



Inspection group III is as per TT-11. HRC 28-35.  
 Dimensions without tolerances should be implemented according to accuracy class 7, OST 1010.  
 Technical requirements for thread should be in accordance with standard 82021-00. Metallurgical defects are not allowed.  
 Sharp edges should be blunted.  
 Coating: Chemical oxidizing, oil finishing. May be manufactured from material 40 CX. Thread may be made by rolling so that the diameter of the non threaded part is within the pitch diameter of thread.  
 Tool mark upto 2 mm wide, with projection or depression not exceeding 0.15 mm and surface finish R20 is permitted at place A.

**EXPLANATORY NOTE:-**

**MATERIAL QUOTED:** HEXAGON: 14-4 GOST 8560-78  
 38XA GOST 4543-71

BRIGHT STEEL HEXAGONAL BAR

14 = ACROSS FLATS

4 = CLASS OF ACCURACY.

38XA = GRADE OF MATERIAL (HIGH QUALITY STEEL)

**CHEMICAL COMPOSITION %:**

- CARBON = 0.35-0.42
- SILICON = 0.17-0.37
- MANGANESE = 0.50-0.80
- CHROMIUM = 0.80-1.10
- PHOSPHORUS = 0.025
- SULPHUR = 0.025
- COPPER = 0.30
- NICKEL = 0.30

MAXIMUM

**MECHANICAL PROPERTIES:**

- ULTIMATE STRENGTH  $\text{kgf/mm}^2$  (MIN) = 95
- YIELD POINT  $\text{kgf/mm}^2$  (MIN) = 80
- RELATIVE ELONGATION  $\gamma$  (MIN) = 12
- RELATIVE REDUCTION ALONG CROSS SECTION  $\gamma$  (MIN) = 50
- IMPACT STRENGTH  $\text{kgfm/cm}^2$  (MIN) = 9

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

EST. WT. 0.045 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

(A) Alt. Material: STEEL 709M40 (EN-19) TO BS-970 Pt-1-1983

DRN	Gautam	MATERIAL - HEXAGON	USED ON -
CHKD	S. S. S.	14-4 GOST 8560-78	CS 3305-03-15
TED	(Name)	38XA GOST 4543-71	
APPD		CONTROLLER OF QUALITY ASSURANCE (HEAVY VEHICLES)	
DATE	24-2-89	A V A D I	
SCALE	2:1		
DIMENSIONS IN mm.		TITLE	
TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS 2102-69		CRANK PIN PLUG BOLT	
A	18.5.09	Authy: Third Alt. Comm. Minutes Point: 2 Dated 27-02-2009.	D S. CAT NUMBER
ISSUE	DATE	NATURE OF AMENDMENTS	DRAWING NUMBER
			305-10

EXPLANATORY NOTE ADDED ON 28-12-81