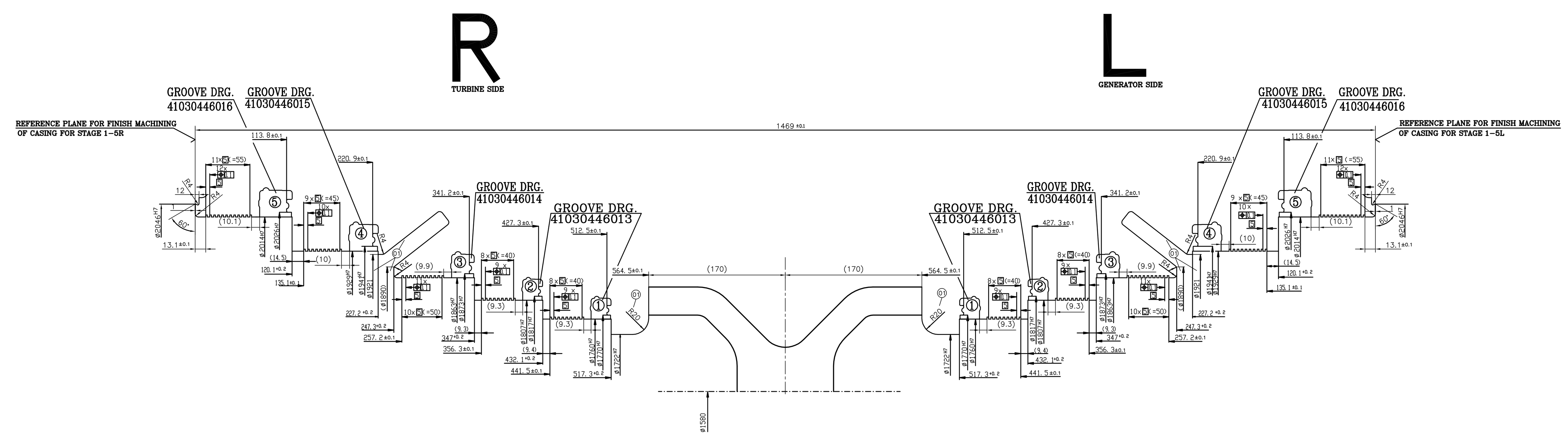
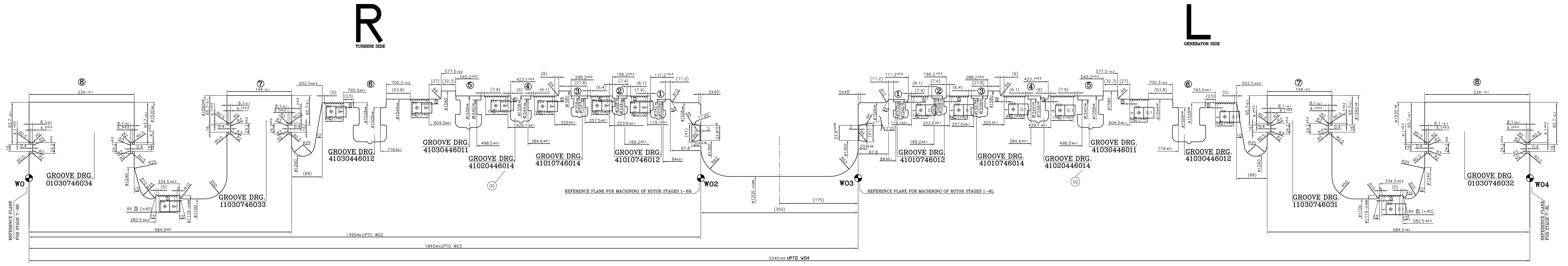
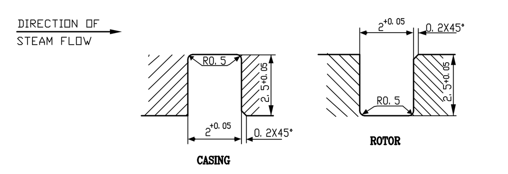


FINISH MACHINING CONTOUR OF CASING



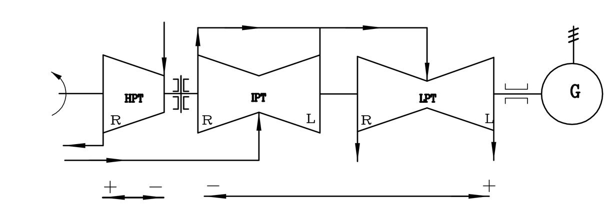
FINISH MACHINING CONTOUR OF ROTOR



DETAILS OF GROOVE FOR SEALING STRIP (SCALE 10:1)

