
Mechanical properties of fasteners

Part 3. Specification for set screws and similar threaded fasteners not under tensile stresses

Caractéristiques mécaniques des éléments de fixation

Partie 3. Spécification des vis sans tête et des éléments de fixation filetés similaires non soumis à des contraintes de traction

Mechanische Eigenschaften von Befestigungsteilen

Teil 3. Spezifikation für Regulierschrauben und andere nicht unter Spannung stehende Befestigungsteile mit Gewinde

Contents

	Page		Page
National foreword	Inside front cover	Tables	
Cooperating organizations	Back cover	1. Designations of property classes in relation to Vickers hardness	1
Specification		2. Steel specifications	2
1. Scope and field of application	1	3. Mechanical properties	2
2. References	1	4. Values for H_1 and E	4
3. Designation system	1	5. Torque requirements	5
4. Raw materials	2	Figures	
5. Mechanical properties	2	1. Untitled	3
6. Test methods for determination of mechanical properties	3	2. Untitled	4
7. Marking	6	3. Torque test details	5

National foreword

This British Standard has been prepared under the direction of the Mechanical Engineering Standards Committee. This Part of the standard is identical with ISO 898/5-1980 'Mechanical properties of fasteners—Part 5 : Set screws and similar threaded fasteners not under tensile stresses'. The United Kingdom has taken an active part in the work of Technical Committee ISO/TC 2, Fasteners, of the International Organization for Standardization (ISO).

The other Parts of this standard are as follows:

Part 1 'Specification for screws and studs'

Part 2 'Specification for nuts with specified proof load values'.

Terminology and conventions. The text of the international standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is especially drawn to the following.

The comma has been used throughout as a decimal marker. In British Standards it is current practice to use a full point on the baseline as the decimal marker.

Where the words 'International Standard' appear, referring to this standard, they should be read as 'British Standard'.

Cross-references

International standard	Corresponding British Standard
ISO/R 80-1968	BS 891 Method for Rockwell hardness test Part 1 : 1962 Testing of metals (Technically equivalent)
ISO/R 81-1967	BS 427 Method for Vickers hardness test Part 1 : 1961 Testing of metals (Technically equivalent)

The Technical Committee has reviewed the provisions of ISO/R 79-1968 referred to in the text, and has decided that they are acceptable for use in conjunction with this standard.

The British Standard related to ISO/R 79 is BS 240 : Part 1 : 1962.

ISO 6157/1, at present at the stage of draft, will be implemented as a British Standard in due course.

Additional information. The 'set screws' referred to in this standard are generally known in the United Kingdom as 'grub screws'.

Attention is drawn to the limitation of use in that screws complying with the requirements of this specification are intended for use under conditions that induce compressive stresses only: they should not be used with locknuts or other means that induce tensile stresses.

Omission of captions to figures. In the international standard, the captions to figures 1 and 2 have been omitted. For the sake of clarity, the following are appropriate:

Figure 1. Zones of decarburization

Figure 2. Hardness measurements for decarburization tests.

The Technical Committee responsible for this British Standard has proposed to the ISO committee that these captions should be included in the international standard.