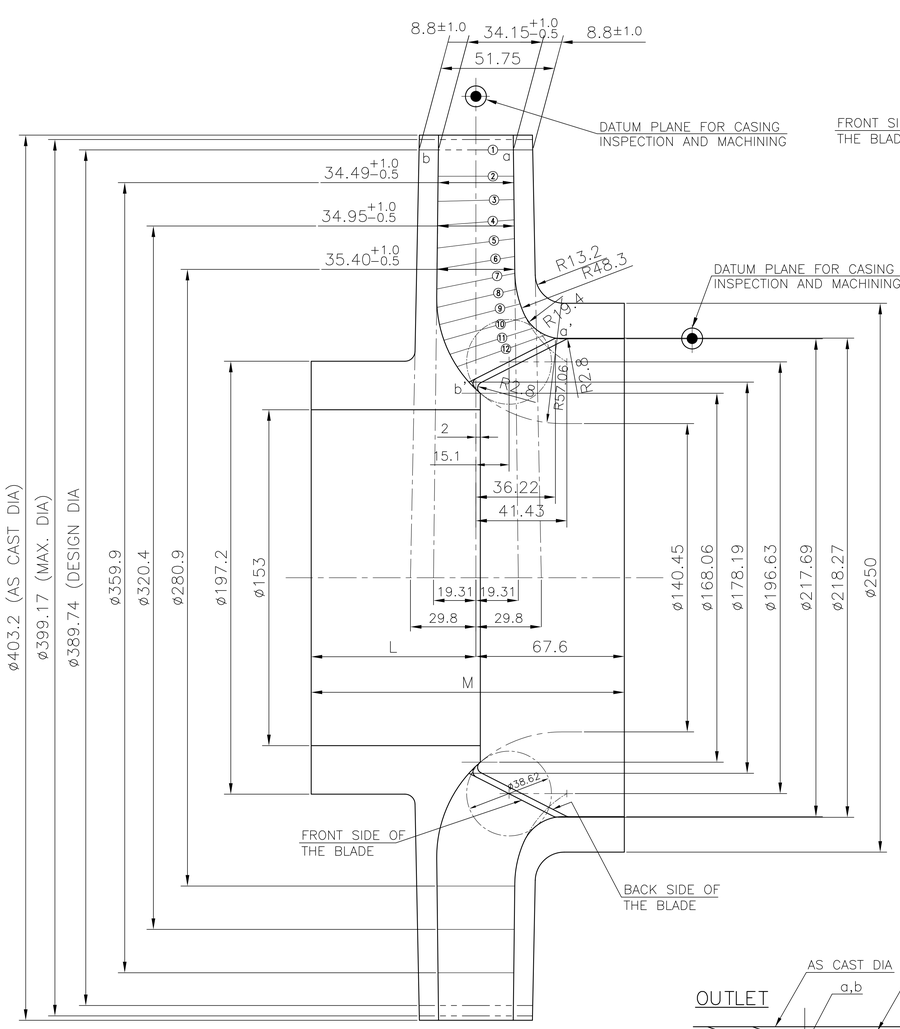
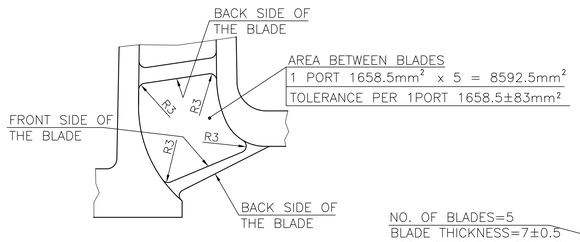
FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

