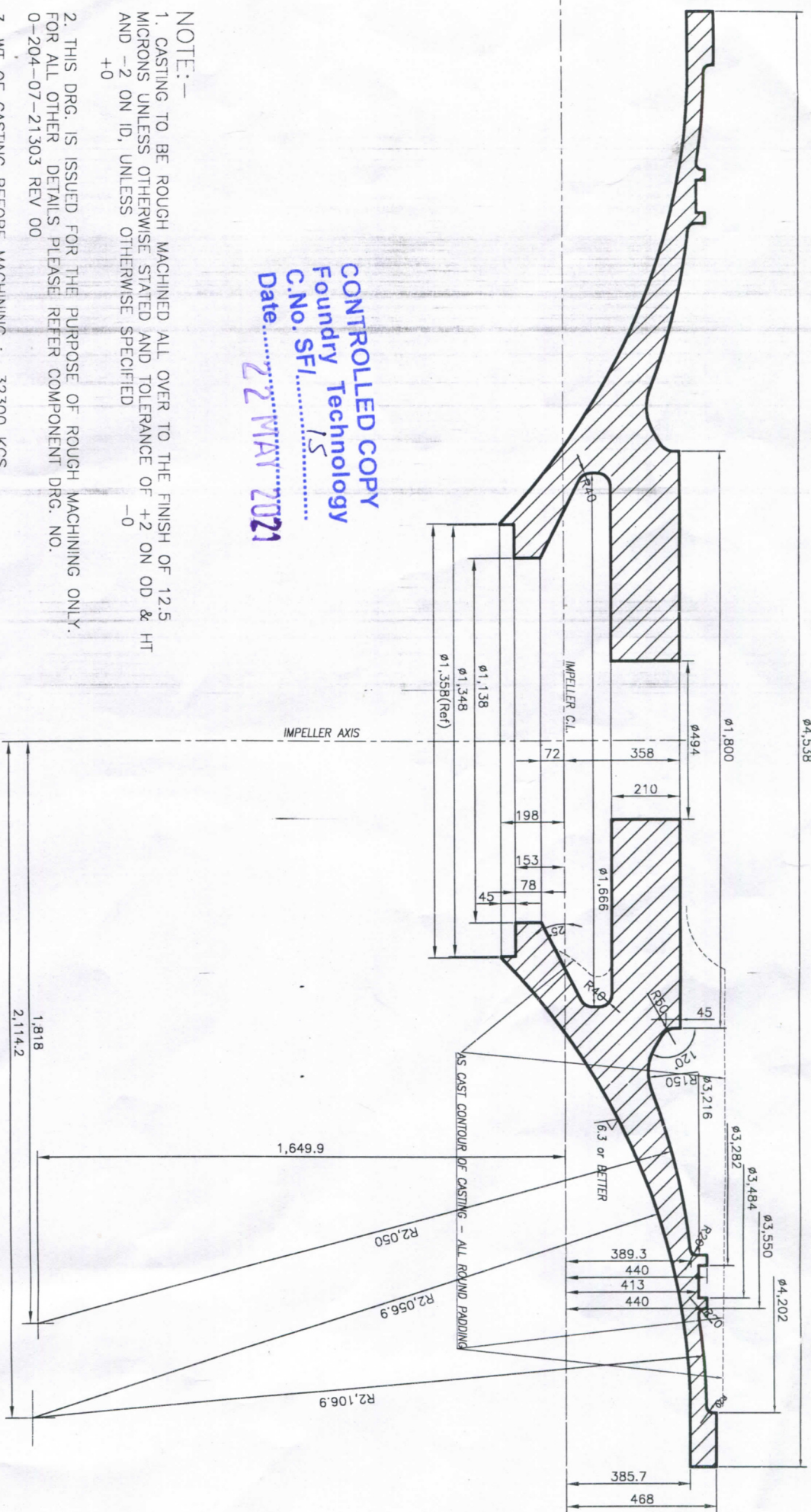
NOTE:-

1. CASTING TO BE ROUGH MACHINED TO THE DRG. DIMENSIONS ON ALL THE SURFACES TO THE FINISH OF 12.5 MICRONS AND TOLERANCE OF +2 ON OD & HT AND -2 ON ID.
2. THIS DRG. IS ISSUED FOR THE PURPOSE OF ROUGH MACHINING ONLY. FOR ALL OTHER DETAILS PLEASE REFER COMPONENT DRG. NO. 0-204-07-21503 REV00
3. WT OF CASTING BEFORE MACHINING : 24500 KGS
WT OF CASTING AFTER MACHINING : 12980 KGS

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Foundry Technology
C.No. SF/ 24
Date: 28 MAY 2021

REV		DATE	ALTERED	CHECKED	ZONE
DEPT.		FDT. TECH.	SCALE	N.T.S.	WEIGHT IN Kgs
TITLE		BHARAT HEAVY ELECTRICALS. LTD. CENTRAL FOUNDRY FORCE PLANT RANPUR HARDWAR			
PROJECT AND CUSTOMER NAME		KALESHWARAN L2P2 BHEL BHOPAL			
TECHNOLOGY NO		23612			
DRAWING NO		0-204-07-21503/M1			
SHEET NO.-1		NO. OF SHEETS-1			
NAME		DRN	CHKD	APPD	DATE
SIGN		23/KALESHWARAN L2P2	N. K. GAURAV	50 27.8.21	50 27.8.21
DATE		50 27.8.21	L. AGRAWAL	50 27.8.21	50 27.8.21
NO. OF SHEETS-1		NO. OF SHEETS-1			

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Foundry Technology
C.No. SFL/.....
Date: 22 MAY 2021

NOTE:-

1. CASTING TO BE ROUGH MACHINED ALL OVER TO THE FINISH OF 12.5 MICRONS UNLESS OTHERWISE STATED AND TOLERANCE OF +2 ON OD & HT AND -2 ON ID, UNLESS OTHERWISE SPECIFIED -0 +0
2. THIS DRG. IS ISSUED FOR THE PURPOSE OF ROUGH MACHINING ONLY. FOR ALL OTHER DETAILS PLEASE REFER COMPONENT DRG. NO. 0-204-07-21303 REV 00
3. WT OF CASTING BEFORE MACHINING : 32300 KGS
WT OF CASTING AFTER MACHINING : 15460 KGS

REV	DATE	ALTERED	ZONE	REV	DATE	ALTERED	ZONE	REV	DATE	ALTERED	ZONE	REV	DATE	ALTERED	ZONE
		CHECKED				CHECKED				CHECKED				CHECKED	

		BHARAT HEAVY ELECTRICALS. LTD. CENTRAL FOUNDRY FORCE PLANT RANIPUR HARDWAR	
DEPT.	FDY/TECH.	SCALE	N.T.S.
PROJECT AND CUSTOMER NAME	PALAMURU RANGAREDDY-4		
TITLE	ROUGH M/C DRG FOR CROWN OF IMPELLER		
DRN	1/23/PALAMURU-4/23615M	NAME	SIGN
WHO	INK. GAURAV SD 215.27	DATE	
CHKD	ACRAVAL SD 215.27		
APPD	R. LAKSHI SD 215.27		
TECHNOLOGY NO	0-204-07-21303/M		
SHEET NO.-1	NO. OF SHEETS-1		

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