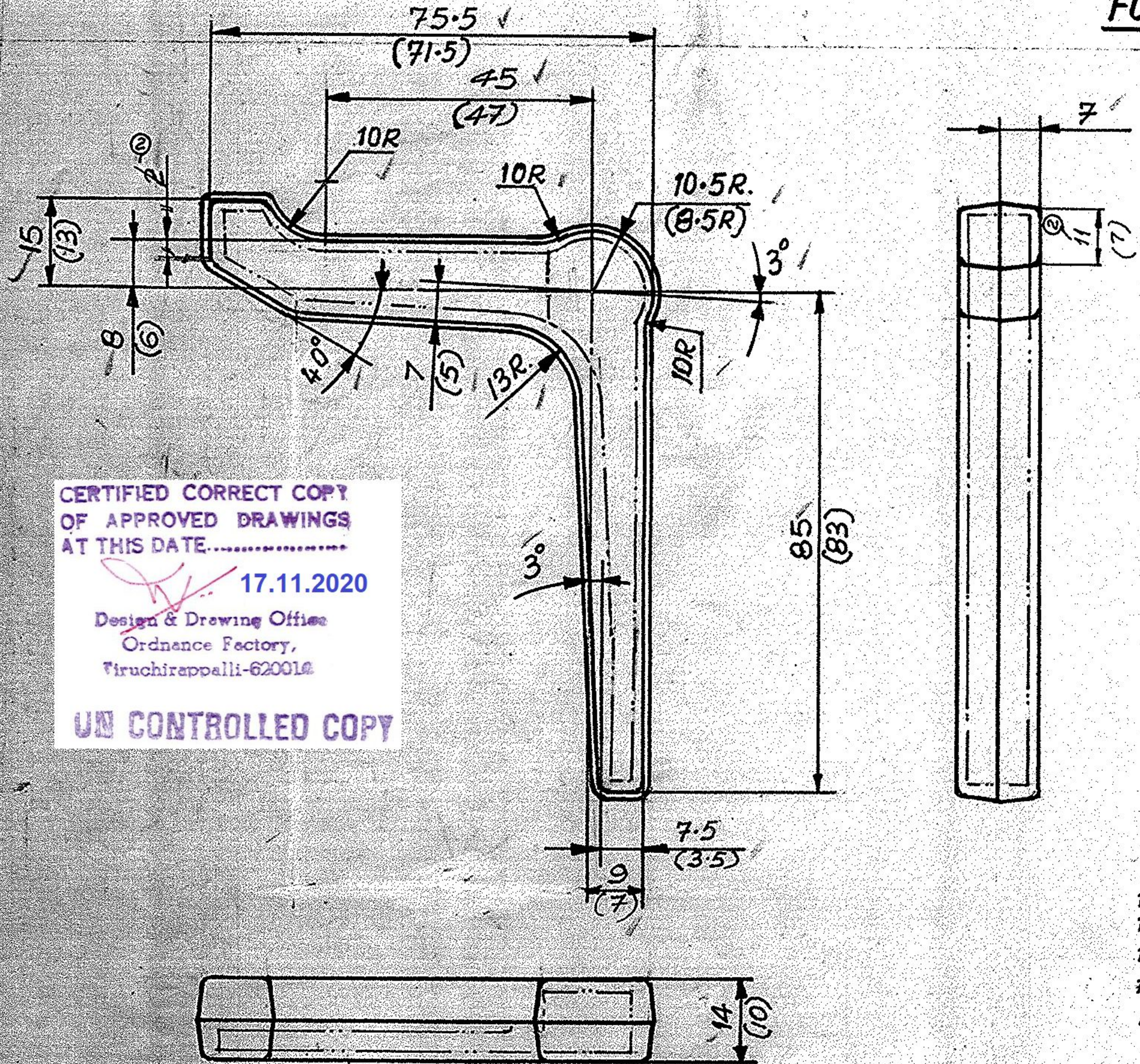


**FORGING DRAWING**

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	0.20 MAX.



