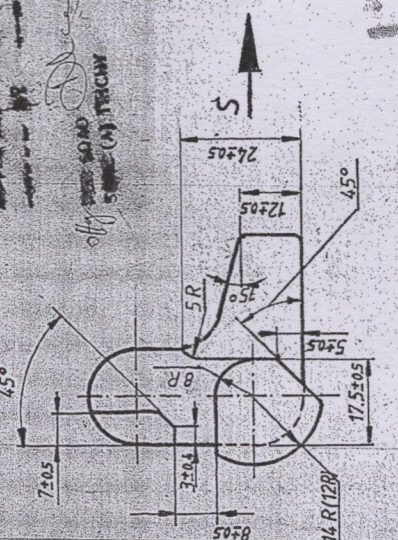
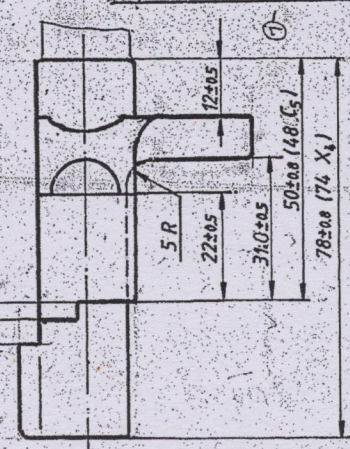
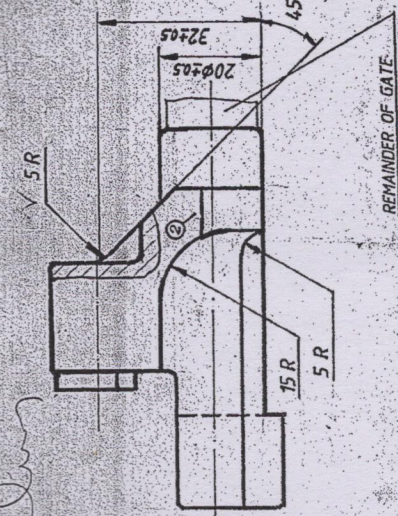
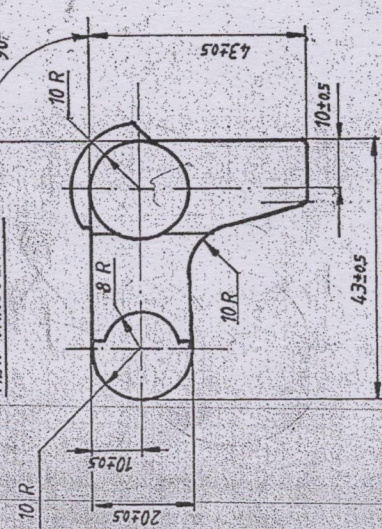


CASTING DRAWING

VIEW THROUGH 'S'



VIEW THROUGH 'A'



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 RADI 1.5 mm.
6. CASTING DEFECTS ON NON MACHINED SURFACES ARE PERMITTED AS PER GOST 3-4365-79
7. IMPACT STRENGTH SHOULD BE CONTROLLED ON THE SPECIMENS IN ACCORDANCE WITH PARA 3.5 AND 3.6 GOST 977-75
8. CORRECTION OF CASTING DEFECTS ARE ALLOWED
9. CASTING DRAFT ANGLE UP TO 1°

UN CONTROLLED COPY
 RETRIEVED COPY OF APPROVED DRAWINGS AT THE DATE 30/01/88
 DESIGNING OFFICE,
 ORDNANCE FACTORY, TIRUCHIRAPALLI-16

TECHNICAL REQUIREMENTS OF CASTING
 BLANKS AS PER OST 3-4365-79
 WEIGHT OF THE CASTING 0.30 Kgs.
 MATERIAL - 30XTC A - OST 3-4365-79
 Rz 80
 SURFACE FINISH V MAX.
 SPECIAL TEST -- MAGNETIC FLAW DETECTION
 CLEANING -- SAND BLASTING
 CASTING BELONGS TO GROUP II, OST 3-4365-79
 STRENGTH CATEGORY KT-55

INDI. MATL. AND RADIOGRAPHIC TEST
 ADDED IN SHEET NO. 2
 SHEETS: 1/2

APPROVED	08-88	OKW 2	AWM/PROJ
CHECKED			F/M. PROJ
REDRAWN			

ORDNANCE FACTORY	DRG-NO:	64 C 5014 250 I 3
TIRUCHIRAPALLI-16		

CHEMICAL COMPOSITION OF THE MATERIAL		MECHANICAL PROPERTIES OF THE MATERIAL	
30XTC A		30XTC A	
C	0.25 - 0.35	ULTIMATE STRENGTH	75 Kgf/mm ²
Mn	0.90 - 1.20	YIELD STRENGTH	55 Kgf/mm ²
Si	0.30 - 0.50	RELATIVE ELONGATION	10-15%
P	0.04 Max.	IMPACT STRENGTH	3 Kgr/cm ²
S	0.04 Max.		
	0.04-0 Max.		