**TOLERANCE STATEMENT**

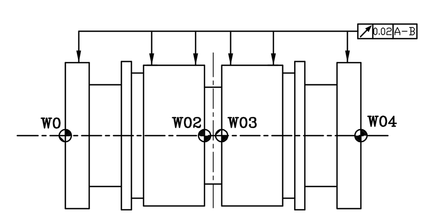
| NOMINAL SIZE mm | | TOLERANCE RANGE H7 | h6 | h9 |
|---|---|---|---|---|
| ABOVE | UP TO | UPPER / LOWER | UPPER / LOWER | UPPER / LOWER |
| 1250 | 1600 | +0.125 / 0 | 0 / −0.078 | 0 / −0.310 |
| 1600 | 2000 | +0.150 / 0 | 0 / −0.092 | 0 / −0.370 |
| 2000 | 2500 | +0.175 / 0 | 0 / −0.110 | 0 / −0.440 |



3.2 ALL OVER

## TECHNICAL REQUIREMENTS :

1. RADIAL RUN OUT SHALL BE PERFORMED AT STAGE 1L, 6L, 8L, 1R, 6R AND 8R WITH RESPECT TO LOCATION A-B OF LP ROTOR (PGMA10304). THE SURFACE FINISH AT THESE LOCATIONS SHALL BE 2.5. PERMISSIBLE RUN-OUT VALUES WHICH ARE VALID FOR ALL STAGES SHALL BE AS PER THE SKETCH BELOW.




2. GROOVE SHALL BE MACHINED AS PER FOLLOWING DRAWINGS :-

| MOVING BLADE | | GUIDE BLADE | |
|---|---|---|---|
| STAGE | DRAWING NO. | STAGE | DRAWING NO. |
| 1& 2L, R | 41010746012 | 1& 2L, R | 41030446013 |
| 3L, R | 41010746014 | 3L, R | 41030446014 |
| 4L, R | 41020446014 | 4L, R | 41030446015 |
| 5L, R | 41030446011 | 5L, R | 41030446016 |
| 6L, R | 41030446012 | | |
| 7L | 11030746031 | | |
| 7R | 11030746033 | | |
| 8L | 01030746032 | | |
| 8R | 01030746034 | | |

3. LOCATION OF INSERTION GROOVES SHALL BE AS PER TECHNOLOGICAL INSTRUCTION NO. 944.004 (FV 100113) WITH $\alpha$=60°

**INSERTION GROOVE DRAWINGS**

| STAGE | DRAWING NO. |
|---|---|
| 1L-6L | 41030446021 |
| 1R-6R | 41030446022 |

4. FOR THE VALUE OF TOLERANCE (H7, h9 AND h6), SEE TOLERANCE STATEMENT.

GRADE OF UNTOL DIM: –
MCG: – C/M/F/ AA 023 0208
WELDING: –'T1' 0 610 003
GAS CUTTING: –'T3' AA 0621101

| REV | DATE | ALTERED / CHECKED | ZONE / DESCRIPTION |
|---|---|---|---|
| 02 | 16.6.04 | HANS LAL Sd/– / P.K.B. Sd/– | IN STAGE 4L & 4R GROOVE DRG.NO. WAS 41020446004. (STE-04-F0168) |
| 01 | 13.11.03 | HANS LAL Sd/– / P.K.B. Sd/– | (1) RADIUS AT STEAM INLET OF CASING WAS R30 (2) DIMENSION OF EXTRACTION GROOVE (GS & TS) –DIMENSION (ø1890) WAS (ø1892). –DIMENSIONS 15, 117.5, 85 & R4 DELETED. –DIMENSION ø1921 ADDED. (STE-03-F1264) |

CBOM NO. 91030446000 — STATUS OF DRG U

| AGREED DEPT | NAME | SIGN | DATE |
|---|---|---|---|
| STT | G.SINGH | Sd/– | 06/05/03 |
| NCT | V.KISHORE | Sd/– | 01/05/03 |
| STT | SATYA DEO | Sd/– | 30/06/03 |

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT: STEAM TURBINE

BHARAT HEAVY ELECTRICALS LTD. RANIPUR, HARDWAR

| | NAME | SIGN | DATE |
|---|---|---|---|
| DRN | HANS LAL | Sd/– | 31.03.03 |
| CHD | P.K.BANSAL | Sd/– | 03.04.03 |
| APPD | T.K.GHOSH | Sd/– | 03.07.03 |

DEPT STE — CODE 4011 — SCALE 1:2 — WEIGHT (KG) — — REF. TO ASSY. DRG. 91030446000

TITLE : GROOVE PLAN LPT

DRAWING NO. 9-10304-46051 — SHEET No. 1 — No. OF SHEETS