

FIRST ANGLE PROJECTION

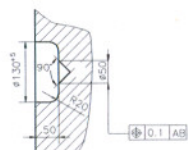
(ALL DIMENSIONS ARE IN mm)

1-136-01-30604/05

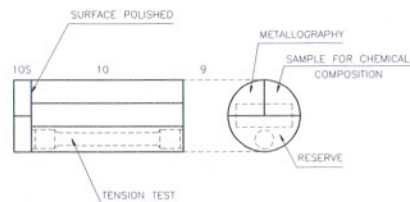
TURBINE SIDE



DETAIL-Z



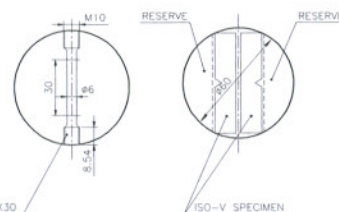
AXIAL TESTING OF CORE "AXF"



RADIAL TESTING OF CORE "AXF"

SAMPLE NO.6

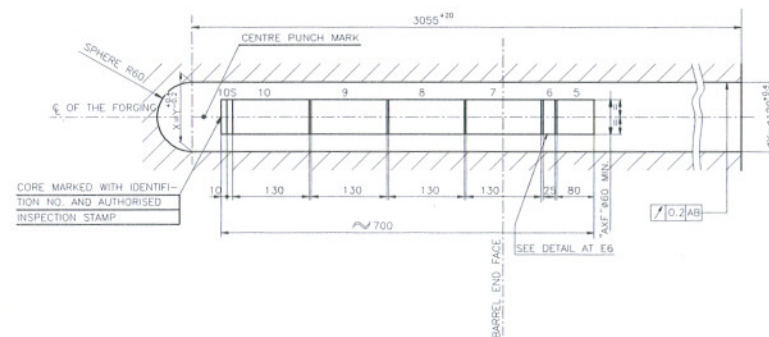
SAMPLE NO.5



TENSILE SPECIMEN #6X30

150-V SPECIMEN

DETAIL OF AXIAL CORE "AXF"



REMARKS :-

- 1) R1, R2 AND R3 ARE SPACED AT 120° APART AROUND THE BARREL.
- 2) 40 mm OUT OF 80 mm HATCHED PORTION IS FOR TESTING BY MANUFACTURER AND THE REMAINING 40 mm SHALL BE PARTED OFF AND SENT FOR TESTING AT B.H.E.L.
- 3) MACHINING TOLERANCE ON UNTOLERANCED DIMENSIONS: ± 1

ITEM NO.	DESCRIPTION	DRAWING NO.	VAR NO.	RAW MATERIAL SIZE OR CASTING (KG) NO. OR FORGING (KG) NO.	MATERIAL CODE	MATERIAL SPECIES	QUANTITY
	FORGING				TG9518250766	22625	
					HY19382	1	

THE FOLLOWING CONDITIONS APPLY EXCEPT OTHERWISE STATED...

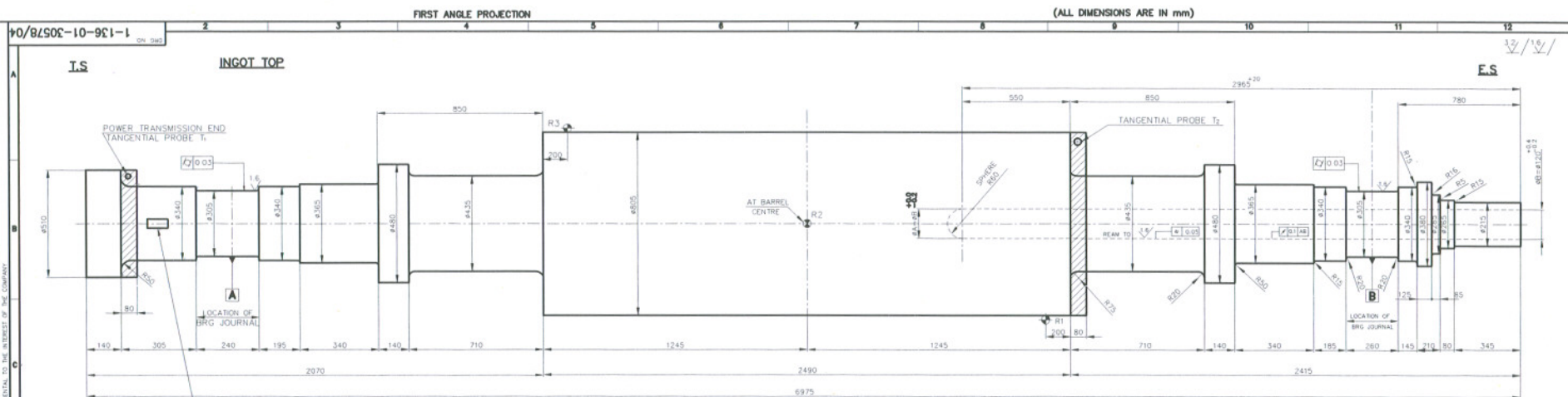
1. REF. TO HYDROGEN FOR UNSPECIFIED TOLERANCES
2. CHAMFER M/R/D SHARP EDGES 1:2 TO 1:0 AT 45°
3. INTERNAL M/R/D CORNER RADI 1 TO 0.7
4. THE SURFACE ROUGHNESS WHEREVER NOT SHOWN SHALL BE TAKEN FROM THE SURFACE ROUGHNESS SHOWN ON THE SIDE BACK SLATS GIVEN AT THE TOP MOST RIGHT CORNER OF THE DRC.

