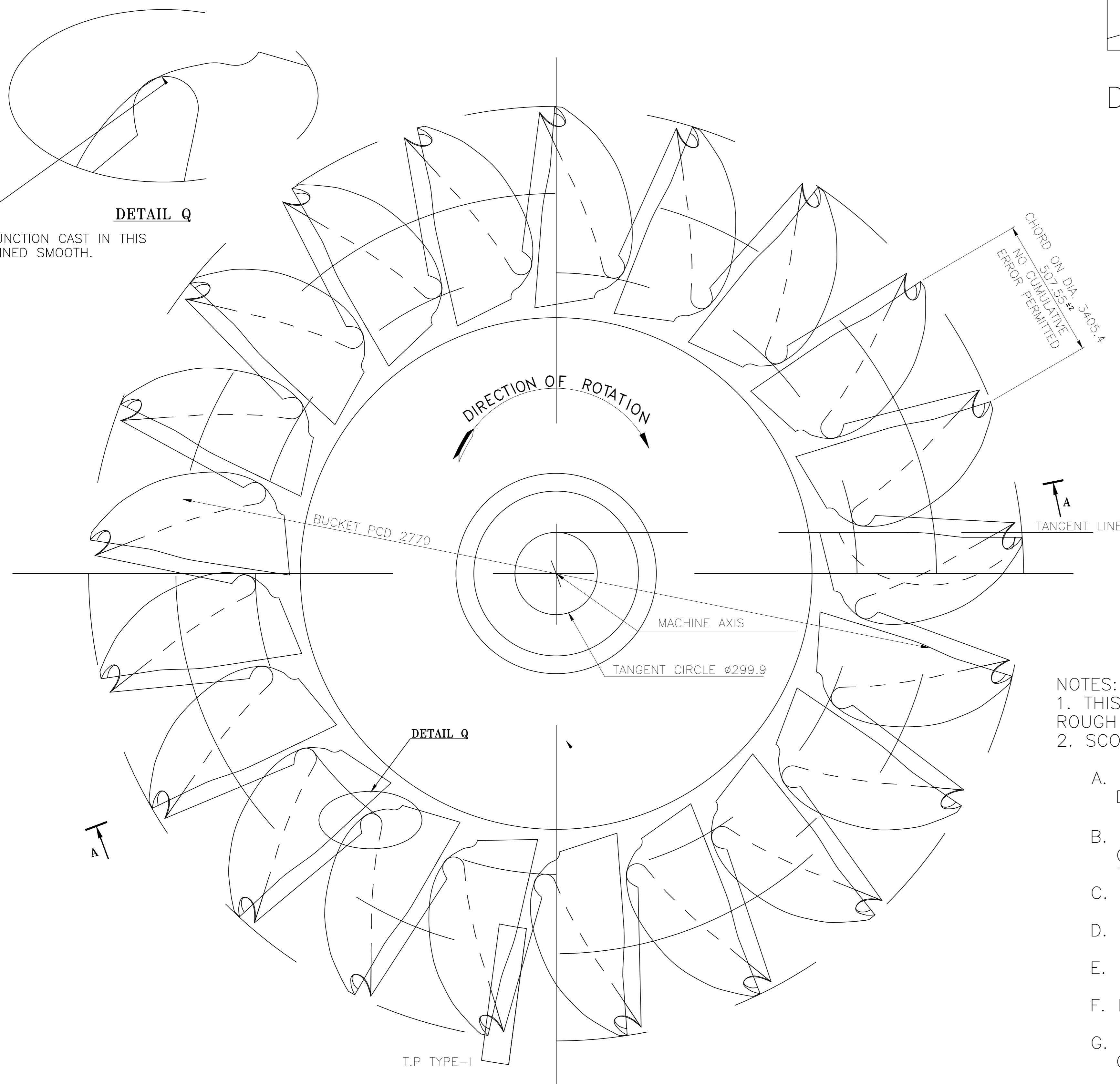


DETAIL-'P'

