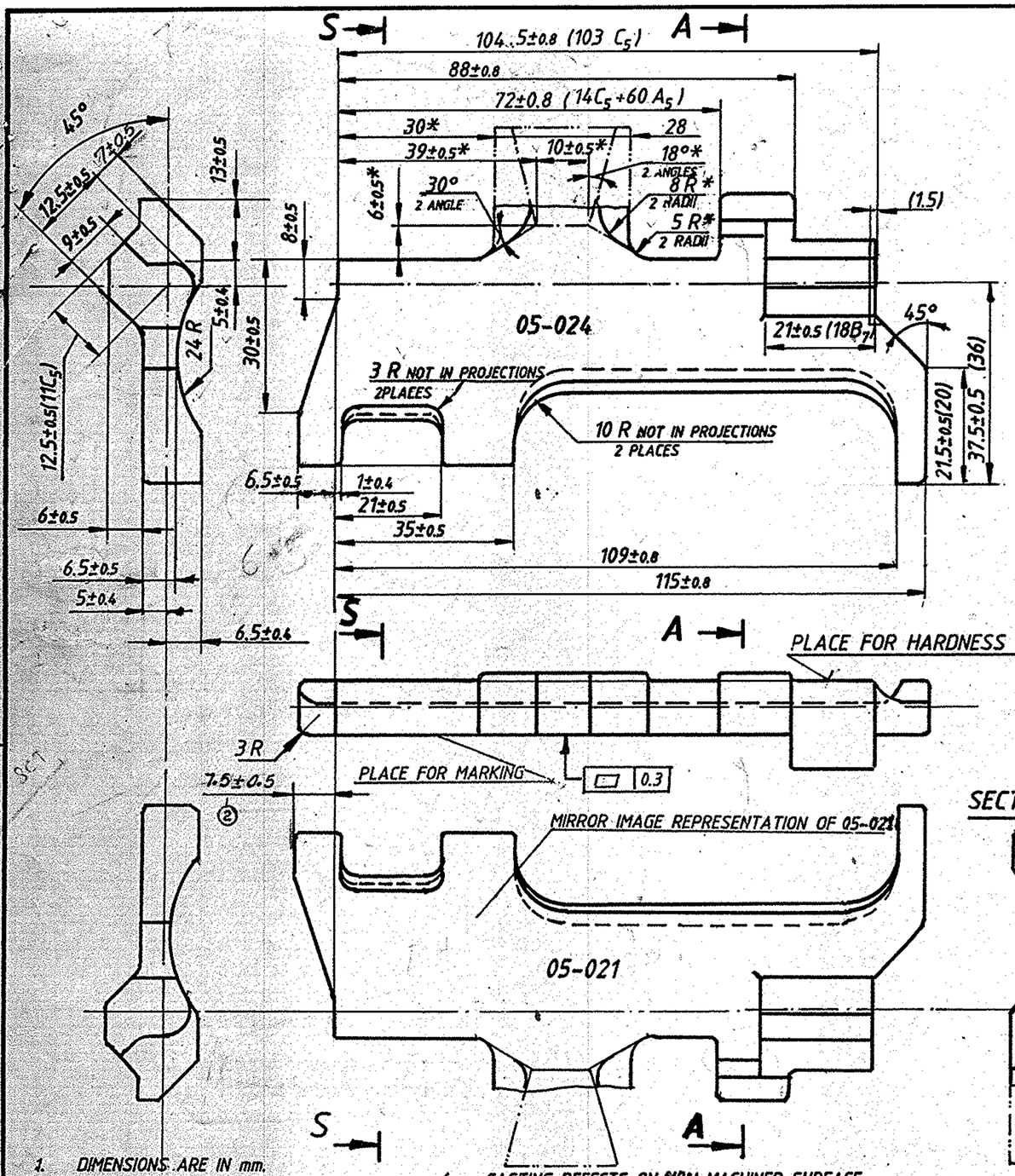
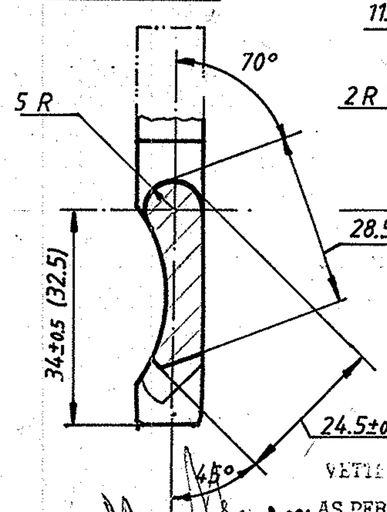
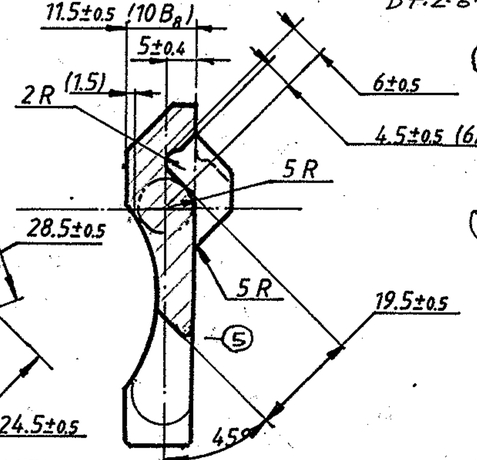
CASTING DRAWING