TYPE OF PRODUCT
NAME OF CUSTOMER/PROJECT

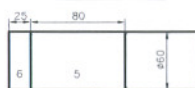
DEPT.	UNIT.	DRG. NO.	SCALE	WEIGHT (KG)	REF. TO ASSY DRC.	ITEM NO.	NO. OF SHEETS
425	1/4	NTS	22625	NA	NA	1	1
GENERATOR ROTOR FORGING				1-136-01-30604/05			

TARI 930-33P

NAME	DATE	NO. OF
DRN. DEVASHI	17.02.03	VAR
CHD. U. SRIDHAR	17.02.03	NA
APPR. S. BUCHAYYA	17.02.03	NA



RADIAL TESTING OF CORE "AXF"

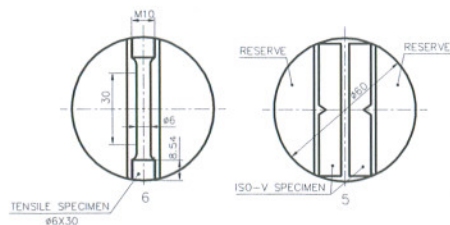


SEE DETAILS AT D11

REMARKS:

1. ROTOR SHELL BE MANUFACTURED, TESTED AND SUPPLIED AS PER HY19382/REV.01 MATERIAL OF FORGING 26 Ni Cr MoV 115.
2. DIMENSIONS SHOWN ARE FOR THE ROUGH MACHINED ROTOR FORGING IN mm. NO ALLOWANCE NEED BE KEPT.
3. MATERIAL HEAT TREATMENT AND TESTING OF THE ROTOR FORGING IS TO BE AS PER HY19382/REV.01 AND THIS DRG.
4. HATCHED PORTION INDICATES MATERIAL ALLOWANCE FOR TESTING OUT OF 80mm. TEST RINGS AROUND 40mm THICK ARE MENT FOR TESTING BY MANUFACTURER AND REMAINING MATERIAL IS MENT FOR TESTING AT B.H.E.L. HOWEVER THE THICKNESS OF TEST RINGS CAN BE DECIDED BY THE MANUFACTURER AND ACCORDINGLY MATERIAL ALLOWANCE FOR TESTING MAY BE KEPT TO A MINIMUM.
5. MACHINING TOLERANCE ON UNTOLERANCED DIMENSIONS: $\pm 1\text{mm}$
6. FINISH OF THE FORGING $\sqrt{10}$ ($\sqrt{10}$)
7. JOURNALS TO BE GIVEN RUST PREVENTIVE PROTECTIVE COATS.
8. R1, R2 AND R3 SPACED AT 120° APART AROUND THE ROTOR ARE THE LOCATIONS FOR RESIDUAL STRESS MEASUREMENT AS PER K.W.U. RING CORE METHOD
9. **TESTING SEQUENCE:**
 - a. ULTRASONIC
 - b. RESIDUAL STRESS MEASUREMENT
 - c. TESTS T1 & T2

BEFORE GOING AHEAD WITH ANY OF THE ABOVE TESTS, IT SHALL BE ENSURED THAT THE RESULTS OF ALL THE PREVIOUS TESTS CONFORM TO SPECIFICATION HY19382/REV.01



REV	DATE	ALTERED	CHD/APPD	REV	DATE	ALTERED	CHD/APPD	REV	DATE	ALTERED	CHD/APPD	REV	DATE	ALTERED	CHD/APPD
05	28.10.03	CHD/APPD		04	28.10.03	CHD/APPD		03	16.08.99	CHD/APPD		02	16.08.99	CHD/APPD	

GENERATOR ROTOR FORGING		1-136-01-30578	NA	FORGING		T09518250618		14020	
ITEM NO	DESCRIPTION	DRAWING NO	VAR NO	RAW MATERIAL SIZE OR CASTING DRG NO OR FORGING DRG NO	MATERIAL CODE	NET WT	CROSS WT		
THE FOLLOWING CONDITIONS APPLY EXCEPT OTHERWISE STATED:				TYPE OF PRODUCT NAME OF CUSTOMER/PROJECT TARI 800-24P					
1. REF. TO HY0230261 FOR UNDESPECIFIED TOLERANCES. 2. CHAMFER M/C/D SHARP EDGES 1:2 TO 1:1 AT 45°. 3. INTERNAL M/C/D CORNER RADII 1:1 TO 1:2. 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.				DEPT: ENR UNTIL DRG OR 425 C.A.M/P SCALE: 1:1 WEIGHT (KG): 14020 REF TO ASSY DRG: NA DRAWING NO: 1-136-01-30578 SHEET NO: 01 NO OF SHEETS: 01					
BHARAT HEAVY ELECTRICALS LIMITED HYDERABAD				NAME: DEPT SIGN: 29.04.03 NO OF VAR: NA CHD: G.C.REDDY DATE: 29.04.03 APPD: T.K.RAJU DATE: 29.04.03					
GENERATOR ROTOR FORGING				1-136-01-30578 04					