

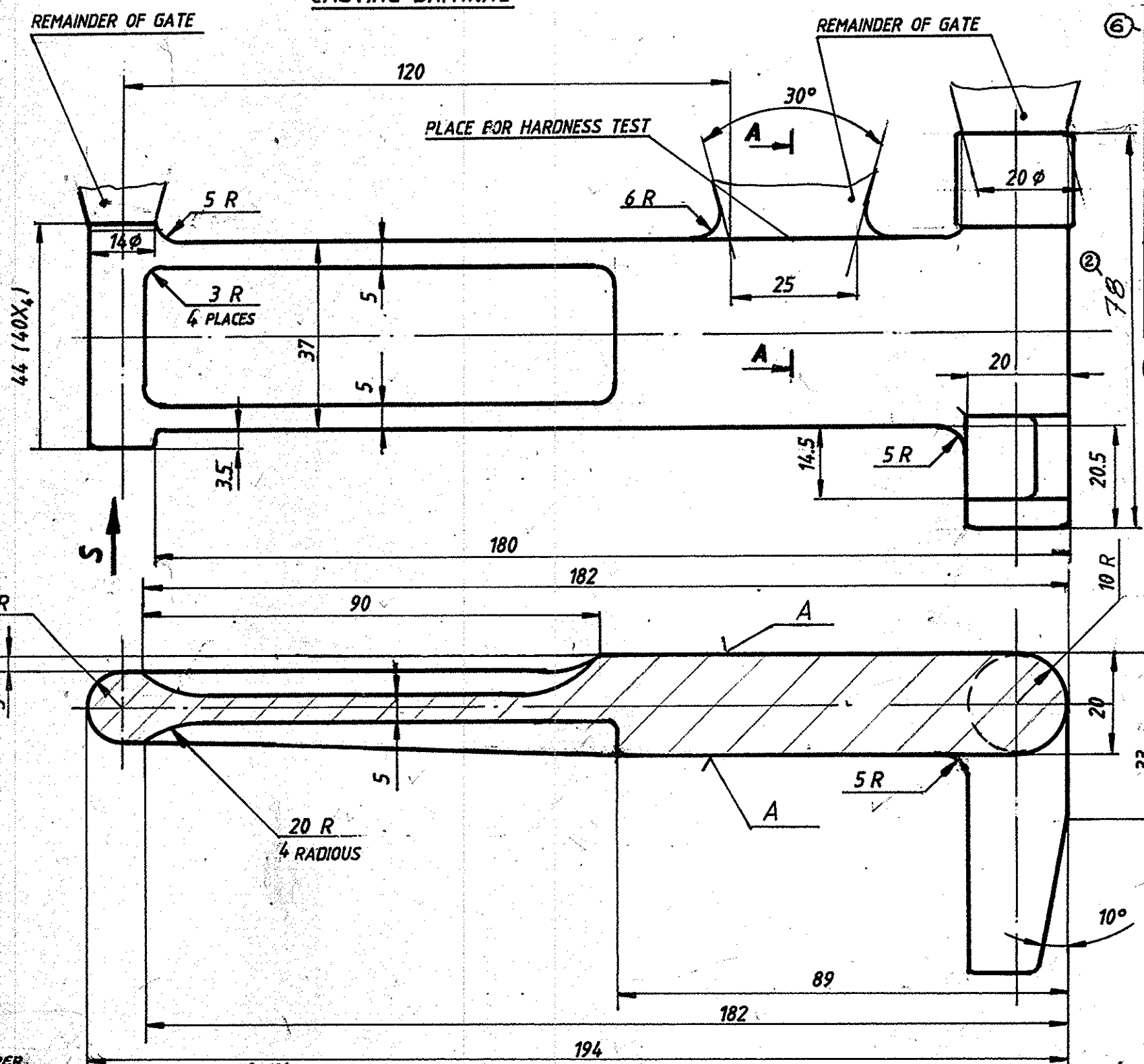