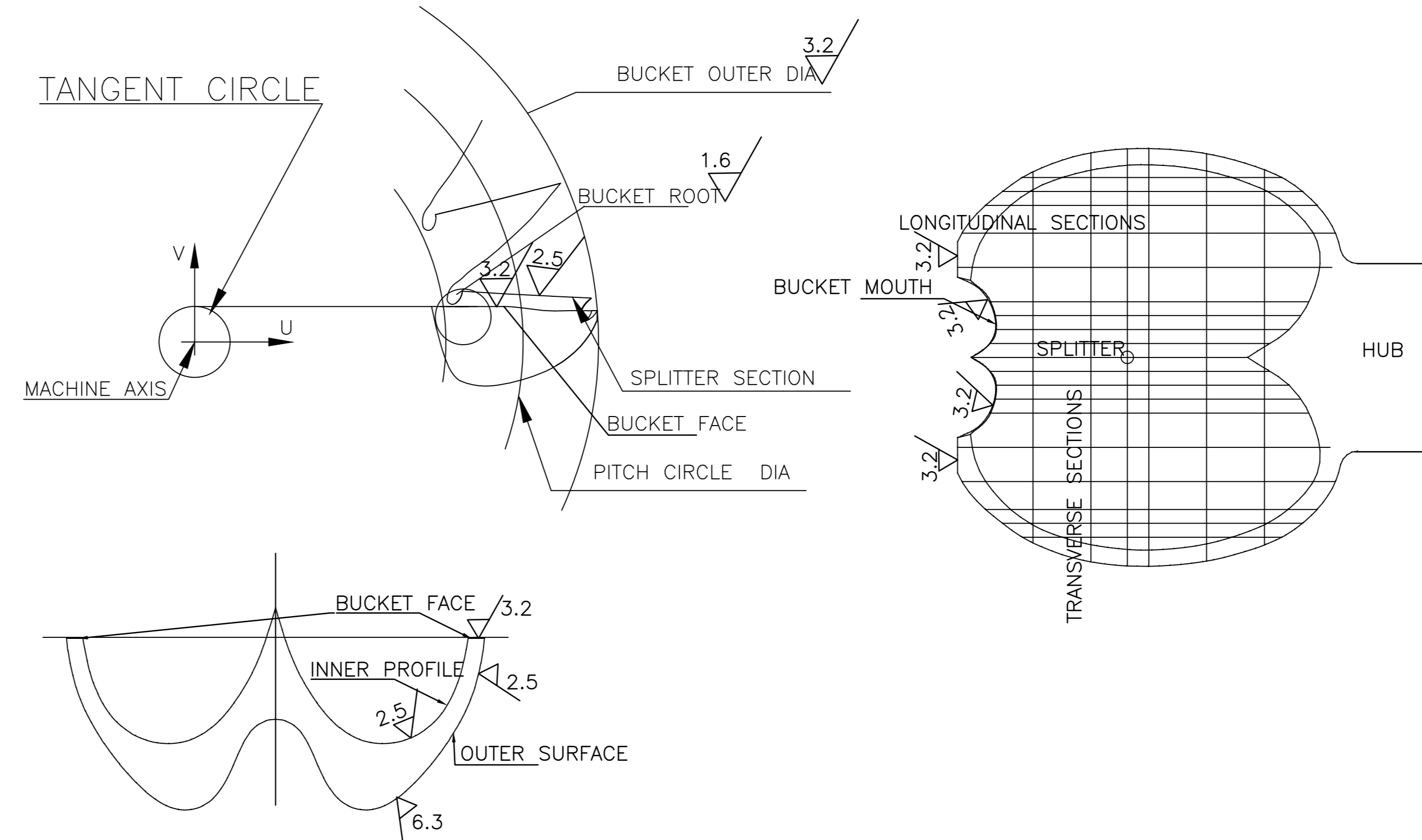
DETAILS OF SURFACE FINISH OF PELTON RUNNER BUCKET

ATTENTION:
SPLITTER ROOT JUNCTION CAST IN THIS SHAPE AND MACHINED SMOOTH.

