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ICS 49.025
CCS V10

HB

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

HB 8423.7-2023

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

金属材料牌号鉴别方法 第7部分：看谱法鉴别镍基高温合金牌号

(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 8423.7-2023 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 high-temperature alloy grades with nickel as the main alloy element using spectrum analysis methods. This standard is applicable to the identification of various nickel-based high-temperature alloy grades listed in Table A.1. Various nickel-based high-temperature alloy grades other than those listed in Table A.1, as long as the types of alloying elements are within the range of the types of elements listed in Table A.1, and the content (i.e., mass fraction) of the alloying elements is within the

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corresponding range of this standard. The element content determination intensity standard can be used as a reference within the range defined.

HB 8423.7-2023 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 8423.8-2023 - Methods for identification of metal material grades - Part 8: Spectral identification of cobalt-based high-temperature alloy grades

HB 8423.9-2023 - Methods for identification of metal material grades - 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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