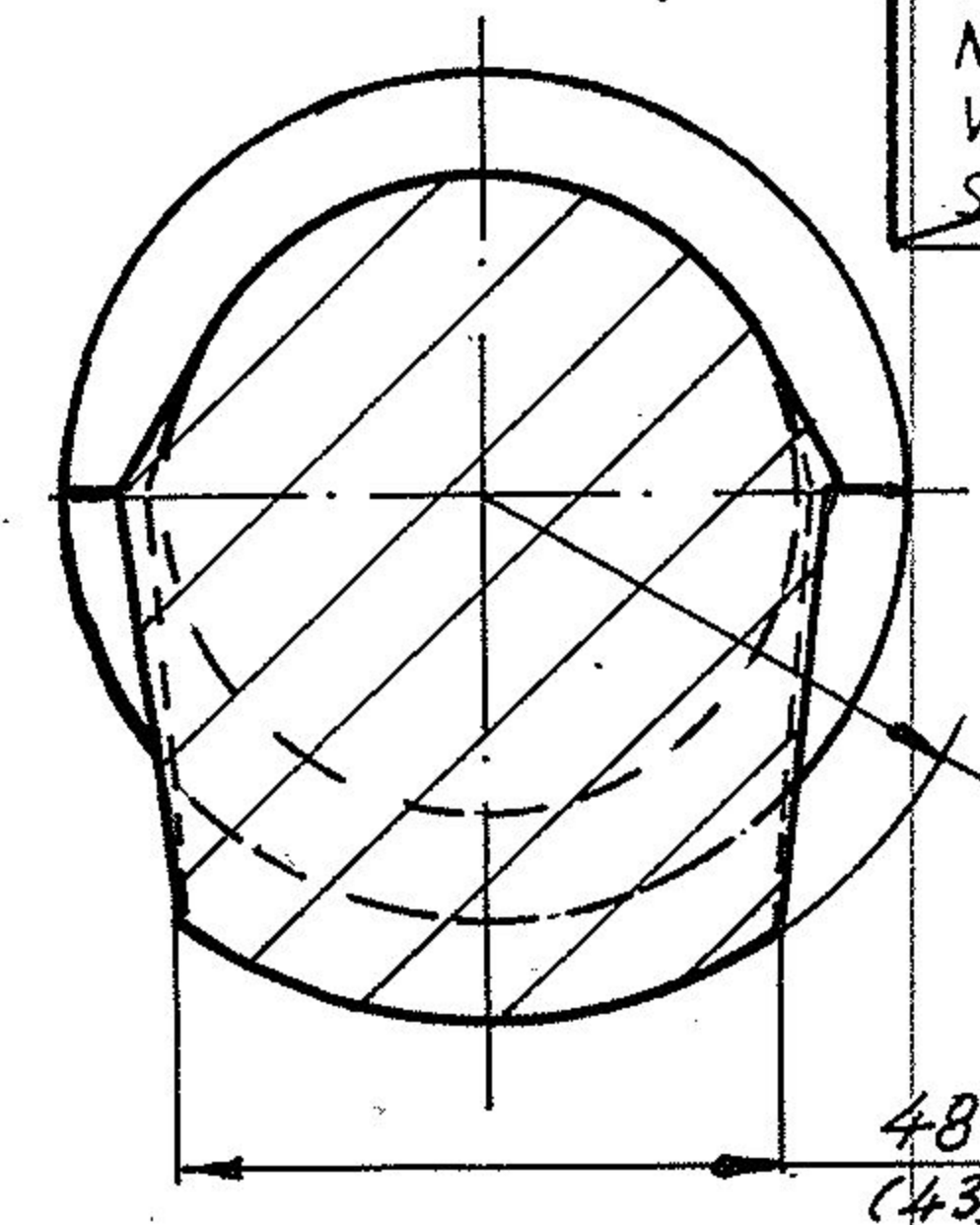
