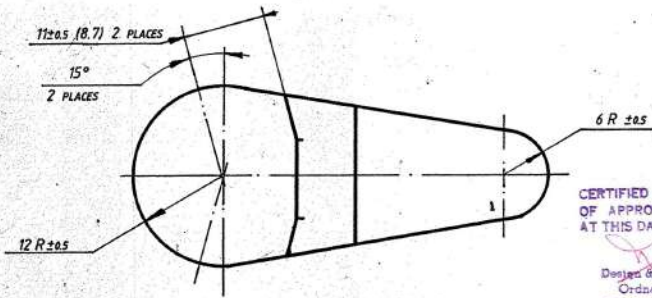


CASTING DRAWING

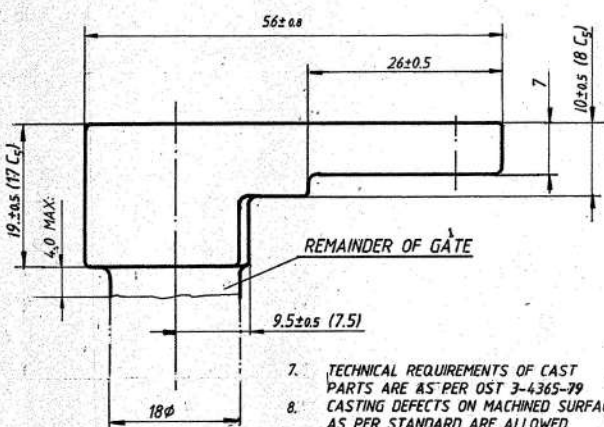


MATL. 23XГC2M07Y.
MECH. PROPERTIES
ULTIMATE STRENGTH 130 Kgf/mm²
AND YIELD STRENGTH 110 Kgf/mm²
ARE ALSO BE ACCEPTABLE.

CERTIFIED CORRECT COPY
OF APPROVED DRAWINGS
AT THIS DATE.....
17.11.2020

Design & Drawing Office
Ordnance Factory,
Tiruchirapalli-620016
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CHEMICAL COMPOSITION OF THE MATERIAL 23XГC2M07Y			
C	0.20 - 0.24	Si	1.80 - 2.0
Mn	0.50 - 0.80	Fe	0.60 - 0.90
Mo	0.25 - 0.30	V	0.10 - 0.15
Ni	0.10 Max. @	S	0.025 Max.
P	0.025 Max.		
MECHANICAL PROPERTIES OF THE MATERIAL 23XГC2M07Y (nominal)			
ULTIMATE STRENGTH	140 Kgf/mm ²		
YIELD STRENGTH	120 Kgf/mm ²		
RELATIVE ELONGATION	8%		
IMPACT STRENGTH	4 Kgf.M/cm		



- TECHNICAL REQUIREMENTS OF CAST PARTS ARE AS PER OST 3-4365-79
- CASTING DEFECTS ON MACHINED SURFACES AS PER STANDARD ARE ALLOWED
- WEIGHT OF THE CASTING 0.120 Kgs.
- MATERIAL - 23XГC2M07Y, TY-AUT 116-78
- SURFACE FINISH ∇ MAX.
- CLEANING - SAND BLASTING.
- CASTING BELONGS TO GROUP II, OST 3-4365-79 (SPECIAL PURPOSE CASTING)

- DIMENSIONS ARE IN mm.
- SCALE - 2:1
- FIRST ANGLE PROJECTION
- HARDNESS AFTER PRELIMINARY HEAT-TREATMENT HB 255 MAX.
- UN-SPECIFIED RADII 10 mm
- DRAFT ANGLE AS PER GOST 3212-80

- 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
- 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
- TENSILE TEST IS CARRIED OUT AS PER GOST 1497-73 ON CYLINDRICAL SPECIMEN WITH DIAMETER 10mm WITH LENGTH 30mm. TESTS ON SPECIMENS (SAMPLES) ON 5mm DIAMETER WITH 25mm LENGTH IS PERMITTED
- 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.