FOR COMPONENT NO. 2A42-05-014-CARRIER

VEILED FOR MATERIAL ONLY
 AS PER I.I.D. 1 / LATER NO. 10
 10/11/75 / 18/11/75
 5/11/76-97
 28/11/75
 28/11/75
 28/11/75

1. ACCEPTANCE OF CASTING IS CARRIED OUT AS PER GOST 977-75 PARAGRAPH TWO AND THREE BUT WHILE MANUFACTURING CASTING AS PER SHELLED MODELLAS 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
 (SAMPLES) IN 5 mm DIAMETER WITH 25 mm LENGTH IS PERMITTED
4. DETERMINATION OF IMPACT STRENGTH IS CARRIED OUT AS PER GOST 9454-78 ON THE SPECIMAN OF TYPE I AT NORMAL TEMPERATURE AND AS PER 9454-78 AT LOW TEMPERATURE

GUIDELINES FOR PROCUREMENT AND INSPECTION OF INVESTMENT CASTING REF. CONTROLLED QUALITY ASSURANCE (METALS) CHAPUR LETTER NO. PRA-1/2011/2 DATED 06.05.94

NOMENCLATURE AND IDT. NO.	STEEL GRADE	TYPE OF OPERATION	EQUIPMENT	TEMP. IN °C	HEATING TIME	COOLING	% OF INSPN.
CARRIER	30XTC A	NORMALIZING OF COMPONENTS AND REFERENCE SAMPLES.	ELECTRIC FURNACE	800-920	TWO HOURS FROM THE TIME FURNACE REACHES 800°C MINIMUM	AIR	3% BUT NOT LESS THAN 3 PIECES

VIEW	VIEW CORRECTED	STORE DRG. NO. ADDED	DESCRIPTIONS/DETAILS	SIG.	DATE
③ C	DAI. NO. 007/95, Dt. 9-2-95.				
②	VIEW CORRECTED				
①	STORE DRG. NO. ADDED				
B	DIMENSION 31±0.5 HAS 30±0.5				

⑨
INDIGENOUS MATERIAL: IS: 10343-1999, GR 18Q WITH THE FOLLOWING CHEMICAL COMPOSITION:-

⑦	C%	Si%	Mn%	Cr%	Mo%	S%	P%
	0.22	0.30	0.50	0.90	0.15	0.035	0.035
	0.29	0.60	0.80	1.20	0.25	Max.	Max.

AND MECHANICAL PROPERTIES AS PER THE SPECIFICATION

~~IS 10343 Gr 18Q 4B~~ AUTHORITY: CQA (METALS) ICHAPUR LR NO.

~~MQA-3/T/S/B/ Dt. 6/11/97~~

⑧ ~~IS 10343 Gr 18Q 4B~~

AUTHORITY: CQA (WEAPONS) JABALPUR, LR. NO.: 2B1/301/CQAW/BMPTI/DPT

RADIOGRAPHIC TEST

dt. 21-04-03.

(a) RADIOGRAPHIC ACCEPTANCE STANDARD OF THE CASTING SHOULD BE AS PER ASTM-E-192

(b) 100% OF THE ADVANCE SAMPLE (NOT LESS THAN 5) WILL BE SUBJECTED TO RADIOGRAPHIC TEST.

(c) RADIOGRAPHIC TEST OF ADVANCE SAMPLE WILL BE CARRIED OUT BY CQA(MET) ICHAPUR.

OR

④ THE AREA QUALITY ASSURANCE OFFICER CONCERNED WOULD GET THE RADIOGRAPHIC TEST DONE IN HIS PRESENCE AND FORWARD THE PLATES TO TO CQA (MET) ICHAPUR FOR SENTENCE AND APPROVAL OF THE MOULD.

(d) BULK PRODUCTION WOULD COMMENCE ONLY AFTER MOULD AND MATERIAL HAS BEEN APPROVED BY CQA(MET) ICHAPUR.

(e) 5% OF THE CASTING SELECTED AT RANDOM FROM ^{THE} BULK WOULD BE SUBJECTED TO RADIOGRAPHIC TEST. THIS MAY BE DONE UNDER THE ARRANGEMENT OF THE AREA QUALITY ASSURANCE OFFICER AND SENTENCE MAY BE AWARDED BY HIM BASED ON THE STANDARD OF THE ADVANCE SAMPLES CLEARED BY CQA(MET) ICHAPUR.

REF. :- CONTROLLERATE OF QUALITY ASSU(W) JABALPUR LETTER NO. 50431/CQAW/QA-11 DATED 14 MARCH 95.

CONTROLLERATE OF QUALITY ASSU (M) ICHAPUR LETTER NO. MQA-3/LIW/3/W Dt. 03 MAY 1995

⑥ INDIGENOUS MATERIAL: IS: 10343 G/ 4A OR BS 3146 Pt: I 74

⑦ ~~TYPE/CLA 3, SEPERATELY CAST TEST BAR SHALL MEET THE SPECIFIED MECHANICAL PROPERTIES INCLUDING IZOD IMPACT VALUE~~

⑨ I	DA.No.001/16 DC.No.19446-W 14.09.15	PP 1.1.16
⑧ H	DA.No. 02/03 Dt. 24.05.03	24/5/03
G 7	DA.No.052/97 Dt 11-8-97	11-8/97
UPDATED.	DA.No.022/97 Dt. 23-3-97	23/3/97
F ⑥	DA.No.058/96 Dt. 27-6-96	27/6/96
E ⑤	DA.No.71/95 Dt. 8-8-95	8/8/95
D ④	DA.No.020/95 Dt. 4-4-95	4/4/95
AMENDMENTS	DESCRIPTIONS	SIG. & DATE

SHEETS 2/2	APPROVED	<i>[Signature]</i> 12.4.95	ORDNANCE FACTORY	COMPONENT NO. 2442-05-014 CARRIER
<i>[Signature]</i> DRAWN	CHECKED	<i>[Signature]</i> 24.4.95 1/C.30mm D&DO	TIRUCHIRAPALLI	DRG. NO. 64C 5014 250 I3

⑩