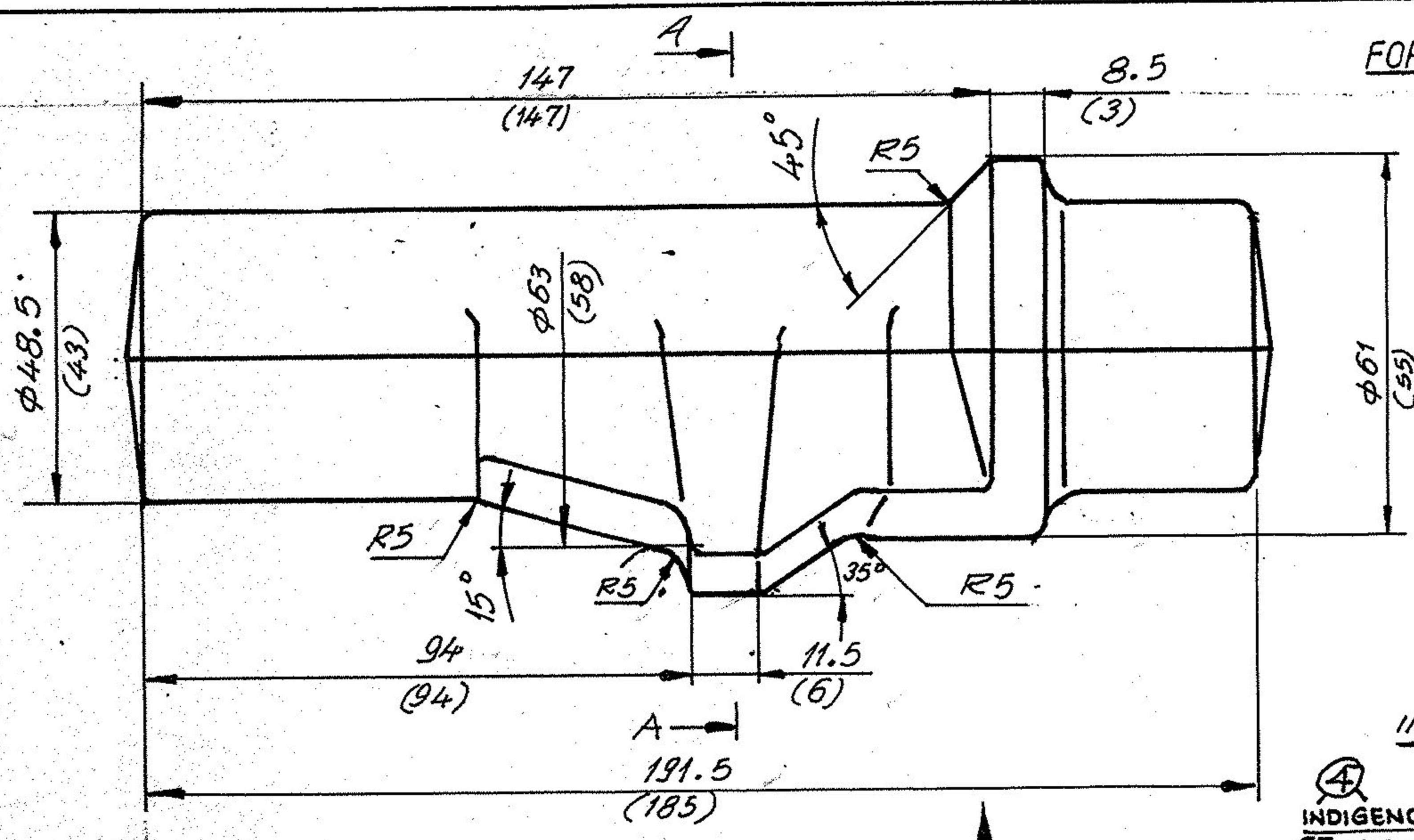


