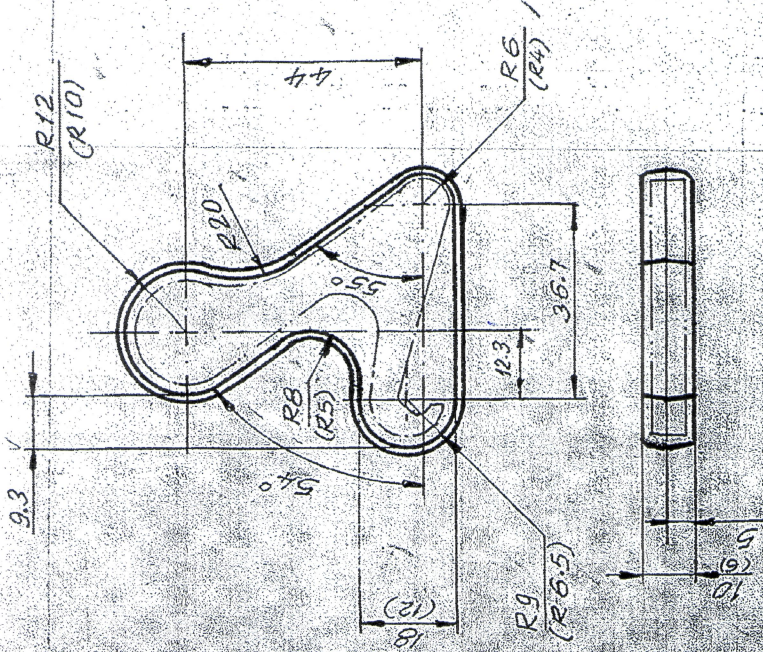


CHEMICAL COMPOSITION OF THE MATERIAL - 30XHZM04-a

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.

FORGING DRAWING



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

HEAT-TREATMENT PROCESS CHART

NOMENCLATURE AND IDT. NO.	STEEL GRADE	TYPE OF OPERATION	EQUIPMENTS	TEMP. IN °C	TIME	COOLING	HARDNESS
TIE ROD C 5056	30XHZM04	NORMALIZATION HEATING	ELECTRIC CHAMBER FURNACE	650-870	3 HOURS	MEDIUM AIR	ON TRAY
		HIGH TEMPERING HEATING	ELECTRIC CHAMBER FURNACE OR ELECTRIC SHAFT FURNACE	660-680	5 HOURS	WITH FURNACE UP TO 500°C AIR	ON TRAY

- DRESS THE PLACE FOR HARDNESS TESTING
- TEST HARDNESS

18. RAW MATERIAL SIZE - 260⁶⁰ X 45 LONG (HOT ROLLED)
19. MATERIAL - 30XHZM04-a OST 3-98-80
20. STAMP CONVENTIONAL STAMP OF BLACK SMITH 1705 GOST 2930-62

INDIGENOUS MATERIAL: BS 970 Pt 4-83 Gde 826 M 31 (IN 2) COND (OR) IS: 5517-93 DESIGN 31 NILO CY3 M06 LRS 63 mm (TENSILE STRENGTH 550 MPa)

1 SEPARATE TEST SAMPLE IS TO BE HEAT TREATED AND TESTED IN 2 CONDITION AUTHY. COAM. LY. NO. MRA-3/TS/5 DT. 2-5-97

- NOTES:
- DIMENSIONS ARE IN mm
 - FIRST ANGLE PROJECTION
 - SCALE - 1:1
 - HEAT-TREATMENT - NORMALIZING & HIGH-TEMPERING HARDNESS HB 255 MAX.
 - DE-SCALING - PICKLING OR SHOT-BLASTING
 - DISPLACEMENT IN PARTING LINE SHOULD NOT BE MORE THAN 0.5 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 20 mm IN DEPTH
 - UNSPECIFIED DRAFT ANGLE SHOULD NOT BE MORE THAN 7°
 - UNSPECIFIED RADI 2 mm.
 - TOLERANCES ARE AS PER I CLASS GOST 7505-74 C2 AND AS FOLLOWS -
 - VERTICAL ±0.9
 - HORIZONTAL ±0.5
 - DIE FORGING BY HAMMER
 - NUMBER OF PARTS OBTAINED FROM ONE DIE FORGING - ONE PIECE
 - DIMENSION BETWEEN BRACKETS ARE FOR MACHINING.
 - DIMENSIONS MARKED THUS ARE FOR REFERENCE
 - WEIGHT OF THE FORGING 0.350 KGS

APPROVED FOR MATERIAL ONLY
AS PER LAST D.O. No 18225/W
DT. 26-2-96
Sr. Scientific Officer
Sr. Quality Assurance Engg. (A/Forms)
Tiruchirappalli-620016.

F3 DA No. 005116, Dt. 04.05.16 PP

DA No.	006138	Dt.	24-4-97
UPDATER	DA No. 028197	Dt.	23-3-97
D4	DA No. 058196	Dt.	6-9-96
C3	DA No. 022185	Dt.	04-4-97
B2	DA No. 715192	Dt.	05-11-92
SL NO	STORE DRG. NO ADDED	106 8 0178	

FOR COMPONENT NO 2A42-05-056 - CONNECTING LINK RIGID
DRG NO: 64 C 5056 200 E3 F3

ORDNANCE FACTORY
TIRUCHIRAPALLI-16

Ref. No. 364 Sheet No. 43

APPROVED
CHECKED
RBR/ANW
DGM/PROJ
I/C PROJ