DETAIL Q



VIEW FROM 'B'



NOTES:

1. THIS DRAWING IS ISSUED FOR THE PURPOSE OF MACHINING OF PELTON RUNNER BUCKET PROFILE. THIS MACHINING IS TO BE CARRIED OUT AFTER ROUGH MACHINING OF THE HUB BORE AND FACES AND FURTHER UPGRADATION OF CASTING IN FOUNDRY.
2. SCOPE OF MACHINING:

- A. RUNNER OUTER DIAMETER TO BE MACHINED TO 3.2 MICRONS FINISH. VENDOR SHALL RECEIVE THE RUNNER WITH ROUGH MACHINED OUTER DIAMETER WITH 5-6 MM MATERIAL FOR FINAL MACHINING.
 - B. BUCKET MOUTH FINISH MACHINED TO TEMPLATE, THE BUCKET MOUTH PROFILES (INSIDE AND BACK) MACHINED AND FINISHED TO 3 TEMPLATES- ONE ON CENTRE SPLITTER AND TWO ON EACH SIDE, TO FINISH 2.5 MICRONS OR BETTER. BACK OF MOUTH CUT OUT PROFILE TO BE MACHINED TO REQUIRED ANGLE.
 - C. SPLITTER EDGES EQUALLY MILLED AND PROFILE TO BE MACHINED TO TEMPLATES TO SURFACE FINISH 2.5 MICRONS OR BETTER.
 - D. SPLITTER SHALL BE LOCATED IN THE CENTRE OF BUCKET WIDTH.
 - E. BUCKET FACE USED AS REFERENCE PLANE FOR BUCKET PROFILES TEMPLATES, MACHINED TO REQUIRED TOLERANCE.
 - F. INLET AND OUTLET AREAS OF BUCKET TO BE MACHINED.
 - G. INNER PROFILE OF BUCKETS TO BE MACHINED TO CONTINUOUS SHAPE WITH NO UNDULATION TO 2.5 MICRONS FINISH OR BETTER AND SHALL BE CHECKED WITH 4 TRANSVERSE AND 2 LONGITUDINAL TEMPLATES FOR EACH HALF.
 - H. BUCKET OUTER SURFACES MACHINED TO FINISH 6.3 MICRONS WITHIN A PROFILE TOLERANCE ± 2.5 MM. ALSO, BUCKET OUTER SURFACES ON THE SIDES, NEAR BUCKET FACE TO BE MACHINED TO 2.5 MICRONS WITH TEMPLATES.
 - I. BUCKET FACE INCLINATION SHALL BE TRUE ON TANGENT CIRCLE WITHIN TOLERANCE.
 - J. BUCKET ROOT TO BE MACHINED TO 1.6 MICRONS FINISH, TO CHECKED WITH TEMPLATE.
3. WEIGHT OF CASTING IN PRE-MACHINED CONDITION SHALL BE 19500 KG AND THAT AFTER MACHINING SHALL BE 15000 KG.
4. FOR BUCKET PROFILE DRAWING - REFER DRG NO. 0-204-00-68902 Rev 00 & 3-204-00-68903.
5. MATERIAL OF THE CASTING IS GX5Cr-Ni 13-4 OF DIN17445 (13%Cr-4%Ni SS)
6. MATERIAL AVAILABILITY FOR MACHINING ON FACE SPLITTER SHALL BE AROUND 20 MM, INSIDE AND OUTSIDE OF BUCKET SHALL HAVE 6-8 MM MATERIAL FOR MACHINING

		BHARAT HEAVY ELECTRICALS. LTD. CENTRAL FOUNDRY FORGE PLANT RANIPUR HARDWAR			
DEPT. FDY.TECH.	SCALE N.T.S.	RECHT. IN KGP	NAME	SIGN	DATE
REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED
REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED
REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED
TITLE MACHINING DRG (2ND STAGE) FOR PELTON RUNNER			DRN	/23/kganga/23449M.dwg	SD 19.7.15
PROJECT AND CUSTOMER NAME KISHANGANGA			CHD	T. DAVE	SD 19.7.15
TECHNOLOGY NO 23449			APPD	T. DAVE	SD 19.7.15
BHCL BHOPAL			DRAWING NO- 1-204-07-18503/M2 SHEET NO.- 1 NO. OFF SHEETS- 1		