INTERNATIONAL STANDARD



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION ORGANISATION INTERNATIONALE DE NORMALISATION MEЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Assembly tools for screws and nuts — Driving parts for hand-operated square drive socket wrenches — Torque testing

iTeh STANDARD PREVIEW Outils de manœuvre pour vis et écrous – Pièces de commande pour douilles à main à carré conducteur – Essai de résistance à la torsion ards.iteh.ai)

> <u>ISO 3315:1988</u> https://standards.iteh.ai/catalog/standards/sist/945fb00b-741d-435f-9876-8ad5cf359087/iso-3315-1988

ISO 3315 Second edition 1988-10-01

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 3315 was prepared by Technical Committee ISO/TC 29, Small tools.

ISO 3315:1988

This second edition cancels and replaces the first edition (ISQ/3315 ar 1975)//clause 5 of /41d-435f-9876-which has been technically revised.8ad5cf359087/iso-3315-1988

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Assembly tools for screws and nuts — Driving parts for hand-operated square drive socket wrenches -**Torque testing**

1 Scope

This International Standard applies to driving parts for handoperated square drive socket wrenches listed under numbers 253, 255, 256, 257, 251, 252 and 254 in ISO 1703 : 1983, Assembly tools for screws and nuts - Nomenclature. It specifies

- the mimimum hardness value for their driving squares; a)
- the method of torque testing; b)
- c) the minimum torsional strength values.

The across flats dimension of the female test square shall be equal to the minimum dimension of the corresponding female square (see ISO 1174) with a tolerance of H8: the female test square shall be hardened to not less than 55 HRC.

A device in which the female test square can be rotated at a certain torque, determined with an accuracy of \pm 2,5 %, may also be used for this test.

Following the application of the minimum test torque, the tool shall not show permanent deformation or other damage which could affect its usability.

iTeh STANDAR 4.2 PSpecial/requirements

'iso

2 Normative reference

The following standard contains provisions which, through Draw out the handle completely at one end and apply the

(standards, 421) Test of tee handle square drive

reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was dards/sist/945fb00b-741d-435f-9876 valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1174 : 1975, Assembly tools for bolts and screws -Driving squares for power socket wrenches and hand socket wrenches.

Driving squares 3

Driving squares shall be in accordance with ISO 1174, and have a minimum hardness of 39 HRC.

Torque testing 4

4.1 Procedure

Place the tool in a female test square and apply the corresponding torque.

Do not jerk or strike the tool when testing and apply the load gradually until the minimum testing torque (see clause 5) is reached. The torque is calculated as the product of the magnitude of the load by the distance measured between the point of application of the load and the axis of the female test square.

load to the end farthest from the test square.

4.2.2 Test of speed brace

Apply the load in the middle of the part on which the operator's hand normally rests.

4.2.3 Test of ratchet handle and reversible ratchet handle

Apply the load as near to the end of the handle as possible.

For tools having a reversible ratchet, type 257, the test shall be carried out in both directions.

4.2.4 Test of male square spin type handle

An appropriate appliance shall allow the load to be applied to the handle without clamping the handle on the rod, which could alter the test result.

4.2.5 Test of flex head nut spinner

Apply the load as near as possible to the end of the handle, which is placed at right angles to the axis of the square.

4.2.6 Test of offset handle square drive

Apply the load as near to the end of the handle as possible.

5 Minimum test torque, M

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Descriptors : tools, assembly tools, hand tools, wrenches, specifications, tests, torsion tests.

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