

DIN EN 16124:2012-02 (E)

Founding - Low-alloyed ferritic spheroidal graphite cast irons for elevated temperature applications

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
7	Requirements	7
7.1	Chemical composition	7
7.2	Microstructure	7
7.3	Mechanical properties	8
8	Sampling	9
8.1	General	9
8.2	Cast samples for tensile testing	9
8.3	Samples cut from a casting	11
9	Test methods	15
9.1	Chemical analysis	15
9.2	Micrographic examination	15
9.3	Tensile test	15
9.4	Hardness test	16
9.5	Specific test	16
10	Retests	17
10.1	Need for retests	17
10.2	Test validity	17
10.3	Non-conforming test results	17
10.4	Heat treatment of samples and castings	17
11	Inspection documentation	17
Annex A (informative) Guidance values of mechanical properties for 3 special grades		18
Annex B (informative) Properties of low alloyed ferritic spheroidal graphite cast irons at elevated temperatures		19
Annex C (informative) Additional information on general mechanical and physical properties		33
Annex D (informative) Heat treatment		34
Annex E (informative) Nodularity		35

Annex F (normative) Sectioning procedure for cast samples	36
Bibliography	37