

केन्द्रीय मुहर विभाग - III

हमारा संदर्भ- केन्द्रीय मुहर विभाग-3/16: IS 1364 (Part 1)

दिनांक :16 11 2018

विषय: अनुपालन हेतु एस आई टी

सभी शाखा कार्यालय से आग्रह है कि एस आई टी का अनुपालन तत्काल प्रभाव से सुनिश्चित करें।

(अमित कुमार)

वैज्ञानिक 'सी' (सी एम डी-III)

प्रमुख (सी एम डी-III)

सभी क्षेत्रीय/शाखा कार्यालय

आई टी एस विभाग – बीआईएस इंटरनेट पर अपलोड करने हेतू

CENTRAL MARKS DEPARTMENT-III

Our Ref: CMD-3/16: IS 1364 (Part 1)

Date: 16 11 2018

Subject: SIT for IS 1364(Part 1):2018 – Hexagon Head Bolts, Screws and Nuts of Product Grade 'A and B' – Part 1 Hexagon Head Bolts (Size Range M 1.6 to M 64)

This has reference to the subject mentioned above.

BOs may kindly ensure implementation of the SIT with immediate effect.

Amit Kumar
Sc. C (CMD III)

Head (CMD - III)

Circulated to: All ROs/BOs

Copy to: ITS for hosting on Intranet

**SCHEME OF INSPECTION AND TESTING FOR CERTIFICATION OF
HEXAGON HEAD BOLTS GRADE 'A and B' (SIZE RANGE M 1.6 to M 64)
ACCORDING to
IS 1364 (Part 1):2018**

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare a calibration plan for the test equipment.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. LABELLING AND MARKING – As per the requirements of IS 1364 (Part 1).

4. CONTROL UNIT – All head screws of same property class and designation manufactured in a day shall constitute a control unit.

HEAT TREATMENT BATCH: All the head screws of same property class and designation heat treated together at the same time shall constitute a heat treatment batch.

5. LEVELS OF CONTROL - The tests as indicated in column 1 of [Table 1](#) and the levels of control in column 3 of [Table 1](#), shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standard and covered by the licence should be marked with Standard Mark.

6. REJECTIONS – Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1

(1)			(2)	(3)			
Test Details			Test equipment requirement	Levels of Control			
Cl.	Requirement	Test Methods		R: required (or) S: Sub-contracting permitted	No. of Sample	Frequency	Remarks
		Clause	Reference				
3.	Dimensions	3	IS 1364 (Part 1)	R	As per sampling plan given in IS 1367 (Part 17)		
4	General Requirement		IS 1367 (Part 1)/ ISO 8992	R			
	Thread requirement		IS 4218 (Part 3) IS 14962 (Part 1)	R	As per sampling plan given in IS 1367 (Part 17)		

Tests For Steel							
Tensile Test	9.1 to 9.5, 9.7	IS 1367 (Part 3) /ISO 898(Part 1)	R	Two	Every 7 th control unit	#	
Proof Load Test	9.6						
Head Soundness Test	9.8						
Torsion Test	9.13						
Impact Test	9.14						
Hardness Test	9.9	IS 1367 (Part 3) /ISO 898(Part 1)	R	Three	Every Heat treatment batch	##	
Decarburization Test	9.10						
Tests for Stainless Steel and Non Ferrous metals							
Tensile Strength	6.2.2	IS 1367 (Part 14/ Sec 1) :2002 /ISO 3506(Part 1) : 1997 (<i>for stainless steel</i>)	R	Two	Every 7 th control unit	#	
Stress at 0.2% permanent strain	6.2.3						
Elongation after fracture	6.2.4						
Breaking Torque Test	6.2.5	IS 1367 (Part 3) /ISO 898(Part 1) (<i>for Non – ferrous metals</i>)					

	Strength under wedge loading	6.2.6	IS 1367(Part 14/ Sec 1) :2002 /				This test is applicable for <i>stainless steel only</i> . #
	Hardness	6.2.7	ISO 3506(Part 1) : 1997	R	Three	Every Heat treatment batch	This test is applicable for <i>stainless steel only</i> . ##
	Surface Integrity	Table 3	IS 1364 (Part 1)	R	Every half hour samples to be checked		
FINISH/ COATING							
	Electroplating		IS 1367(Part 11)	R	As per Sampling plan given in Note 1		Different electroplating or other finish may be given as agreed between customer and supplier
	Non - Electrolytically applied zinc flake coating		ISO 10683	R			

In case of any failure, twice the number of sample shall be tested from the same control unit for those characteristics in which failure has occurred. In case of any further failure the control unit shall be rejected and shall not be marked with BIS standard mark. Further each control unit corresponding to the property class in which the failure had occurred shall be tested till samples from three consecutive control units pass after which the earlier frequency can be restored.

In case of any failure, twice the number of sample shall be tested from the same heat treatment batch for those characteristics in which failure has occurred. In case of any further failure the heat treatment batch shall be rejected and shall not be marked with BIS standard mark. Further twice the sample from each heat treatment batch corresponding to the property class in which the failure had occurred shall be tested till samples from three consecutive heat treatment batch pass after which the earlier frequency can be restored.

NOTE 1: Sampling plan for Finish/coating test:

Total number of head screws in batch	Number of test samples
Upto and including 500	3
501 upto and including 35,000	5
Over 35,000	8

NOTE-2: Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

NOTE-3: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval by BO Head.