



- NOTES:-
1. DIMENSIONS ARE IN mm.
  2. SCALE - NOT TO SCALE
  3. FIRST ANGLE PROJECTION
  4. HEAT-TREATMENT - NORMALIZING AND HIGH TEMPERING / HARDNESS HB 255 MAXIMUM
  5. DISPLACEMENT IN PARTING PLANE SHOULD NOT EXCEED 0.8 mm
  6. DE-SCALING - PICKLING
  7. REMAINDER OF FLASH ON DIE PARTING LINE SHOULD NOT EXCEED 1.1 mm.
  8. ROD CURVATURE SHOULD NOT EXCEED 0.8 mm.
  9. SURFACE DEFECTS SHOULD NOT EXCEED 1.0 mm IN DEPTH.
  10. UNSPECIFIED DRAFT ANGLE 7°
  11. UNSPECIFIED RADII 2.5mm
  12. ALLOWANCES ARE AS PER CLASS I GOST 7505-74 M2.
  13. TOLERANCES AS PER CLASS II GOST 7505-74 C2, AND AS FOLLOWS  
VERTICAL  $\pm 0.15$   
HORIZONTAL  $\pm 0.1$  (DIE FORGING OR HAMMER)
  14. NUMBER OF PARTS OBTAINED FROM ONE FORGING - ONE PIECE
  15. DIMENSIONS GIVEN IN BRACKET ARE FOR MACHINING.
  16. WEIGHT OF THE FORGING 4.910 Kgs  $\phi 90 \times 118 \pm 2$  /  $\phi 75 \times 170 \pm 2$
  17. RAW MATERIAL SIZE - 85 $\phi$  x 2132 LONG (HOT ROLLED)
  18. MATERIAL - 30X12M9A-a OST 3-98-80
  19. MARKING BY BLACKSMITH'S STAMP, LETTERING NO 5-8 Gost 2930-62

FORGING DRAWING

VERIFIED FOR MATERIAL ONLY  
AS PER LAST DC (1) No. 1177/24 (21)  
MCA 3/17/13 dt. 21.6.97  
(MNV) SRAJADISHI  
Sr. Scientific Officer  
Sr. Quality Assurance Unit (A) Control  
Tiruchirapalli-620016.

CHEMICAL COMPOSITION OF THE MATERIAL 30X12M9A-a

C	0.32 - 0.34	Si	0.17 - 0.37
Mn	0.3 - 0.6	Cr	0.6 - 0.9
Ni	2.0 - 2.6	Mo	0.2 - 0.3
V	0.10 - 0.18	P	0.025 MAX.
S	0.025 MAX.	Cu	0.3 MAX.

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

HEAT-TREATMENT PROCESS CHART

NOMENCLATURE AND IDT. NO	STEEL GRADE	TYPE OF OPERATION	EQUIPMENT	TEMP. IN °C	TIME	COOLING MEDIUM	FIXTURE	HARDNESS
SLIDER C 3001	30X12M9A	NORMALIZING HEATING	ELECTRIC CHAMBER FURNACE	850-870	4 HRS.	AIR	ON TRAY	3% FROM A BATCH BUT NOT LESS THAN 3 PIECE INSPEL. 5%
		HIGH TEMPERING HEATING	ELECTRIC CHAMBER FURNACE OR ELECTRIC SHAFT FURNACE	660-680	6 HRS.	WITH FURNACE UP TO 500°C THEN IN AIR	ON TRAY	

1 - DRESSING PLACE FOR CHECKING HARDNESS  
2 - CHECKING HARDNESS

INDIGENOUS MATL - STEEL B6970 Pt.1 1983 G. 626 M31 CONDITION 2 S&F CONTANT 0.025% EACH MAX.

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

UN CONTROLLED COPY

17.11.2020  
Design & Drawing Office  
Ordnance Factory,  
Tiruchirapalli-620016

DA No. 2249 dt. 23-3-92	DA No. 2351/13
DA No. 06836 dt 30-7-96	DA No. 307-96
DA No. 70/92 dt. 2-11-92	DA No. 2873/93
DA No. 138 REF. WAS LD REF.	
STORE DRG. NO ADDED	DATE
AMENDMENTS	DATE

D3 DA No.009/16 DK09.11.16 RAW MATL SIZE ADDED (PP)

FOR COMPONENT NO  
2A42 - 03-001 - SLIDER

Subj: 19-5-88	Asst. Insp. In-charge	6/1/88	10/16/88	ORDNANCE FACTORY TIRUCHIRAPALLI-16	DRG NO: 64 C 3001 200 C 3
REDRAWN	CHECKED	APPROVED	V/C PROJ.	WH/PROJ.	D3

ALA-NO-363/52