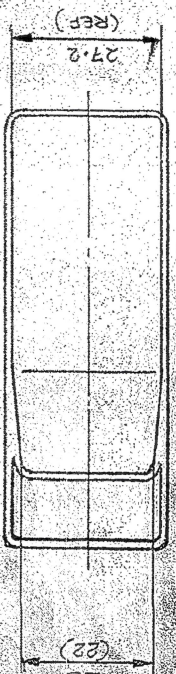
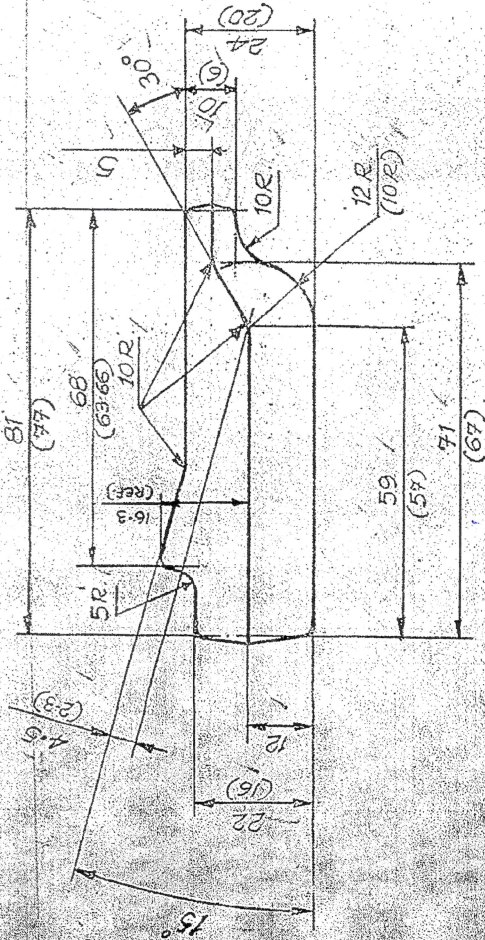


FORGING DRAWING



- NOTES:-**
- DIMENSIONS ARE IN mm.
 - FIRST ANGLE PROJECTION
 - SCALE - 1:1
 - HEAT-TREATMENT - NORMALIZING & HIGH-TEMPERING. HARDNESS HB 255 MAX.
 - DE-SCALING - SHOT-BLASTING
 - DISPLACEMENT IN PARTING LINE SHOULD NOT BE MORE THAN 05 mm.
 - REINFORCER FLASH ALONG DIE PARTING LINE SHOULD NOT BE EXCEED 0.7 mm.
 - SURFACE DEFECTS - SHOULD NOT EXCEED 0.5 mm IN DEPTH.
 - UN-SPECIFIED DRAST-ANGLE 70°
 - UN-SPECIFIED RADIUS mm.
 - ALLOWANCES ARE AS PER J1 CLASS GOST 7505-74 M2
 - TOLERANCES ARE AS PER J1 CLASS GOST 7505-74 C2. AND AS FOLLOWS
 - VERTICAL ± 0.03
 - HORIZONTAL ± 0.02
 - DIE FORGING ON HAMMER
 - NUMBER OF PARTS OBTAINED FROM ONE DIE FORGING ONE PIECE.
 - NUMBER BETWEEN BRACKETS ARE FOR MACHINING
 - STAMPING OF CONVENTIONAL SEAL OF BLACK SMITH NO-5 GOST 2930-62
 - WEIGHT OF THE FORGING 0.300 Kgs. 0.400 Kg

17 RAW MATERIAL SIZE $308.27 \times 90.2 \times 10$ LONG (HOT ROLLED)

18 MATERIAL - 30XH2M9A-a OST 3-98-80

APPROVED BY: *[Signature]* 19/11/86

ENGINEERING OFFICE

ORDNANCE FACTORY, TIRUCHIRAPALLI-62

CHEMICAL COMPOSITION OF THE MATERIAL - 30XH2M9A

C	0.27 - 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.

3-91 (4)

INDIGENOUS MATERIAL: BS 970 PL-1-B-G2 826 MBI COND. 2 (OR) IS 5517-93 DESIGN 31 NI10 CYS M06 LRS 63 mm (TENSILE STRENGTH 1550 MPa.)

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

AUTHY: GRAM LT. NG. MGA-3/73/A DT. 2-3-92.

HEAT-TREATMENT PROCESS CHART

NOMENCLATURE AND IDT. NO.:	STEEL GRADE	TYPE OF OPERATION	EQUIPMENTS	TEMP. IN °C	TIME	COOLING	ON TRAY	9% BUT NOT LESS THAN
SEAR STOP.	30XH2M9A	NORMALIZATION HEATING	ELECTRIC CHAMBER FURNACE	850-870	3 HOURS	AIR	ON TRAY	FIXTURE
C 5029		HIGH-TEMPERING HEATING	ELECTRIC CHAMBER FURNACE OR ELECTRIC SHAFT FURNACE	660-680	5 HOURS	WITH FURNACE UP TO 500°C	ON TRAY	AIR

1. DRESS THE PLACE FOR HARDNESS TESTING

2. TEST HARDNESS

1-2 PIECES FROM A BATCH ARE SUBJECTED TO GRAIN FLO BY THE METALLURGISLABORATORY.

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

VERIFIED FOR MATERIAL ONLY AS PER LAST DC (I) No. 18291.W

DATE: 19/11/86

[Signatures]

Mr. S. [Signature] (Officer)
Sr. Quality Assurance Executive (A/Insr)
Tiruchirappalli-620015.

DA No. 005/88	DT. 24-6-96	88	24 (4/1)
DA No. 024/88	DT. 23-3-97	88	23 (1/7)
DA No. 058/96	DT. 27/1/96	88	27 (1/8)
DA No. 027/85	DT. 13-2-95	88	13 (4/3)
STORE DRG. NO ADDED	11/04/85A		
AMENDMENTS	5/8		
SL. NO	S/O & DATE		

FOR COMPONENT NO 2A42-05-029 -SEAR

ORDNANCE FACTORY	DRG. NO. 64 C 5029 200 C3
TIRUCHIRAPALLI-16	
WM/PROJ.	1/16/86
APPROVED	6/1/88
CHECKED	<i>[Signature]</i>
DRAWN	<i>[Signature]</i>

ALB. No. 366/82