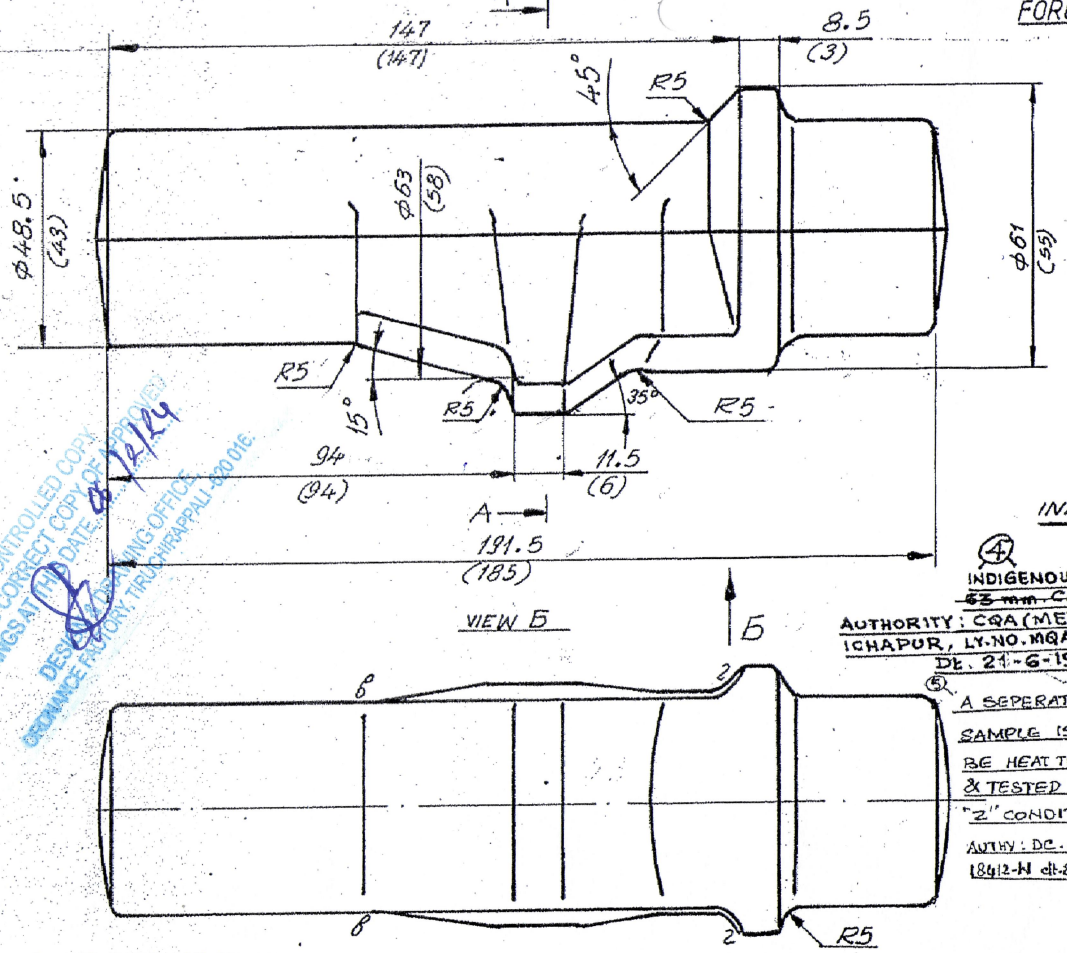
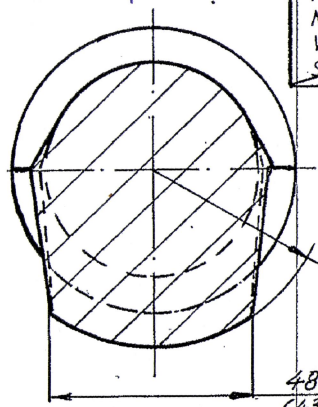
FORGING DRAWING





CHEMICAL COMPOSITION OF THE MATERIAL :- 30XH2MΦA

C	0.27–0.34	Si	0.17–0.37
Mn	0.3–0.6	Cr	0.6–0.9
Ni	2.0–2.4	Mo	0.2 –0.3
V	0.10–0.18	P	0.025 MAX.
S	0.025 MAX.	Cu	0.3 MAX.