SECTION S-S



SECTION A-A



⑤ VIEW AT SEC. A-A SHOWN CORRECTLY [DA.NO. 67/95 DT. 2-8-95]

VETTED FOR MATERIAL ONLY

AS PER LAST DC (I) No. 'LETTER' /DTD 2-3-95 DT. 6-7-95

(MANI NAGADISH)
Sr. Scientific Officer
Sr. Quality Assurance Engineer
Tiruchirapalli-620016.

CHEMICAL COMPOSITION OF THE MATERIAL 23X ГС2МФ ПУ	
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
~~Ni~~	~~1.0 Max.~~ ⑤
S	0.025 MAX.
P	0.025 MAX

MECHANICAL PROPERTIES OF THE MATERIAL 23ХГС2МФ ПУ (MINIMUM)	
ULTIMATE STRENGTH	140 Kgf/mm²
YIELD STRENGTH	120 Kgf/mm²
RELATIVE ELONGATION	6%
IMPACT STRENGTH	4 KgfM/cm²

FOR COMPONENT NO ①
2A42-05-021
~~RH FEED~~ PAWLS & ⑥
2A42-05-024
~~LH FEED~~ PAWLS

SL. NO	AMENDMENTS	SIG & DATE
③D	DA. NO. 007/95 dt. 8-2-95	
②	DIM. 7.5±0.5 ADDED FOR 05-021 ORG. ADVANCED. T.D C3	25/9/92
①	STORE DRG. NO ADDED	20/3/92

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. CASTING DEFECTS ON NON-MACHINED SURFACE ARE ALLOWED AS PER OST 3-4365-79.
7. MOULDING ANGLE UP TO 1° AS PER GOST 3212-80.
8. IMPACT STRENGTH SHOULD BE CONTROLLED ON THE SAMPLES.
9. STRAIGHTENING IS PERMITTED
10. CORRECTION OF CASTING DEFECTS IS PERMITTED.
11. * DIMENSIONS NEED NOT BE COTROLLED.
12. MANUFACTURING OF CASTING WITH TWO VARIANTS (TYPES) OF FEEDERS IS PERMITTED
13. WEIGHT OF MATERIAL 0.250 Kgs.
14. MATERIAL :- ~~23ХГС2МФПУ, TYAPM 116-78~~
15. CLEANING :- SAND BLASTING
16. SURFACE FINISH ▽ Rz80 Max.
17. SPECIAL TEST :- MAGNETIC FLAW DETECTION
18. CASTING BELONGS TO GROUP II, OST 3-4365-79 (SPECIAL PURPOSE CASTING)

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 10mm. WITH LENGTH 50mm. 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.

INQI. MATL. AND RADIO GRAPHIC TEST ADDED IN SHEET NO. 2.

④ SHEETS: 1/2

CASTINGS AND TEST BARS ARE SUBJECTED TO FOLLOWING HEAT-TREATMENT :-

a. PRELIMINARY HEAT-TREATMENT (PRIOR TO MACHINING)
   i) NORMALIZING AT TEMPERATURE 1000° ±20° C FOR 1-2 HOURS.
   ii) TEMPERING AT TEMPERATURE 720°±20° C FOR 4 HOURS.

HEATING FOR NORMALIZIING AND HARDENING IS TO BE CARRIED OUT WITH PROTECTION OF CASTING FROM DECARBURIZATION AND OXIDATION

FINAL HEAT-TREATMENT (AFTER MACHINING) TEST BAR ONLY, AS PER FOLLOWING SEQUENCE OF OPERATION. ③ HARDENING AT TEMP. 1000°±20°C SOAKING TIME IS ONE HOUR, COOLING IN OIL. TEMPERING AT TEMP. 200°±20°C FOR 4 HOURS

⑧

19187-W	NOMEN. AMENDED &
OT-05-2009	DG. CAT. NO. ADDED

DA.No.005/16 DL04.05.16 PP

AMENTS.	DESCRIPTIONS & DETAILS	SIG & DATE
B	DIM. 7±0.5 ADDED. DIM. 6.5±0.5 WAS 7±0.5	19/5/95

DRAWING PROVISIONAL

Sadhu 15-6-88			08-'88			
REDRAWN	CHECKED		APPROVED	F/M.PROJ	AWM/PROJ	

ORDNANCE FACTORY
TIRUCHIRAPALLI-16

DRG NO: 64 C 5021 250 I/3 ⑧

ALB. NO. 390; SHEET NO. 286 021 & 05-024.