

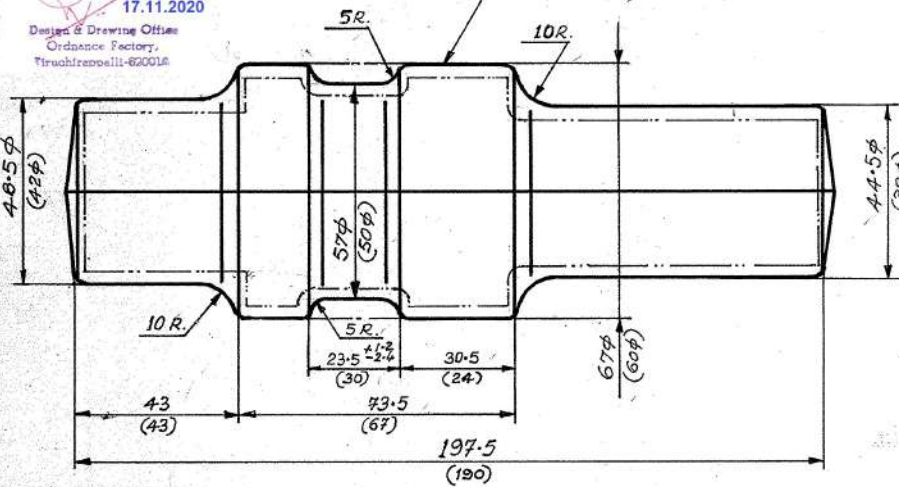
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FORGING DRAWING

Design & Drawing Office
Ordnance Factory,
Tiruchirappalli-620016

PLACE FOR TESTING HARDNESS



CHEMICAL COMPOSITION OF THE MATERIAL :- 30XH2M0A-3

C	0.27-0.34	Si	0.17-0.37
Mn	0.3-0.6	P	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	CODING MEDIUM	FIXTURE	HARDNESS INSPEL %
GAS CYLINDER C 2035	30XH2M0A	NORMALIZING HEATING	ELECTRIC CHAMBER FURNACE	850-870	4 HRS.	AIR	ON TRAY	3% BUT NOT LESS THAN 3 FEELS.
		HIGH TEMPERING HEATING	ELECTRIC CHAMBER FURNACE OR ELECTRIC SHAFT FURNACE	660-680	5 HRS.	WITH FURNACE UP TO 500°C AND IN AIR	ON TRAY	

1. DRESSING OF PLACES FOR CHECKING HARDNESS
2. HARDNESS CHECKING

- DIMENSIONS ARE IN mm.
- HEAT-TREATMENT NORMALIZATION AND HIGH TEMPERING HARDNESS HB 255 MAX.
- DE-SCALING - PICKLING
- DISPLACEMENT IN PARTING LINE SHOULD NOT BE MORE THAN 0.3 mm
- REMAINDER FLASH ALONG DIE-PARTING LINE SHOULD NOT EXCEED 1.0 mm
- SCALE :- 1:1
- CURVATURE OF ROD SHOULD NOT EXCEED 1.0 mm
- FIRST ANGLE PROJECTION
- SURFACE DEFECTS, SHOULD NOT EXCEED 0.9 mm DEPTH
- UN-SPECIFIED DRAFT ANGLE 7°
- UN-SPECIFIED RADII 2.5mm
- ALLOWANCES ARE AS PER II CLASS GOST 7505-74 M2
- TOLERANCES ARE AS PER II CLASS GOST 7505-74 C2 AND AS FOLLOWS

- MATERIAL :- 30XH2M0A OST 3-98-80
- RAW MATERIAL SIZE :- 60φ x 230±2 LONG (HOT ROLLED)
- WEIGHT OF THE FORGING 3.640 Kgs.

INDIGENOUS MATL. :- STEEL GRADE 826 M31 CONDITION 'Z' S&P CONTENT 0.025% EACH MAX. TO BS: 970 Pt-1-1983. 40 Ni 2Cr Mo 28 Ni S: 436T-6T HARDENED TO ACHIEVE THE HARDNESS 41-5 TO 46-5 HRC STEEL GRADE 817 M40 CONDITION 'Z' S&P CONTENT 0.025% EACH MAX TO BS: 970 Pt-1-1983. Pt-3-1991

VETTED FOR MATERIAL ONLY AS PER LAST DC (1) No. 18791/W DT 13-9-96

Sr. Quality Assurance Officer (Quality)
Tiruchi 3palli-629316

- VERTICAL +0.18
- HORIZONTAL -0.12
- DIE FORGING BY HAMMER
- NUMBER OF PARTS OBTAINED FROM ONE DIE FORGING : 1 PIECE
- DIMENSIONS BETWEEN BRACKETS ARE FOR MACHINING
- STAMP CONVENTIONAL STAMP OF BLACKSMITH M0 5 GOST 2930-62

DA NO.	006/98	DI.	24-4-98
DA NO.	22/97	DR.	23-3-97
DA NO.	145/94	DE.	19-11-94
ALT. MATL. ADDED.			
STORE DRG. NO ADDED			
AMENDMENTS			

FOR COMPONENT NO 2A42-02-035-GAS CYLINDER

Redrawn	Checked	Approved	I/C. PRJ	WM/PROJ	ORDNANCE FACTORY TIRUCHIRAPALLI-16	DRG NO: 64 C 2035 200 Q 3
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ALB. NO. 363/40