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ICS 49.025
CCS V10

HB

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

HB 8423.8-2023

Methods for identification of metal material grades - Part 8: Spectral identification of cobalt-based high-temperature alloy grades

金属材料牌号鉴别方法 第8部分：看谱法鉴别钴基高温合金牌号

(English Translation)

Issued on: December 20, 2023 **Implemented on: July 1, 2024**

Issued by: Ministry of Industry and Information Technology of the People's Republic of China

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1 Foreword

HB 8423.8-2023 was issued by Ministry of Industry and Information Technology of the People's Republic of China on 20 December 2023 and has been in force since 1 July 2024.

It is one of 9 parts of the HB 8423 series.

The HB prefix, without a suffix, marks a mandatory standard: within its scope, compliance is required.

2 Scope Preview

This standard specifies the method principles, instruments, working conditions and identification steps for identifying cobalt-based (with cobalt as the main alloy element) high-temperature alloy grades using spectrum analysis methods. This standard is applicable to the identification of cobalt-based superalloy grades listed in Table A.1. Various cobalt-based high-temperature alloy grades other than those listed in Table A.1 can be used as a reference as long as the types of alloy elements and their contents (i.e., mass fractions) are within the range defined by the strength standards for determination of the

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corresponding element contents in this part.

HB 8423.8-2023 falls under ICS 49.025, in the field of aircraft and space vehicle engineering.

This catalogue holds 64 other HB standards in that field.

In this catalogue, HB standards carry edition years from 2012 to 2025.

3 About this standard

Sector: Aviation Industry Standard

Issued by: Ministry of Industry and Information Technology of the People's Republic of China

English translation: about 15 pages (approximate)

4 Related standards

Other parts of this standard:

HB 8423.1-2014 - Identification methods for grades of metallic materials - Part 1: Identification of aluminium alloy grades by optical emission spectroscopy

HB 8423.2-2014 - Identification methods for grades of metallic materials - Part 2: Identification of titanium alloy grades by optical emission spectroscopy

HB 8423.3-2017 - Metallic materials - Identification method - Part 4: s.

HB 8423.4-2017 - Metallic materials - Identification method - Part 5

HB 8423.5-2017 - Metallic materials - Identification method - Part 6

HB 8423.6-2017 - Corrosion of metals and alloys Evaluation method for chromium-free passivation of galvanized sheets

HB 8423.7-2023 - Metal material grade identification method - Part 7: Spectral identification of nickel-based high-temperature alloy grade

HB 8423.9-2023 - Part 9: Identification of copper alloy grades by spectral analysis

Standards on related subjects:

GB/T 34520.8-2021 - Test methods of continuous silicon carbide fibers-Part 8: Oxygen content

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5 Classification and status

International classification (ICS): 49.025

Chinese Standard Classification (CCS): V 10

Prefix HB: mandatory standard.

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