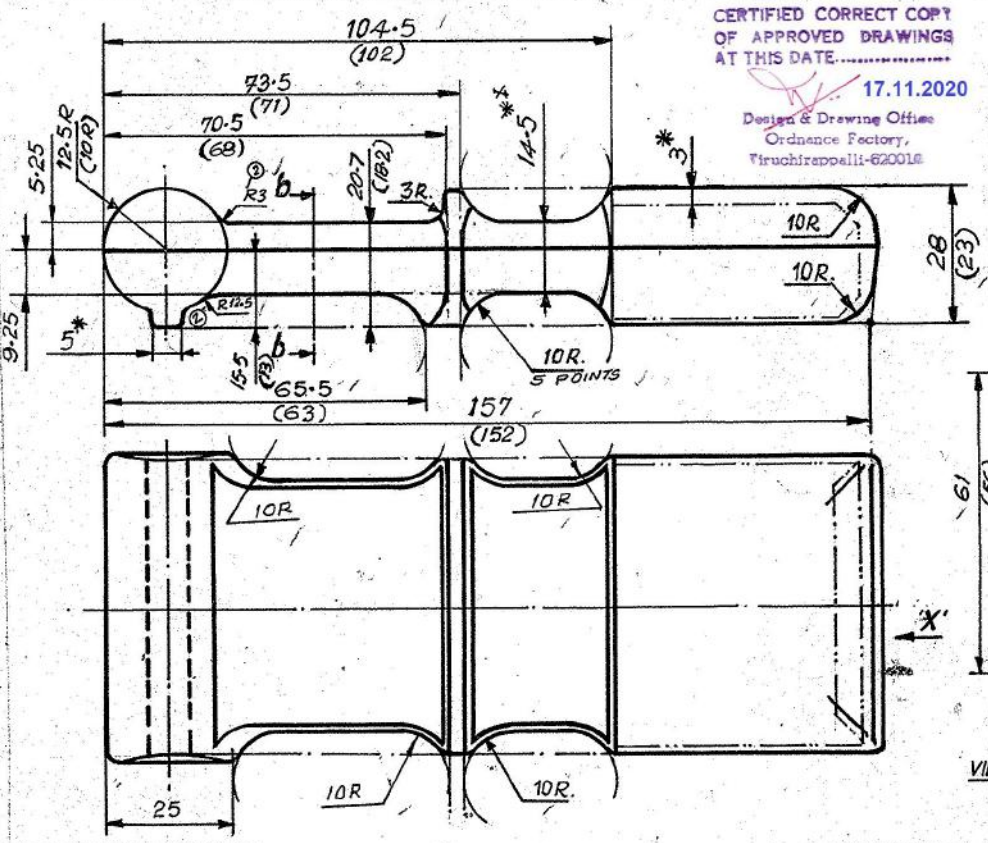
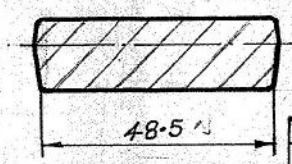
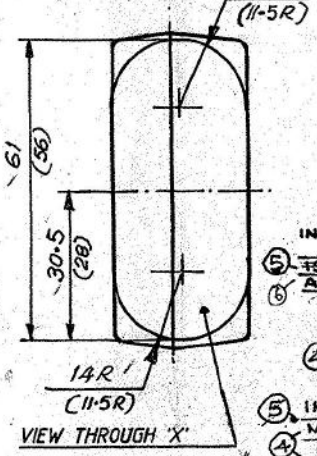
UN CONTROLLED COPY

FORGING DRAWING

CERTIFIED CORRECT COPY OF APPROVED DRAWINGS AT THIS DATE 17.11.2020
Design & Drawing Office
Ordnance Factory,
Tiruchirappalli-620016







CHEMICAL COMPOSITION OF THE MATERIAL :- 30XH2MØA-a			
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.

