



- INSPECTION GROUP **II** AS PER TECHNICAL REQUIREMENTS TT-11.
- BUTT-END **B** SHOULD BE CARBURIZED h 0.7 TO 1.1 (mm) IN THE MANUFACTURED ARTICLES HRC \geq 56. THREAD SHOULD BE PROTECTED AGAINST CARBURIZING. IT IS ALLOWED TO CARBURIZE HEXAHEDRON EDGES OF SURFACES **B** & **F**. LOCAL CARBURIZING OF THREAD IS ALLOWED.
- UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE AS FOLLOWS :-
FOR SHAFTS - AS PER B7,
OTHERS - AS PER C17.
- IT IS ALLOWED TO MAKE THREAD HAVING AN ANGLE DIAMETER OF 0.35 ± 0.02 .
- COATING - CHEMICALLY OXIDIZED, OILED.

EXPLANATORY NOTE :

6. MATERIAL QUOTED : 12XH3A
TY 14-1-381-72
12XH3A = CHROMIUM NICKEL STEEL (HIGH QUALITY).

a) **CHEMICAL COMPOSITION :**

GRADE OF STEEL	C O N T E N T OF E L E M E N T S %								
	C	Si	Mn	Cr	Ni	Mo	P	S	Cu
	M A X I M U M								
12XH3A	0.09-0.16	0.17-0.37	0.30-0.60	0.60-0.90	2.75-3.15	-	0.025	0.025	0.30

b) **MECHANICAL PROPERTIES :-**

GRADE OF STEEL	ULTIMATE TENSILE STRENGTH Kgf/mm ² (min)	YIELD POINT Kgf/mm ² (min)	IMPACT STRENGTH Kgf/cm ² (min)	RELATIVE ELONGATION % (MIN 2	RELATIVE REDUCTION ALONG CROSS SECTION % (MIN)
12XH3A	95	70	9	11	55

Ⓐ **EQUIVALENT MATERIAL**
EN 36B TO BS : 970 /
13 Ni 13 Cr 3 TO IS : 4432-1988

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

EST. WT. 0.021 Kg TO BE STAMPED OR MARKED WHERE INDICATED THUS # LETTERS)

ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN	CHD	TCD	APPD	DATE	SCALE	DIMENSIONS IN mm.	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS 2102-69	MATERIAL :- 12XH3A TY 14-1-381-72	USED ON :- CB 20-27-15-1 CB 20-27-15-2
CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)								AYADI	
TITLE								TAPPET BOLT	
ISSUE	DATE	NATURE OF AMENDMENTS	D S CAT NUMBER			DRAWING NUMBER			
A	15-7-10	4 th ALT. COMM. MEETING MINUTES POINT No 9 DT 26-10-09				20-27-51			

KVD No.- 634-14