

Contents

	Foreword	
	Introduction	
1	Scope	
2	Normative references	
3	Terms and definitions	
4	General	
4.1	Designation system for classifying graphite in cast irons	
4.2	Form	
4.3	Distribution	
4.4	Size	
4.5	Visual classification of graphite	
5	Sampling and sample preparation	
5.1	Samples taken from a casting	
5.2	Sample preparation	
6	Procedure for graphite classification	
6.1	Procedure for visual classification of graphite	
6.2	Evaluation of the analysis results	
7	Reference images	
7.1	General	
7.2	Reference images for graphite form	
7.3	Reference images for the distribution of graphite (form I)	
7.4	Reference images for graphite size	
8	Designation of graphite by form, distribution and size	
8.1	Designation system	
8.2	Designation of different graphite sizes within a casting	
8.3	Designation of mixed graphite forms, distributions and sizes	
8.4	Designation of unclassified graphite forms	
8.5	Nodule count	
9	Report	
Annex A	(informative) Typical graphite forms in cast-iron materials — Examples of photomicrographs	
Annex B	(informative) Distribution of flake (lamellar) graphite (form I) — Examples of photomicrographs	
Annex C	(informative) Common terminology and main occurrences concerning graphite in cast irons	