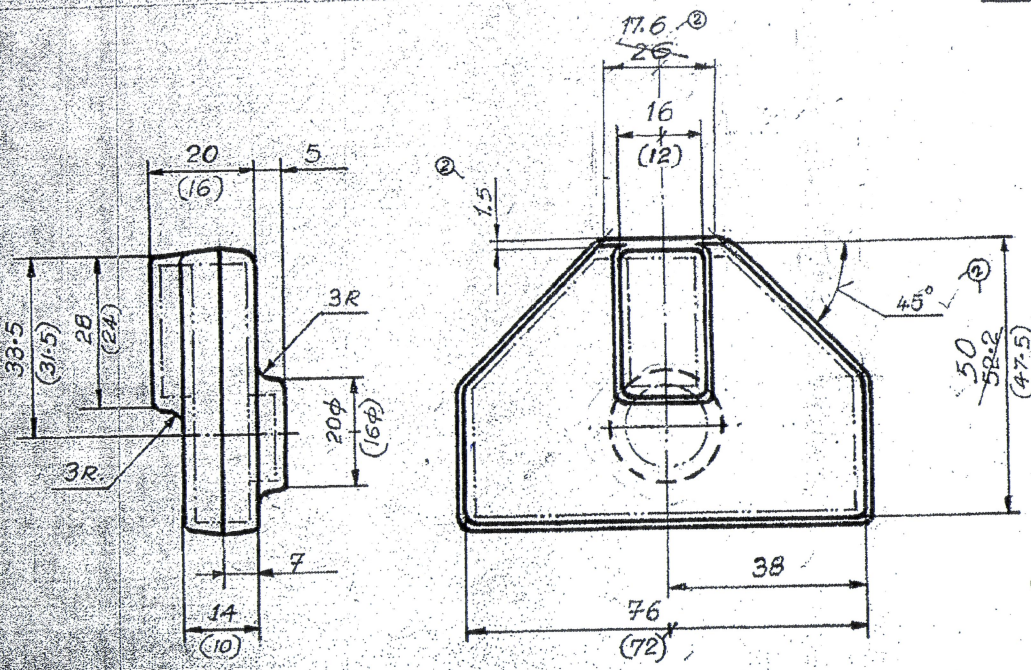
FORGING DRAWING



CHEMICAL COMPOSITION OF THE MATERIAL:- 30XPA			
C	0.28 - 0.33	Si	0.17 - 0.37
Mn	0.50 - 0.80	Cr	1.0 - 1.3
Ni	0.25 - 0.50	S	0.025 MAX.
P	0.025 MAX.	Cu	0.2 MAX.

⑤ ①

FOR COMPONENT NO
2A42-01-005 -STRIP

⑤ INDIGENOUS MATERIAL ; IS 4367-91, 25 Cr 13 Mo 6 M OR IS 5517-93, 25 Cr 13 Mo 6 M. TEST SAMPLES SHALL BE HEAT TREATED AND TESTED TO LRS 63 mm. COMPONENTS SHALL BE HEAT TREATED TO HARDNESS SHOWN IN THE DRAWING AUTHORITY: CQA(METALS), ICHAPUR LY.NO. MQA-3/TS/B Dt. 21-6-1997

HEAT-TREATMENT PROCESS CHART

NOMENCLATURE AND IDT. NO:	STEEL GRADE	TYPE OF OPERATION	EQUIPMENTS	TEMP. IN °C	TIME	COOLING MEDIUM	FIXTURE	HARDNESS INSPN. %
⑤ STRIP C 1005	⑤ 30XPA	NORMALIZATION HEATING	ELECTRIC CHAMBER FURNACE OR PUSHER TYPE FURNACE	850-870	3 HRS. PUSHING DURATION 15 MIN.	AIR	ON TRAY ON TRAY	3% BUT NOT LESS THAN 3 PIECES.

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

⑤ INDIGENOUS MATL. STEEL NO DS: 5901 Dt. I 1983 OF 30XPA IN "X" CONDITION

④ THE FINISHED COMPONENT SHOULD ATTAIN A HARDNESS RANGE OF HRC3 43.5 TO 51.5 AFTER FINAL HEAT TREATMENT

VETTED FOR MATERIAL ONLY
AS PER LAST DO (T) N/Letter No.:
MQA-3/TS/B Dt: 21.6.97
28/7/97
(MRV)
Sr. Scientific Officer
Sr. Quality Assurance Officer
Tiruchirapalli-16

1. DIMENSIONS ARE IN mm
2. SCALE :- 1:1
3. FIRST ANGLE PROJECTION
4. HEAT-TREATMENT :- NORMALIZING. HARDNESS HB. 217 MAXIMUM
5. DE-SCALING :- PICKLING
6. DISPLACEMENT IN PARTING LINE SHOULD NOT BE MORE THAN 0.4 mm
7. REMAINDER FLASH ALONG DIE-PARTING LINE SHOULD NOT EXCEED 0.5 mm
8. CURVATURE OF ROD SHOULD NOT EXCEED 0.6mm.
9. SURFACE DEFECTS :- SHOULD NOT EXCEED 0.8 mm IN DEPTH.
10. UN-SPECIFIED DRAFT ANGLE 7°
11. UN-SPECIFIED RADII 1.5mm
12. ALLOWANCES ARE AS PER III CLASS GOST 7505-74 M1
13. TOLERANCES ARE AS PER II CLASS GOST 7505-74 C2 AND AS FOLLOWS
    VERTICAL $^{+0.8}_{-0.4}$
    HORIZONTAL $^{+0.9}_{-0.5}$
    DIE FORGING 8T HAMMER
14. NUMBER OF PARTS OBTAINED FROM ONE DIE FORGING : 1PIECE
15. DIMENSIONS BETWEEN BRACKETS ARE FOR MACHINING
16. STAMPING OF CONVENTIONAL STAMP OF BLACK SMITH :- LETTERING II 0 5 GOST 2930-62
17. WEIGHT OF THE FORGING 0.400 Kgs.
18. RAW MATERIAL SIZE :- $45\phi^{+0.4}_{-0.7}$ x 51 LONG (HOT ROLLED)
19. MATERIAL :- STEEL 30XPA OST 3-98-80

CONTROLLED COPY
CERTIFIED TO BE A TRUE COPY OF APPROVED
DRAWING DATED 19/1/84
DESIGNING OFFICE,
ORDNANCE FACTORY, TIRUCHIRAPALLI-620 016.

AMEND-MENTS	DESCRIPTIONS/DETAILS	SIG & DATE
C ②	DA No. 008/97 Dt. 4-2-97. DA No. 51/92, Dt. 25-1-92 DIM. 50 WAS. 52.2 DIM. 17.6 & 1.5 ADDED. DIM. 26 DELETED	4-2-97
①	STORE DRG. NO. ADDED	
B	DIM. 27.2 DELETED. DIM. 25 ±0.5 DELETED DIM. 25 ADDED. ST. & ANGLE TOL ADDED	15/1/91
A ③	DA NO 044/97 Dt 30/6/97	30/6/97
E ④	DA NO. 56/96 Dt 26/6/96	26/6/96
D ②	DA NO. 022/95 Dt. 12-4-95	12-4-95

Sadhi 20/06/88	Selvaraju	6/'88		29/6/88	ORDNANCE FACTORY TIRUCHIRAPALLI-16	DRG NO: 64 C 1005 200 F 3
REDRAWN	CHECKED	APPROVED	I/C. PROJ	WM/PROJ		ALB. NO. 353, SHT. NO. 5