

DIN EN 12513:2011-05 (E)

Founding - Abrasion resistant cast irons

Contents		Page
Foreword		3
Introduction		4
1 Scope		5
2 Normative references		5
3 Terms and definitions		5
4 Designation		6
5 Order information		6
6 Manufacture		6
6.1 General		6
6.2 Heat treatment		6
7 Requirements		7
7.1 Chemical composition		7
7.2 Brinell hardness		7
7.3 Microstructure		7
8 Sampling		7
8.1 Frequency of sampling for chemical analysis		7
8.2 Number and frequency of Brinell hardness tests		7
9 Test methods		8
9.1 Chemical analysis		8
9.2 Hardness test		8
9.3 Microstructure examination		8
10 Retests		9
10.1 Need for retests		9
10.2 Test validity		9
10.3 Nonconforming test results		9
10.4 Heat treatment of samples and castings		9
Annex A (informative) Heat treatment of abrasion resistant cast irons		12
Annex B (informative) Conversion between Brinell, Vickers and Rockwell C hardness		15
Annex C (informative) Relationship between relevant wall thickness and chemical composition for nickel-chromium cast irons		16
Annex D (informative) Typical microstructures of abrasion resistant cast irons		17
Annex E (informative) Comparison of abrasion resistant cast iron material designations according to EN 1560 and ISO/TR 15931		18
Annex F (informative) Significant technical changes between this European Standard and its previous edition		19
Bibliography		20