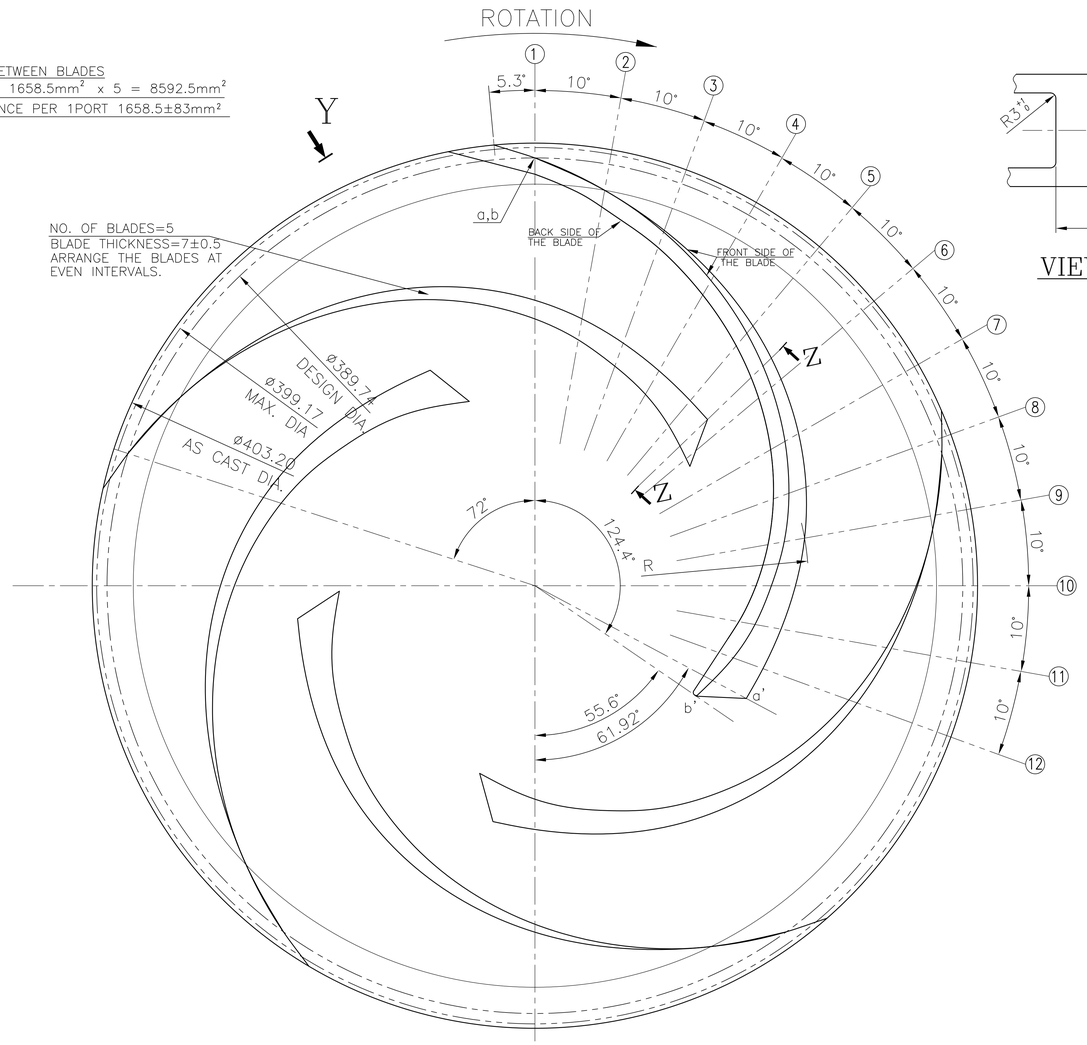
DRG. NO. 0 180 40 2 4678

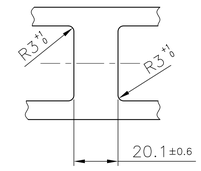




SECTION−ZZ

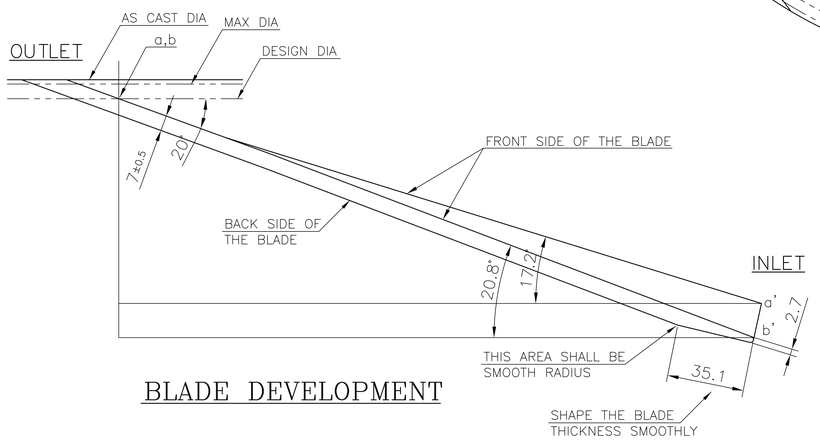
A





VIEW−Y

VIEW−A



BLADE DEVELOPMENT

DIMENSIONS TABLE AND REMARKS				
MARK	L	M	ROTATING DIRECTION (VIEWED FROM SUCTION NOZZLE)	No. OF STG
⑴	75	142.6	C.W	2ND STAGE
⑵	113	180.6	C.W	3RD STAGE
⑶	75	142.6	C.C.W	4TH STAGE & 5TH STAGE
⑷	113	180.6	C.C.W	6TH STAGE

