
Microstructure of cast irons —
Part 1:
Graphite classification by visual
analysis

Microstructure des fontes —

Partie 1: Classification du graphite par analyse visuelle

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Foreword

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This document was prepared by Technical Committee ISO/TC 25, *Cast irons and pig irons*.

This third edition cancels and replaces the second edition (ISO 945-1:2017), of which it constitutes a minor revision. The changes compared with the previous edition are as follows:

- [Figures 3](#) and [4](#) have been corrected to a diameter of 120 mm to allow a direct comparison with the microscope display screen;
- [Figures 3](#) and [4](#) have been corrected so that the maximum graphite sizes conform with [Table 1](#).

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Introduction

Microstructure designation is a useful feature that provides a means of classifying the graphite form, distribution and size in cast irons.

Graphite classification by visual analysis is a well-established method which is well recognized within the foundry industry as a means of quickly determining the overall graphite microstructure of a cast iron casting.

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