

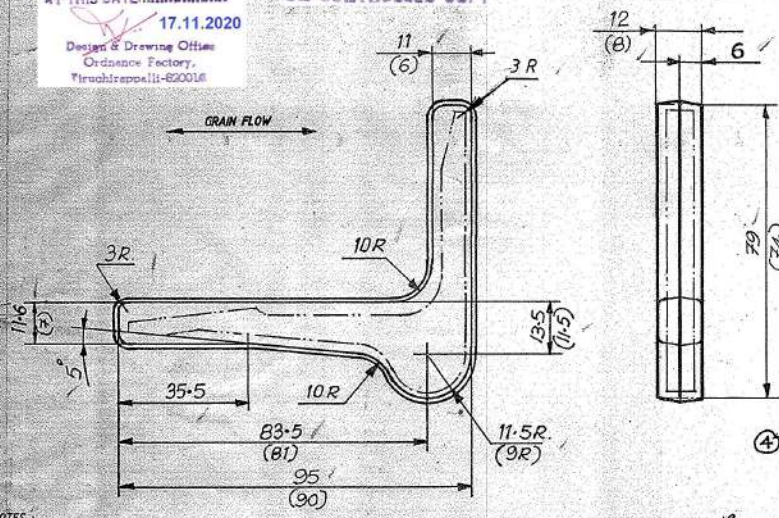
CERTIFIED CORRECT COPY OF APPROVED DRAWINGS AT THIS DATE..... 17.11.2020
 Design & Drawing Office
 Ordnance Factory,
 Tiruchirappalli-620016

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FORGING DRAWING

CHEMICAL COMPOSITION OF THE MATERIAL :- 30X2M6A-a

C	0.21 - 0.34	Si	0.17 - 0.37
Mn	0.30 - 0.60	Cr	0.6 - 0.9
Ni	2.0 - 2.40	Mo	0.2 - 0.3
V	0.10 - 0.18	P	0.025 MAX.
S	0.025 MAX.	Cu	0.30 MAX.



HEAT-TREATMENT PROCESS CHART

NOMENCLATURE AND IDT. NO.	STEEL GRADE	TYPE OF OPERATION	EQUIPMENTS	TEMP. IN °C	TIME	COOLING MEDIUM	TEXTURE	HARDNESS IN MPa
TRIGGER LEVER	30X2M6A	NORMALIZATION HEATING	ELECTRIC CHAMBER FURNACE	850-870	4 HOURS	AIR	ON TRAY	3% BUT NOT LESS THAN 3 PIECES
C 5053		HIGH TEMPERING HEATING	ELECTRIC CHAMBER FURNACE OR ELECTRIC SHAFT FURNACE	860-880	5 HOURS	WITH FURNACE UPTO 500°C AIR	ON TRAY	

1. DRESS THE PLACE FOR HARDNESS TESTING
 2. TEST HARDNESS

1-2 PIECES FROM A BATCH ARE SUBJECTED TO GRAIN FLOW TEST BY THE METALLURGIST'S LABORATORY

- NOTES -
- DIMENSIONS ARE IN mm.
 - FIRST ANGLE PROJECTION
 - SCALE :- 1:1
 - HEAT-TREATMENT :- NORMALIZING & HIGH-TEMPERING HARDNESS HB 255 MAX.
 - DE-SCALING - PICKLING
 - DISPLACEMENT IN PARTING LINE SHOULD NOT BE MORE THAN 0.4 mm.
 - REMAINDER FLASH ALONG DIE PARTING LINE SHOULD NOT BE EXCEED 0.5 mm.
 - ROD CURVATURE SHOULD NOT EXCEED 0.6 mm.
 - SURFACE DEFECTS :- SHOULD NOT EXCEED 0.6 mm IN DEPTH
 - UN-SPECIFIED DRAFT ANGLE SHOULD NOT BE MORE THAN 7°.
 - UN-SPECIFIED RADII 1 mm.
 - ALLOWANCES ARE AS PER 11 CLASS GOST 7505-74
 - TOLERANCES ARE AS PER 11 CLASS GOST 7505-74 AND AS FOLLOWS
- VERTICAL $\frac{1}{16}$
 HORIZONTAL $\frac{1}{16}$
 DIE FORGING BY HAMMER
- NUMBER OF PARTS OBTAINED FROM ONE DIE FORGING ONE PIECE.
 - DIMENSION BETWEEN BRACKETS ARE FOR MACHINING
 - STAMPING OF CONVENTIONAL SEAL OF BLACK SMITH 110 5-B Gost 2930-62
 - WEIGHT OF THE FORGING 0.241 Kgs.

18. RAW MATERIAL SIZE - $36\phi \times 69^{+2}$ LONG (HOT ROLLED)
 19. MATERIAL - 30X2M6A-a OST-3-98-80

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

INDIGENOUS MATERIAL : BS 970 Pt.1-83 Gy 826 M31 1'2" CONDITION
 (OR) IS : 5517-93 DESIGN/31 NI 10 CY 3 MO6 LRS 63 mm (TENSILE STRENGTH 1550 MPa)
 INDIGENOUS MATERIAL : BS 970 Pt.1 83 Gy 826 M31 1'2" OR IS 5517, 30 NI 10 CY 3 MO6, LRS 63 mm. COMPONENT SHALL BE HEAT TREATED TO HARDNESS SHOWN IN THE DRAWING. AUTHORITY : CQA (METALS) ICHAPUR
 LY.NO MQA-31S/B Dt. 21-6-1997

A SEPARATE TEST SAMPLE IS TO BE HEAT TREATED AND TESTED IN '2' CONDITION

D	DA NO. 044197 Dt. 30/6/97
U	DA NO. 008197 Dt. 4/2/97
C	DA NO. 058196 Dt. 27/6/96
B	DA NO. 020/95 Dt. 2-4-95
S	DA NO. 006/98 Dt. 24-4-98

VETTED FOR MATERIAL ONLY AS PER CAST DOCUMENT LETTERING MRA/TS/B dt. 21-6-97

Signature: *M. Srinivasan*
 Sr. Supt.
 Tiruchirappalli

FOR COMPONENT NO
 LEVER MANUAL CONTROL
 2A42-05-053 - TRIGGER LEVER

Redrawn	Checked	Approved	I/C PROJ.	WM/PROJ.	ORDNANCE FACTORY TIRUCHIRAPALLI-16	DRG NO.: 64 C 5053 200 D3
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ALB. NO. 364/37