



MATERIAL :- STEEL 35 X FCN GOST 977-75
TECHNICAL REQUIREMENTS FOR CASTINGS ARE AS PER TY 83-65-BB GROUP 2, CHEMICAL COMPOSITION IS AS PER GOST 977-75

MATERIAL FOR INDIA :- IS: 10343-1999 GRADE 16Q
 BS 3146 PT 1/1974 TYPE CLA-12 OR A1 TO GR B CASTINGS
 RADIOGRAPHIC TEST AS PER ASTM-E-192 WITH ACCEPTANCE STANDARDS FOR GAS HOLE AND FOREIGN MATERIALS: LEVEL-5 SHRINKAGE [ALL TYPES] LEVEL-3 ALSO REFER CQA [MET] JCHAPUR INSPECTION INSTRUCTION NO. MQA-1/QA-1/12 DE. 5-5-94 FOR OTHER DETAILS.

CERTIFIED CORRECT COPY OF APPROVED DRAWINGS AT THIS DATE: 17.11.2020
 Design & Drawing Office
 Ordnance Factory,
 Truichitrapalli-620016

UN CONTROLLED COPY

DETAILS TO BE MARKED ON TAG:
 SL. NO. OF TAG.
 BATCH NO.
 NO. OF COMPTS. IN THE BATCH.
 INSP. MARK OF MOULD CHECK.
 INSP. MARK OF COMPONENT.

MATERIAL COMPOSITION

a) CHEMICAL COMPOSITION CONFORMING TO OEM MATERIAL GRADE STEEL 35XFCN OF GOST 977-75 TO BE USED TO ACHIEVE SPECIFIED MECHANICAL PROPERTIES OF OEM OR IS:10343-1999 GRADE 16-Q.

b) MATERIAL COMPOSITION TO BE FOLLOWED IS AS UNDER:-

%C	%Mn	%Si	%Cr	%Ni	%Cu	%P	%S
0.30	1.00	0.60	0.60	0.30	0.30	0.040	0.040
0.40	1.30	0.80	0.90	max	max	max	max

MATERIAL FOR INDIA :-
 BS 3146 PT 1 / 1974 TYPE CLA-12 / GRADE 16
 OTHER TECHNICAL DETAILS ARE AS PER CQA [MET] INSPECTION INSTRUCTION NO. MQA-1/QA-1/12 DE. 5/5/94

DIMS. WITH IN BRACKETS AFTER MACHINING

1. SURFACE ROUGHNESS OF CASTINGS AS PER STANDARD.
2. DRAFT ANGLE IS UPTO 1°.
3. UNSPECIFIED CASTING RADIUS UPTO 1.2mm.
4. MISALIGNMENT ALONG PARTING PLANE UPTO 0.4 mm.
5. SINKAGE OF TRACES DUE TO EJECTOR IS PERMITTED UPTO 0.2 mm.
6. MARK THE SL. NO. OF TAG ON WHICH THE DETAILS ARE MARKED
7. SECTION A-A FOR MEASURING DEPTH OF DECARBURISED LAYER.

8. REFER ATTACHED SHEET FOR HEAT TREATMENT PROCESS
 DRG. NO: M 882

HARDNESS HB. 241 MAX.

H	DA.No. 001/20 AS PER DC.No: 27193-5A, Dt. 08.04.19 amended on 22.02.20
G	GOST. MATL. ADDED REF: CQAM [QA] 12-7/V-1; Dt. 04/01/2019 DA. NO. 001/19; Dt.: 25/04/19.
F	DA. No. 001/17 Dt. 01-02-17
E	DA. 12/98 D/12.7mm DE. 30.11.98 MATL. FOR INDIA AMENDED REF. DC. NO. 24101-SA DE. 23-10-98
D	MATERIAL FOR INDIA AMENDED 24074-SA DE. 6-4-98 DA. NO. 8/98 D/12.7mm DE. 16-6-98

C	DA. NO. 10/95 : PLAN VIEW DIMS. 10.0.5 ARROW HEAD SHOWN CORRECTLY	S. Repn 26-7-95
B	D. A. No. 2/95 D. 12.7mm DE. 4-8-95	S. Repn A-8-95
AMENDMENT		DATE & SIGN

VETTED FOR MATERIAL ONLY

Principal Scientist, I. & M. Quality Assurance Unit, For Spec. Quality Assurance Office, Spec. Quality Assurance Dept. (ASQA) Trichy.

26/04/19

DS. CAT NO. 1005007187

BRACKET FORE SIGHT

SHEETS : 1	1 ST ANGLE PROJECTION	DRAWN	VC PROJ.	CASTING DRG. 6P11-1-6
SHEET NO : 1	SCALE : 1:1	CHECKED	DIV. OFFICER	DRG. NO.: 62 C 1006 250 H3