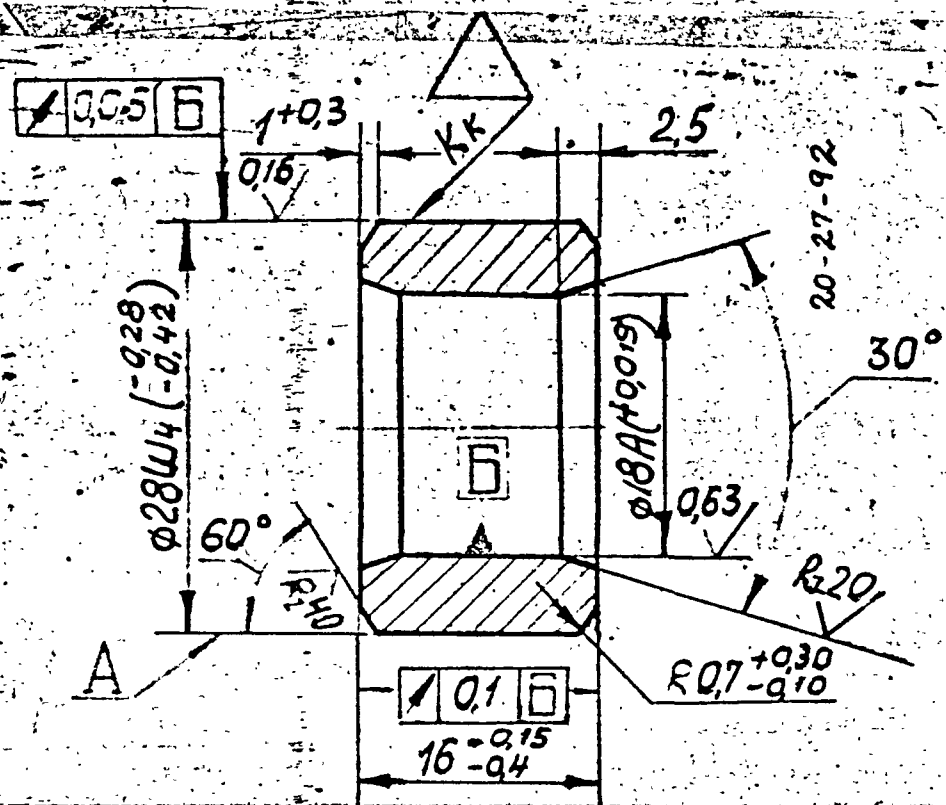


DRAWING NUMBER  
20-27-92



- INSPECTION GROUP III AS PER TECHNICAL REQUIREMENTS TT-11.
- HRC  $\geq$  58 CARBURIZE H 0.8 TO 1.5 mm, H 0.8 TO 1.4 mm, ON SURFACES A AND B IN MANUFACTURED ARTICLE. MICROSTRUCTURE OF CARBURIZED COATING IS NEEDED MARTENSITE NOT IN EXCESS OF NUMBER 4, SCALE 3, GOST 8233-56, CARBIDE NET SHOULD NOT EXCEED NUMBER 4, SCALE 5, GOST 8233-56.
- UNSPECIFIED LIMIT DEVIATIONS FOR DIMENSIONS, ARE AS PER CM7.
- TAPER OF SURFACE A SHOULD NOT EXCEED 0.015 mm.
- QUALITY OF SURFACE A SHOULD NOT EXCEED 0.02 mm.

EXPLANATORY NOTE:-

MATERIAL QUOTED:- STEEL 12X H3A TY14-1-381-72

2.5/√(√)

12 X H3A = GRADE OF STEEL.

CHEMICAL COMPOSITION:-

CONTENT OF ELEMENTS %							
C	Si	Mn	Cr	Ni	P	S	Cu
					MAXIMUM.		
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

MECHANICAL PROPERTIES:-

HEAT TREATMENT.

- a) HARDENING
- FIRST HARDENING OR NORMALIZING = 860 °C.
  - SECOND HARDENING = 760-810 °C.
  - COOLING MEDIUM = WATER OR OIL.

- b) TEMPERING
- TEMPERATURE °C = 180.
  - COOLING MEDIUM = AIR OR OIL.

- YIELD POINT Kgf/mm<sup>2</sup> (MIN) = 70.
- ULTIMATE STRENGTH Kgf/mm<sup>2</sup> (MIN) = 95.
- % RELATIVE ELONGATION (MIN) = 11.
- % RELATIVE REDUCTION ALONG CROSS SECTION (MIN) = 55.
- IMPACT STRENGTH Kgf.m/cm<sup>2</sup> (MIN) = 9.

KVD 63427

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

EST. WT. 0.0437 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 OUT SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

DRM	<i>A. Borker</i>	MATERIAL:-	12X H3A TY 14-1-381-72	USED ON	CB 20-27-15-1 CF 20-27-15-2
CHD	<i>R. Brown</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI			
TCD	<i>N. D. S.</i>				
APPO	<i>201</i>				
DATE	25-5-89	SCALE:-	2 : 1	TITLE <b>TAPPET ROLLER</b>	
DIMENSIONS IN mm		TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS: 2102-69			
ALL THREADS TO CONFORM TO		D S CAT NUMBER	DRAWING NUMBER 20-27-92		
ISSUE DATE	NATURE OF AMENDMENTS				