FOR COMPONENT NO (1)
2A42-02-037-BARREL CATCH

(3) THE FINISHED COMPONENT SHOULD ATTAIN A HARDNESS RANGE OF HRC3 43·5 TO 51·5 AFTER FINAL HEAT-TREATMENT

(2) INDIGENOUS MATL-BS 970 Pt. 1-1983 Gr.826 M31 CONDITION 'Z'. WITH S&P 0.025% MAX. EACH

WITH S&P CONTENT 0.025% EACH (E3)

(4) INDIGENOUS MATERIAL : BS 970 Pt-1 83 Gr 826 M31 'Z' ~~OR IS 5517, 30NI 10CY 3MOC, LRS~~
~~63 mm COMPONENTS SHALL BE HEAT TREATED TO HARDNESS SHOWN IN THE DRAWING~~

AUTHORITY : CQA (METALS) ICHAPUR, LY.NO. MQA-3-TS/B Dt. 21-6-1997

(5) A SEPERATE TEST SAMPLE IS TO BE HEAT TREATED & TESTED IN "Z" CONDITION.
AUTHY : DC. NO. 18412-N dt-8-12-97

HEAT-TREATMENT PROCESS CHART

NOMENCLATURE AND IDT. NO:	STEEL GRADE	TYPE OF OPERATION	EQUIPMENT	TEMP. IN °C	TIME	COOLING MEDIUM	FIXTURE	HARDNESS INSPN. %
BARREL CATCH C 2037	30XH2MΦA	NORMALIZING HEATING	ELEC. CHAMBER FURNACE	850–870	4 HRS.	AIR	ON TRAY	3% BUT NOT LESS THAN 3 PIECES.
		HIGH TEMPERING HEATING	ELEC. CHAMBER FURNACE OR ELEC. SHAFT FURNACE	660–680	5 HRS.	WITH FURNACE UP TO 500°C AND IN AIR	ON TRAY	

1. DRESS THE PLACES FOR CHECKING HARDNESS
2. CHECKING OF HARDNESS

(4)

1. DIMENSIONS ARE IN mm.
2. HEAT-TREATMENT NORMALIZATION & HIGH TEMPERING HARDNESS HB 255 MAX.
3. DE-SCALING :- PICKLING OR SHOT BLASTING
4. DISPLACEMENT IN PARTING LINE SHOULD NOT BE MORE THAN 0.7 mm
5. REMAINDER FLASH ALONG DIE-PARTING LINE SHOULD NOT EXCEED 1.0 mm
6. PROLONGED BURRS SHOULD NOT EXCEED 5 mm AT SEC. "2,8"
7. CURVATURE OF ROD SHOULD NOT EXCEED 1.0 mm
8. SCALE :- N.T.S
9. ~~SURFACE DEFECTS SHOULD NOT BE MORE THAN 0.9 mm~~ (2)
10. UN-SPECIFIED DRAFT ANGLE 7°
11. UN-SPECIFIED RADII 2.5 mm
12. ALLOWANCES ARE AS PER II CLASS GOST 7505-74 M2
13. TOLERANCES ARE AS PER II CLASS GOST 7505-74 C 2 AND AS FOLLOWS
    VERTICAL $^{+1.9}_{-1.0}$
    HORIZONTAL $^{+2.4}_{-1.2}$

DIE FORGING BY HAMMER (4)

14. NUMBER OF PARTS OBTAINED FROM ONE DIE FORGING : 1 PIECE
15. DIMENSIONS BETWEEN BRACKETS ARE FOR MACHINING
16. STAMP CONVENTIONAL SEAL OF BLACKSMITH : LETTERING NO 5 GOST 2930-62
17. FIRST ANGLE PROJECTION (E)
18. MATERIAL :- 30XH2MΦA ~~GOST~~ OST 3-98-80
19. RAW MATERIAL SIZE :- 60Φx 179" LONG (HOT ROLLED)
20. WEIGHT OF THE FORGING 3.200 Kgs.
21. EXTERNAL DEFECTS : HAIR LINE CRACKS, NICKS, AND SCALE PITS SHOULD NOT EXCEED 50% OF ACTUAL ONE SIDED MACHINING ALLOWANCE ACCORDING TO, GOST 8479-70 (2)

VETTED FOR MATERIAL ONLY
AS PER LAST DA (I) No. LETTER/NO IMQA-3/TS/B/dt. 21.6.97
(JAGADISH) 28/7/97
Sr. Scientific Officer (Metl.)
Sr. Quality Assurance Offr. (Metl.)
Tiruchi 620016.

E3 DA.No. 007/16 Dt.22.07.16 RUSSIAN MATL. AMENDED (PP)

(5)	DA NO 006/98 Dt. 14-4-98	24-4-98	UPDATED	DA No. 008/97 dt- 4-2-97	4/2/98	B (2)	NOTE 3 DELETED VIDE DA ADDED DA No. 59/92, DT 28-10-92 AS PER NEW ALBUM VIEWS CORRECTED.	
(4) D	DA NO 044/97 Dt 30/6/97	30/6/97	(3) C	DA NO 56/96 Dt 26/6/96	26/6/96	(1) Sl. NO	STORE DRG. NO ADDED AMENDMENTS	SIG & DATE

Sachi 27-10-92				ORDNANCE FACTORY TIRUCHIRAPALLI-16	DRG NO: 64 C 2037 200 ~~D3~~ E3
REDRAWN	CHECKED	APPROVED	I/C PROJ	OGM/PROJ	

ALS. NO. 363/46