

**NOTES:-**  
 a) MECHANICAL PROPERTIES:-  
 TENSILE STRENGTH,  $R_m$  N/mm<sup>2</sup> (=MPa) min. - 1000  
 0.2% PROOF STRESS,  $R_{p0.2}$  N/mm<sup>2</sup> (=MPa) min. - 880  
 ELONGATION A% min. - 9  
 IZOD IMPACT STRENGTH, Ft. Lb. min. - 30

**CHEMICAL COMPOSITION**

C - 0.35% TO 0.45% Mn - 0.70% TO 1.00% P - 0.025% MAX  
 Si - 0.20% TO 0.80% Cr - 0.80% TO 1.10% S - 0.020% MAX  
 Mo - 0.15% TO 0.25%

**NOTE:-** INSP. & TEST ETC. AS PER COA(SA) ISHAPOR  
 INSTRUCTION NO. M&A-1/QA 1/12 DT. 5.5.94  
**MATL:-** BS.3146 Pt 1:1974 TYPE CLA.5 GRADE-A  
 VIDE COA (METALS) LETTER NO. M&A 1/02  
 INVEST DT. 4.1.93

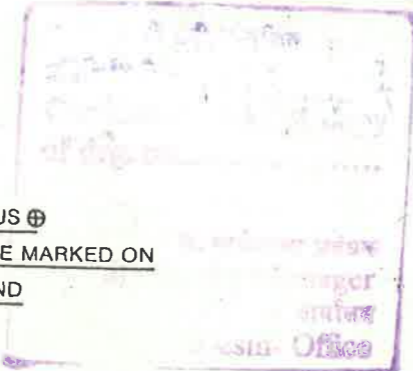
NON STRESSED COMPONENT (CATEGORY-C) D.A. NO. 18/05  
 23/05  
 21/05

**NOTES:-**  
 1) UNTOLERATED DIMNS. TO BE AS PER STD. IS:1116 - 1984 CLASS I OF INVESTMENT CASTING.  
 2) CASTING SHOULD BE FREE FROM DEFECTS LIKE CRACKS, HOT TEARS, COLD SHUT, BLOW HOLES ETC & SURFACE FINISH SHOULD BE SMOOTH. VISUAL EXAMINATION SHOULD CONFORM TO CLAUSE 8.1 & 8.2 OF SPECN. IS: 10343-1982 AND AQL (C=2.5) OF IS: 2500 Pt. I INSPECTION LEVEL II MAX. PERMISSIBLE LIMIT FOR BEND IS 0.5 mm IN TOTAL LENGTH.

- CASTING SHOULD BE SUPPLIED IN ANNEALED CONDITION.
- DE CARBURISATION SHOULD NOT BE MORE THAN 2% OF THE THICKNESS OF THE CASTING.
- TEST PIECES SHOULD BE TESTED IN ACCORDANCE WITH CLAUSE 1.10 METHOD (1) OF B.S. 3146 Pt. 1: 1974. TEST SAMPLES SHOULD BE CAST FROM THE SAME MATL. USED FOR MANUFACTURING OF CASTING AND SHOULD BE MADE TO SATISFY THE SPECN. IS: 10343-1982. RESULT OF TEST SHALL FURNISHED ALONG WITH I NOTE.
- SHARP EDGES & BURS IF ANY ARE TO BE REMOVED.
- 100% MAGNETIC TEST FOR CRACK DETECTION TO BE CARRIED OUT IN SAMPLES AS PER INSPECTION LEVEL II AT AQL: 0.65 AS PER IS: 2500 Pt. 1-1965.
- ALL CASTINGS & REPRESENTATIVE TEST SAMPLES SHALL BE LEGIBLY MARKED WITH MANUFACTURER'S IDENTIFICATION MARK OF 3 mm SIZE.
- 10 TO 15 NO. SAMPLE CASTING DULY PASSED BY INSPECTOR IN RADIO-GRAPHIC TEST, MATERIAL, DIMENSIONS, ETC. TO BE SENT AGAINST EACH 50 TO THIS FACTORY FOR MACHINING & FITMENT TRIAL BEFORE BULK SUPPLY.
- RADIO-GRAPHIC ACCEPTANCE STD. AS PER SPECN. ASTM-E-192 GAS HOLE LEVEL-5 FOREIGN MATL. LEVEL-5 & SHRINKAGE (ALL TYPE) LEVEL-3.
  - 100% OF THE ADVANCE SAMPLES SHALL BE SUBJECTED TO RADIO-GRAPHIC TEST.
  - FOR BULK COMPONENTS, 5% OF EACH OF CAST/ HEAT SHOULD BE SUBJECTED TO RADIO-GRAPHIC TEST UNTIL THE PRODUCTION IS ESTABLISHED BY VENDOR.

- CONDITION-**
- CASTING SHOULD BE SUPPLIED IN ANNEALED CONDITION. HARDNESS 220 HB MAX OR
  - CASTING SHOULD BE SUPPLIED IN 'T' CONDITION HARDNESS 248-302 HB

ALL DIMENSIONS ARE IN m.m.  
 IMPORTANT DIMNS ARE MARKED THUS ⊕  
 INFORMATION MARKED THUS † TO BE MARKED ON SURFACES MARKED ○ TO BE GROUND



DA. NO.	DATE	AMENDMENTS	SIGN.
84/05	28.8.05	CHEMICAL COMPOSITION ADDED	Grain
18/05	22.2.05	NOTE NO. 3 DELETED & CONDITION ADDED	G.M.
	08-11-2001	DRG. REVISED	

<b>RIFLE 5.56 m.m.          BRACKET</b> ARDE SK-3143/13 SKETCH FOR INVESTMENT CASTING			DRAWN	TRACED	CHECKED
			DATE	08-11-2001	
SCALE: 1:1 SMALL ARMS FACTORY, KANPUR.			APPROVED		
			J.W.M/D.O.		
			DRG. NO. SK-4760/2		
SHEET 1 OF 1					