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British Standard Specification for **Malleable cast iron**

Fonte malléable — Spécifications

Temperguß

British Standards Institution

Foreword

This British Standard has been prepared under the direction of the Iron and Steel Standards Committee. It is a combination and revision of BS 309 : 1972, BS 310 : 1972, BS 3333 : 1972, which are withdrawn.

The content of ISO 5922 'Malleable cast iron' has been taken into account in preparing this standard and the designation system reflects that used in the International Organization for Standardization (ISO). As in ISO 5922, it is the material that is covered, not malleable iron castings. This is an important change from the previous British Standards.

With the exception of grades B32-10 and B35-12 (see table 3) the grades in this British Standard are identical with those in ISO 5922. Grades B32-10 and B35-12 concur with UK practice and approximate to the grades in BS 310 : 1972.

Other changes of significance are as follows.

- (a) The adoption of tensile and 0.2 % proof stress criteria instead of 0.5 % proof stress.
- (b) The deletion of the optional test for permanent set stress to determine compliance with the proof stress requirement.
- (c) The hardness values are relegated to an appendix and remain a recommendation. However, should a purchaser require a Brinell hardness test to assess a criterion such as machinability, this is carried out where practicable on a casting and should be called for in the contract.
- (d) The number of grades of whiteheart, and pearlitic malleable cast iron are increased from 2 to 4 and 5 to 6 respectively (see appendix B).
- (e) Grades are designated in terms of tensile strength and percentage elongation relative to a 12 mm diameter test bar, not 15 mm diameter as in the previous British Standards.

The method of producing malleable cast iron including the chemical composition (see clause 4) and the heat treatment used, are at the discretion of the manufacturer.

Appendices A and B are given for information purposes only. Appendix A gives typical properties of hardness (HB) of malleable cast iron relative to type and grade.

Appendix B gives the relative levels of the grades included in this standard and those in BS 309 : 1972, BS 310 : 1972 and BS 3333 : 1972.

Compliance with a British Standard does not of itself confer immunity from legal obligations.