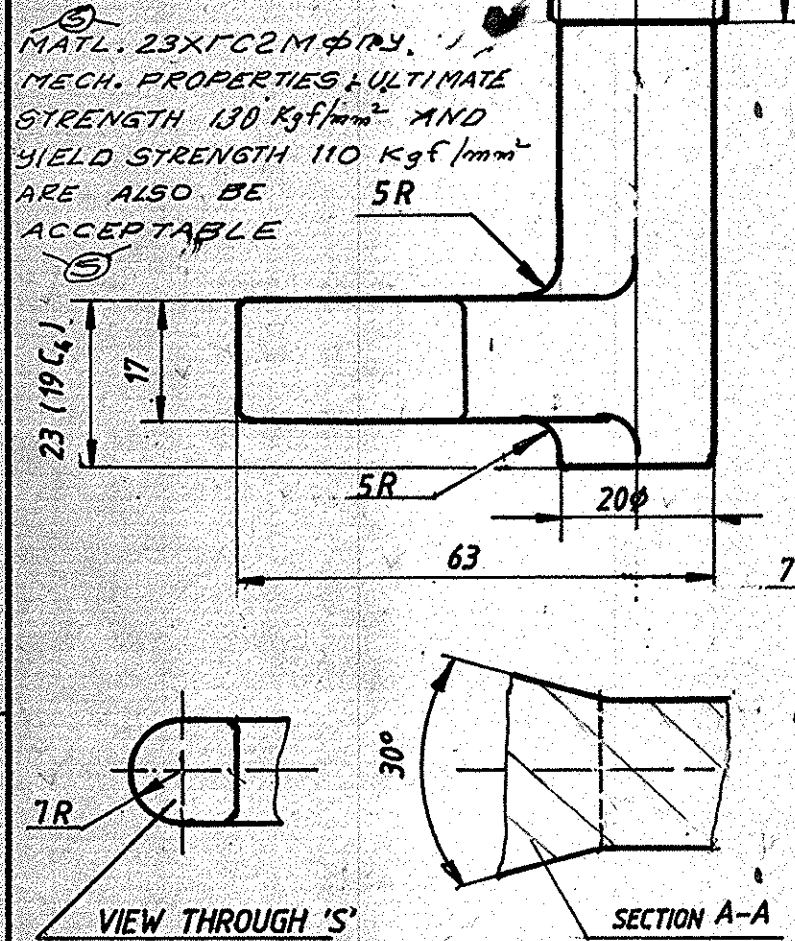
VETTED FOR MATERIAL ONLY