**FORGING DRAWING**



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 2A42-02-037-BARREL CATCH**

CERTIFIED CORRECT COPY OF APPROVED DRAWINGS AT THIS DATE.....

17.11.2020

Design & Drawing Office  
Ordnance Factory,  
Tiruchirappalli-620016

THE FINISHED COMPONENT SHOULD ATTAIN A HARDNESS RANGE OF HRC3 43.5 TO 51.5 AFTER FINAL HEAT-TREATMENT

INDIGENOUS MATERIAL: BS 970 Pt. I 1983 Gr. 826 M31 'Z' WITH S&P 0.025% MAX. EACH

INDIGENOUS MATERIAL: BS 970 Pt. I 83 Gr 826 M31 'Z' OR IS 5517, 30M 10CY 3M06, LRS WITH S&P CONTENT 0.025% EACH

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

A SEPERATE TEST SAMPLE IS TO BE HEAT TREATED & TESTED IN 'Z' CONDITION.  
AUTHY: DC. No. 18412-W 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 HRSPL %
BARREL CATCH	30XH2MΦA	NORMALIZING HEATING	ELEC CHAMBER FURNACE	850-870	4 HRS.	AIR	ON TRAY	3% BUT NOT LESS THAN 3 PIECES.
C 2037	30XH2MΦA	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	3% BUT NOT LESS THAN 3 PIECES.

- DRESS THE PLACES FOR CHECKING HARDNESS
- CHECKING OF HARDNESS

DIE FORGING BY HAMMER

- DIMENSIONS ARE IN mm.
- HEAT-TREATMENT NORMALIZATION & HIGH TEMPERING HARDNESS HB 255 MAX.
- DE-SCALING :- PICKLING OR SHOT BLASTING
- DISPLACEMENT IN PARTING LINE SHOULD NOT BE MORE THAN 0.7 mm
- REMAINDER FLASH ALONG DIE-PARTING LINE SHOULD NOT EXCEED 1.0 mm
- PROLONGED BURRS SHOULD NOT EXCEED 5mm AT SEC. "2, 6"
- CURVATURE OF ROD SHOULD NOT EXCEED 1.0 mm
- SCALE :- N/TS
- SURFACE DEFECTS SHOULD NOT BE MORE THAN 0.9 mm
- UN-SPECIFIED DRAFT ANGLE 7°
- UN-SPECIFIED RADII 2.5 mm
- ALLOWANCES ARE AS PER II CLASS GOST 7505-74 M2
- TOLERANCES ARE AS PER II CLASS GOST 7505-74 C2 AND AS FOLLOWS

- NUMBER OF PARTS OBTAINED FROM ONE DIE FORGING : 1 PIECE
- DIMENSIONS BETWEEN BRACKETS ARE FOR MACHINING
- STAMP CONVENTIONAL SEAL OF BLACKSMITH : LETTERING TO S GOST 2930-62
- FIRST ANGLE PROJECTION
- MATERIAL :- 30XH2MΦA OST. 3-98-80
- RAW MATERIAL SIZE :- 60φ x 179 LONG (HOT ROLLED)
- WEIGHT OF THE FORGING 3.200 Kgs.
- EXTERNAL DEFECTS : HAIR LINE CRACKS, NICKS, AND SCALE PITS SHOULD NOT EXCEED 50% OF ACTUAL ONE SIDED MACHINING ALLOWANCE ACCORDING TO GOST 8479-70

UN CONTROLLED COPY

VETTED FOR MATERIAL ONLY AS PER LAST DA (I) No. LETTER NO MQA-3/TS/B/dt. 21.6.97

(JAGADISH)  
Sr. Quality Assurance (Armed)  
Tiruchi 620016.

NOTE 3 DELETED, NOTE 21 ADDED DA No. 69/92, DT 28-10-92 AS PER NEW ALBUM VIEWS CORRECTED

⑤	DA NO. 006/98 Dt. 24-4-98	②	24-4-98	UPDATED	DA No. 008/97 Dt. 4-2-97	①	4/2/97	①	STORE DRG. NO ADDED	26/3/92
④	DA NO. 044/97 Dt. 30/6/97	③	30/6/97	③	DA NO. 56/96 Dt. 26/6/96	SL. NO	AMENDMENTS	①	SIG & DATE	

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

REDRAWN	CHECKED	APPROVED	I/C PROJ	DGM/PROJ	ORDNANCE FACTORY TIRUCHIRAPALLI-16	DRG NO: 64 C 2037 200	E3
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