NOTE TO SUPPLIER:

1. CASTING SHALL BE SUPPLIED IN ROUGH MACHINED CONDITION AS PER THIS DRAWING DIMENSIONS. THE FINISHING ALLOWANCE IS ABOUT 2MM.
2. SURFACE ROUGHNESS OF MACHINED SURFACES SHALL BE NOT OVER 6.3 MICRONS. SURFACE ROUGHNESS OF VANE&FLOW PASSAGE SHALL BE NOT OVER 5 MICRONS.
3. BEWARE OF THE MISALIGNMENT OF THE BLADE PITCH AND DIMENSIONS AND CAST THE IMPELLER SO THAT THE CENTER OF MASS SHALL BE CLOSE TO THE CENTER OF FIGURE, IN ORDER TO MAKE THE RESIDUAL UNBALANCE SMALLER.
4. MANUFACTURE THIS IMPELLER BY PRECISION CASTING WITH THE GIVEN 3D−DATA.
5. 100% MPI ON CASTING SHALL BE DONE AS PER STD AA0850133 AND ACCEPTANCE AS PER AA0850134 LEVEL−II.
6. RADIOGRAPHY TEST SHALL BE CONDUCTED AS PER ASTM E142 AND ACCEPTANCE NORMS AS PER ASTM E446 LEVEL−II.
7. MATL SPECN SHALL BE AS PER HY19593.
8. ADDITIONAL QUALITY REQUIREMENTS SHALL BE AS PER FP60288.

RADIUS RADIAL COORDINATE (AT FRONT SIDE OF BLADE)

SECTION	⑴	⑵	⑶	⑷	⑸	⑹	⑺	⑻	⑼	⑽	⑾	⑿	INLET
ANGLE	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°	110°	
a−a'	194.87	182.89	172.26	163.02	154.45	146.33	138.65	131.41	124.71	118.68	113.81	110.52	109.135
b−b'	194.87	182.87	171.42	160.44	150.16	140.53	131.51	123.10	115.29	108.17	101.78	93.10	89.095

ITEM NO	DESCRIPTION	DRAWING NO.	VAR. NO.	RAW MATERIAL SIZE OR CASTING DRG.NO. OR FORGING DRG.NO.	MATERIAL CODE	NET WT.	GROSS WT.
04	IMPELLER 6TH STG				FP9219324857	30.9	
					HY19593		
03	IMPELLER 4TH STG AND 5TH STG				FP9219324849	27.3	
					HY19593		
02	IMPELLER 3RD STG				FP9219324830	30.9	
					HY19593		
01	IMPELLER 2ND STG				FP9219324822	27.3	
					HY19593		
					MATERIAL SPECN.	QUANTITY	

THE FOLLOWING CONDITIONS APPLY EXCEPT OTHERWISE STATED.

1. REF.TO HY0230261 FOR UNS. TOLERANCES.
2. CHAMFER M/CD SHARP EDGE 1.2 TO 1.0 AT 45°.
3. INTERNAL M/CD CORNER RADII 1 TO 0.7.
4. THE SURFACE ROUGHNESS WHEREVER NOT SHOWN SHALL BE TAKEN FROM THE SURFACE ROUGHNESS SHOWN OUT SIDE BACK SLASHES GIVEN AT THE TOP MOST RIGHT CORNER OF THE DRG.

TYPE OF PRODUCT MDG406
OR
NAME OF CUSTOMER/PROJECT

BHARAT HEAVY ELECTRICALS LTD. HYDERABAD

	NAME	SIGN.	DATE
DRN.	ASK		11.03.20
CHD.	M.S.RAM		11.03.20
APPD.	M.S.RAM		11.03.20

DEPT.	SCALE	WEIGHT (KG)	REF. TO ASSY DRG.	ITEM NO.	NO.OF ITEMS
PUMPS	NTS	NA	NA	NA	NA
CODE 410					

TITLE: IMPELLER INTER STAGE (CASTING)

DRAWING NO. 0 180 40 2 4678 REV. 00

SHEET NO. 01 NO OF SHEETS 01

REV.	DATE	ALTERED	CHECKED	APPD.	ZONE

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SIGN. AND DATE | REF. DRG. NO. P1-C4998-R0 | COMPUTER FILE NAME : FP0180402467800 | INVENTORY NO

Jun Sat 6 10:29 2020

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Therefore signatures are not essentially required.