AS PER LAST DC (I) No. *LETTER 24*

*MR. A. S. / S. / B. / H. / 6-97* 220 (190)

*CMAV JAGADISH*  
Sr. Scientific Officer  
Sr. Quality Assurance ~~Officer~~ (Asst)  
Tiruchirappalli-620016.

CASTING DRAWING



CHEMICAL COMPOSITION OF THE MATERIAL 23XГC2MΦRY

C	0.20 - 0.24
Si	1.8 - 2.0
Mn	0.5 - 0.8
Cr	0.6 - 0.9
Mo	0.25 - 0.30
V	0.10 - 0.15
S	0.025 MAX.
P	0.025 MAX.
Ni	1.0 MAX.

MECHANICAL PROPERTIES OF THE MATERIAL 23XГC2MΦRY (MINIMUM)

ULTIMATE STRENGTH 140 Kgf/mm<sup>2</sup>  
YIELD STRENGTH 120 Kgf/mm<sup>2</sup>  
RELATIVE ELONGATION 6%  
IMPACT STRENGTH 4 KgfM/cm<sup>2</sup>

1. DIMENSIONS ARE IN mm.
2. SCALE :- 1:1
3. FIRST ANGLE PROJECTION
4. HARDNESS AFTER PRELIMINARY HEAT-TREATMENT HB 269 MAX.
5. UN-SPECIFIED CASTING RADII 2 mm.
6. PATTERN TAPER (DRAFT ANGLE) AS PER GOST 3212-80
7. CASTING DEFECTS ON NON-MACHINED SURFACES ALLOWED AS PER 0573-4365-79
8. IMPACT STRENGTH SHOULD BE CONTROLLED ON THE SAMPLES.
9. ON THE SURFACE 'A' SHRINKAGE DEPRESSION IS PERMITTED.
10. CORRECTION OF DEFECTS IS PERMITTED.
11. STRAIGHTENING OF CASTING IS PERMITTED.
12. WEIGHT OF THE CASTING :- 1.15 Kgs.
13. MATERIAL :- 23XГC2MΦRY, TYPY 115-78
14. CLEANING :- SAND BLASTING
15. SPECIAL TEST TO BE CARRIED; MAGNETIC FLOW DETECTION AND 'X' RAY TEST.

16. SURFACE FINISH  $Rz 80$  MAXIMUM.  
17. CASTING BELONGS TO GROUP II OST. 3-4365-79 (SPECIAL PURPOSE CASTING)

1. ACCEPTANCE OF CASTING IS CARRIED OUT AS PER GOST 977-75 (PARAGRAPH 2 AND 3) BUT WHILE MANUFACTURING CASTING AS PER MELTED MODELS AS PER OST 3-4365-79  
2. MECHANICAL PROPERTIES OF STEEL IS DETERMINED ON THE SPECIMENS, CUT FROM THE TEST BARS AS PER GOST 977-75 AFTER CARRYING OUT COMPLETE HEAT-TREATMENT PROCESS.  
3. TENSILE TEST IS CARRIED OUT AS PER GOST 1497-73 ON CYLINDRICAL SPECIMEN WITH DIAMETER 10 mm WITH LENGTH 50 mm

TESTS ON SPECIMENS (SAMPLES) ON 5mm DIAMETER WITH 25mm LENGTH IS PERMITTED.  
4. DETERMINATION OF IMPACT STRENGTH IS CARRIED OUT AS PER GOST 9454-78 ON THE SPECIMEN OF TYPE I AT NORMAL TEMPERATURE AND AS PER GOST 9454-78 AT LOW TEMPERATURE.

CASTING BELONGS TO GROUP NO II (SPECIAL PURPOSE CASTINGS) AS PER GOST  
INDI. MATL. AND RADIO GRAPHIC TEST ADDED IN SHEET NO. 2

③ C	DA. NO. 007/95 08. 9-2-95	<i>[Signature]</i>
②	DIM. ADDED DRG. ADVANCED TO B3	<i>[Signature]</i>
①	STORE DRG. NO ADDED	<i>[Signature]</i>
SL. NO	AMENDMENTS	SIG & DATE

SHEETS: 1/2

FOR COMPONENT NO 2A42-05-028-LOWER LINK

CASTINGS AND TEST BARS ARE SUBJECTED TO FOLLOWING HEAT-TREATMENT :-  
a. PRELIMINARY HEAT-TREATMENT (PRIOR TO MACHINING)  
i) NORMALIZING AT TEMPERATURE 1000<sup>±</sup>20°C FOR 1-2 HOURS.  
ii) TEMPERING AT TEMPERATURE 720<sup>±</sup>20°C FOR 4 HOURS.  
FINAL HEAT-TREATMENT (AFTER MACHINING) FOR TEST BARS ONLY, AS PER FOLLOWING SEQUENCE OF OPERATION  
③ HARDENING AT TEMP. 1000<sup>±</sup>20°C SOAKING TIME IS ONE HOUR. COOLING IN OIL.  
④ TEMPERING AT TEMP. 200<sup>±</sup>20°C FOR 4 HOURS  
b. HEATING FOR NORMALIZING AND HARDENING IS TO BE CARRIED OUT WITH PROTECTION OF CASTINGS FROM DECARBURIZATION AND OXIDATION.

<i>Sadhu</i> 15/6/84 REDRAWN	<i>[Signature]</i> CHECKED	08-'88 APPROVED	<i>[Signature]</i> F/M. PROJ	<i>[Signature]</i> AWM/PROJ	ORDNANCE FACTORY TIRUCHIRAPALLI-16	DRG NO: 64 C 5028 250 F 3
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