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Casting-Industrial computer radiographic testing

铸件 工业计算机射线照相检测

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the National Casting Standardization Technical Committee (SAC/TC54).

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Industrial Computer Radiography Testing of Castings

1 Scope

This document specifies the classification, quality and inspection of castings using industrial computerized X-ray and gamma radiography techniques using stored phosphor imaging plates (IP).

General requirements, testing techniques, image assessment, test records and reports.

This document is applicable to cast steel, cast iron, copper and copper alloys, nickel and nickel alloys, magnesium and magnesium alloys, aluminum and aluminum alloys, titanium and titanium alloys, etc.

Industrial computer radiography inspection of castings, and other castings are used for reference.

2 Normative references

GB/T 5677

GB/T 9445

GB/T 12604.2

GB 18871

GB/T 21355-2022

GB/T 21356

GB/T 23901.1

GB/T 23901.2

GB/T 23901.5

GB/T 23910

GB/T 25758

GB/T 39427

3 Terms and definitions

The terms and definitions defined in GB/T 12604.2 and the following apply to this document.

3.1 A system that converts information into digital images

It consists of a storage phosphor imaging plate (IP), a corresponding information readout unit (scanner or reader) and system software.

3.2

A photoluminescent phosphorescent material that absorbs and stores information about the rays transmitted by the object being detected and forms a latent image.