HEAT-TREATMENT PROCESS CHART

NOMENCLATURE AND IDT. NO:	STEEL GRADE	TYPE OF OPERATION	EQUIPMENT	TEMP. IN °C	TIME	COOLING MEDIUM	FIXTURE	HARDNESS (INSPN. %)
HOLDER C 1026	30XH2MØA	NORMALIZATION HEATING	ELECTRIC CHAMBER FURNACE	850-870	3 HRS.	AIR	ON TRAY	3% FROM A BATCH 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 & IN AIR	ON TRAY	

1. DRESS THE PLACE FOR CHECKING HARDNESS
2. CHECK HARDNESS

INDIGENOUS MATERIAL : BS 970 Pt-1-83 Gr. 826 M31-Z OR
~~IS:5517 Gr 30 Ni10 Cr3 Mo6 LRS 63 mm~~
AUTHORITY : CQA(METALS) ICHAPUR LY.NO. MQA-3/TS/811 DT 6/11-6-97

4. THE FINISHED COMPONENT SHOULD ATTAIN A HARDNESS RANGE OF HRC3 39.5 TO 46.5 AFTER FINAL HEAT TREATMENT

5. INDIGENOUS MATERIAL : BS:970 PART-1-83 GRADE 826 M31 IN "Z" CONDITION (OR) IS:5517/93 DESIGN. 30 Ni10 Cr3 Mo6. LRS 30mm
IS: 5517 Gr. 31 Ni.10 Cr 3 Mo 6 LRS 30mm.

6. 2. A SEPERATE TEST SAMPLES IS TO BE HEAT TREATED AND TESTED IN "Z" CONDITION.

1. DIMENSIONS ARE IN mm.
2. HEAT-TREATMENT :- NORMALIZATION & HIGH TEMPERING HARDNESS HB 255 MAX.
3. DE-SCALING :- PICKLING.
4. DISPLACEMENT IN PARTING LINE SHOULD NOT BE MORE THAN 0.5 mm
5. REMAINDER FLASH ALONG DIE-PARTING LINE SHOULD NOT EXCEED 0.8 mm
6. FIRST ANGLE PROJECTION
7. CURVATURE OF ROD SHOULD NOT EXCEED 0.8 mm
8. SCALE :- 1:1
9. SURFACE DEFECTS SHOULD NOT EXCEED 0.5 mm DEPTH
10. UN-SPECIFIED DRAFT ANGLE 7°
11. UN-SPECIFIED RADII 2.5mm
12. ALLOWANCES ARE AS PER II CLASS GOST 7505-74 M2
13. TOLERANCES ARE AS PER II CLASS GOST 7505-74 C2 AND AS FOLLOWS

VERTICAL	+1.5 -0.7
HORIZONTAL	+1.7 -0.9

DIE FORGING BY HAMMER

14. NUMBER OF PARTS OBTAINED FROM ONE DIE FORGING : 1 PIECE
15. DIMENSIONS BETWEEN BRACKETS ARE FOR MACHINING
16. STAMP CONVENTIONAL STAMP OF BLACK SMITH 1105 GOST 2930-62
17. MATERIAL :- 30XH2MØA-a OST 3-98-80
18. RAW MATERIAL SIZE :- $45\phi^{-0.4}_{-0.7}$ x165 ±15 LONG (HOT ROLLED)
19. WEIGHT OF THE FORGING 1.50 Kgs.
20. DIMENSIONS MARKED * ARE TECHNOLOGICAL ALLOWENCE
21. DIMENSIONS MARKED *1ARE GIVEN FOR INSPECTION
22. QUALITY OF ANGLE FILLING IN LAP IS NOT TO BE CHECKED ②

	⑥ 006/98 dt 24-4-98		
E⑤	DA NO 052/97		11/8/97
UPDATES	DA No. 22/97 dt. 22-8-97		

D④	DA No. 66/96 Dt 22/7/96	22/7/96
C③	DA. No. 023/96 Dt 12-4-96	Sadhi/12-4-96
B②	DA. NO. 52/92, Dt 26-10-92 NOTE NO. 22 ADDED RADIUS R3 & R12.5 ADDED	26/10/92
①	STORE DRG. NO ADDED	25/3/92
SL. NO	AMENDMENTS	SIG & DATE

VETTED FOR MATERIAL ONLY
AS PER LAST DC (1) No. 18426-W
DT 28.2.98.

FOR COMPONENT NO ①
2A42-01-026 - HOLDER

Sadhi 18/05/88	Hariharaman	6/'88		10/6/88
REDRAWN	CHECKED	APPROVED	I/C. PROJ.	WM/PROJ.

ORDNANCE FACTORY
TIRUCHIRAPALLI-16

DRG NO: ⑤
64 C 1026 200 AE3

ALB. NO. 363/11