GUIDELINES FOR PROCUREMENT AND INSPECTION OF INVESTMENT CASTINGS REF. CONTROLLERATE OF QUALITY ASSURANCE (MSTALS) ICHAPUR, LETTER NO. MQA-1/QA/11/2 DATED 05 MAY 84

VETTED FOR MATERIAL ONLY
AS PER LAST DC (1) NO. 2/LETTER/16
MQA-3/MS/1871.dh/16-97

CMRV JAGAN...
Sr. Quality Assurance Officer (Arms)
Tiruchirapalli-620016.

CASTINGS AND TEST BARS ARE SUBJECT 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.
FINAL HEAT-TREATMENT (AFTER MACHINING) FOR TEST BARRAS PER FOLLOWING SEQUENCE OF OPN.
i) HARDENING AT TEMP. 1000° ± 20° C
ii) SOAKING TIME IS ONE HOUR
iii) COOLING IN OIL
iv) TEMPERING TEMP. 200° ± 20° C FOR 4 HOURS
b) HEATING FOR NORMALIZING AND HARDENING IS TO BE CARRIED OUT WITH PROTECTION OF CASTINGS FROM DECARBURIZATION AND OXIDATION.

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

DA NO. 007/85	UAY	FOR COMPONENT NO
02.2.2.85	11/25/11	2442-05-112 - ARM CONNECTING LINK RIGID
SL. NO	AMENDMENTS	DRG NO:
		64 C 5112 250

23/06/84	Retnaman	08-88	ok	F/M/PROJ	AWM/PROJ
REDRAWN	CHECKED	APPROVED			

INDIGENOUS MATERIAL

- ⑤ ~~IS: 10343 Gr. 4D OR BS: 3146 PL-1 1974, TYPE CLA-5 GRADE L~~
~~IS: 10343 Gr. 4D, CASTING TO BE HEAT-TREATED TO ACHIEVE 41.5-51.5 HRC~~
~~SEPARATELY CAST TEST BARS SHALL MEET THE SPECIFIED MECH. PROPERTIES~~
~~INCLUDING IZOD IMPACT VALUE 14J MIN.~~
~~OR~~
~~BS: 3146, PL-1, 1974, TYPE CLA-5 GRADE 'B'~~

RADIOGRAPHIC TEST

- (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

③ 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(V) JABALPUR LETTER NO. 50431/CQA/V/QA-11 DATED 14 MARCH 95.

CONTROLLERATE OF QUALITY ASSU (M) ICHAPUR LETTER MQA-3/LIW/3/W Dt. 03 MAY 1995

⑥ INDIGENOUS MATERIAL: IS: 10343-1999 GR 19Q WITH CARBON 0.45 - 0.50

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17.11.2020

Design & Drawing Office
 Ordnance Factory,
 Tiruchirappalli-620016

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⑦G	DANo.006/16 Dt.26.05.16 (PP)	
⑥ F	DA.No.001/16 DC.No. 19446-W 14.09.15	PP 1.1.16
E ⑤	DA.No.052/97 Dt. 11-8-97	11/8/97
UPDATED	DA.No.022/97 Dt. 23-3-97.	23/3/97.
D ④	DA.No.70/95 Dt.7-8-95	1/2/95
C ③	DA.No.020/95 Dt.11-4-95	5/2/95
AMENDMENTS:	DESCRIPTIONS	SIG. & DATE

SHEETS 2/2	APPROVED	<i>[Signature]</i> 12/4/95	ORDNANCE FACTORY	COMPONENT NO. 2442-05-112
<i>Sathish</i> DR:WN	CHECKED	<i>[Signature]</i> 12/4/95 1/C.30mm D&DO	TIRUCHIRAPALLI	CONNECTING LINK RIGID DRG. NO. G 64C 5/12 250.R3