CERTIFIED CORRECT COPY OF APPROVED DRAWINGS AT THIS DATE.....  
 17.11.2020  
 Design & Drawing Office  
 Ordnance Factory,  
 Tiruchirappalli-620016  
**UN CONTROLLED COPY**

NOMENCLATURE AND IDT. NO :	STEEL GRADE	TYPE OF OPERATION	EQUIPMENT	TEMP. IN °C	TIME	COOLING MEDIUM	FIXTURE	HARDNESS INSPN. %
LEVER C 5077	30XPA	NORMALIZING HEATING	ELECTRIC CHAMBER OR FURNACE OR PUSHER FURNACE (FURNACE WITH CHARGING DEVICE)	850-870	3 HRS.	AIR	ON TRAY	3%; BUT NOT LESS THAN 3 PICES
1. DRESSING OF PLACES FOR CHECKING HARDNESS 2. CHECKING OF HARDNESS								

**FOR COMPONENT NO 2A42-05-077 LEVER MANUAL CONTROL**

- ALLOWANCES AS PER CLASS II GOST 7505-74 M1
- TOLERANCES AS PER CLASS II GOST 7505-74 C2 AND AS FOLLOWS  
 VERTICAL  $\begin{matrix} +0.9 \\ -0.5 \end{matrix}$   
 HORIZONTAL  $\begin{matrix} +1.1 \\ -0.5 \end{matrix}$   
 DIE FORGING BY HAMMER.
- NUMBER OF PARTS OBTAINED FROM ONE FORGING : 1 PIECE.
- DIMENSIONS GIVEN IN BRACKETS ARE FOR MACHINING
- WEIGHT OF THE FORGING 0.230 Kgs.  $155 \pm 15$
- RAW MAERIAL SIZE :-  $20\phi \begin{matrix} +0.4 \\ -0.5 \end{matrix} \times 145 \pm 15$  LONG (HOT ROLLED)
- MATERIAL :- 30XPA ; OST 3-98-80.
- MARKING BY BLACKSMITH'S STAMP ITO 5 GOST 2930-62

INDIGENOUS MATERIAL: IS 4367-91, 25 Cr 13 MO6 M OR IS 5517, 93, 25 Cr 13 MO6 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

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 DQ (1) No. / LATTER N MQA-3/TS/B dt 21.6.97  
 (MRV JAGADISH)  
 Sr. Selsottio Officer  
 Sr. Quality Assurance Best (Armt)  
 Tiruchi rapalli-620016.

- NOTES :-
- DIMENSIONS ARE IN mm.
  - SCALE :- 1:1
  - FIRST ANGLE PROJECTION.
  - HEAT-TREATMENT :- NORMALIZING; HARDNESS HB 217 MAX.
  - DESCALING :- SHOT BLASTING; PICKLING
  - DISPLACEMENT IN THE PARTIG PLANE SHOULD NOT EXCEED 0.4 mm.
  - REMAINDER OF FLASH ON DIE PARTING LINE SHOULD NOT EXCEED 0.5 mm.
  - ROD CURVATURE SHOULD NOT EXCEED 0.6 mm.
  - SURFACE DEFECTS SHOULD NOT EXCEED 0.3 mm IN DEPTH.
  - UN-SPECIFIED DRAFT ANGLE 7°.
  - UN-SPECIFIED RADII 15 mm.

INDIGENOUS MATERIAL :- BS:970  $\phi$  6-(83) Gdr 817/M40 IN 'Z' CONDITION (OR) IS 5517-93 DESIGN 40 Ni6/Cr4-MO3 LRS 30 mm TENSILE STRENGTH 1500 mpa min.

F 5	DA.No.005/16 Dt.04.05.16 (PP)	C 2	DA.No. 76/92 Dt. 28-10-92 DIM. 2 DELETED. DIM. 11 ADDED.
E 4	DA NO. 044/97 Dt. 30/6/97	1	STORE DRG. NO ADDED
UNATED.	DA No. 008/97 Dt. 4/2/97	B	ANGLE 40° WAS 30°. DIMENSION 50 DELETED. DIMENSION 2 ADDED
D 3	DA.No.56/96 Dt.26/6/96	AMEND-MENTS	DESCRIPTIONS/ DETAILS

Sadhi 16/08/84	Asethraman	6/88	I/C PROJ.	WM/PROJ:	ORDNANCE FACTORY TIRUCHIRAPALLI-16	DRG NO: 64 C 5077 200 F3
REDRAWN	CHECKED	APPROVED				

ALB NO. 364/50