
Mechanical properties of fasteners

Part 1. Specification for bolts, screws and studs

Caractéristiques mécaniques des éléments de fixation
Partie 1. Spécification des boulons, vis, goujons et écrous

Mechanische Eigenschaften von Befestigungsteilen
Teil 1. Spezifikation für Bolzen, Schrauben und Gewindestiften

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Foreword

This British Standard has been prepared under the direction of the Mechanical Engineering Standards Committee. It is one of a series of specifications, of which the full list is as follows:

- Part 1. Specification for bolts, screws and studs
- Part 2. Specification for nuts with specified proof load values*
- Part 3. Specification for set screws and similar threaded fasteners not under tensile stresses.

This Part of this standard is based on ISO 898/1-1978 'Mechanical properties of fasteners — Part 1 : Bolts, screws and studs' published by the International Organization for Standardization (ISO). With the following exceptions its technical content agrees with ISO 898/1:

The wedge angle for property class 10.9 has been reduced to align with existing UK practice. The obligatory marking for property classes 4.6 and 5.6 has been excluded, this marking was included in ISO 898/1 to satisfy the requirements of the European pressure vessel industry. The 'notch' marking to indicate a left-hand thread has also been excluded.

For ease of production it has been found convenient to reproduce the text of ISO 898/1, amended to incorporate the differences outlined above. 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 base line as the decimal marker.

NOTE. ISO 898/1-1978, on which this standard is based, is in the course of a major revision which is likely to give rise to extensive alterations to the mechanical properties of heat treated bolts, screws and studs.

It is recommended that until this standard is revised, incorporating the published revision of ISO 898/1, reference should be made to BS 3692 for the mechanical properties of heat treated hexagon bolts and screws and to BS 4439 for heat treated studs.

Hexagon socket screws to BS 4168 : Parts 1, 6, 7 and 8 are not affected.



*In course of preparation.