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Revert materials for superalloy - Terminology and classification

再生高温合金原料 术语和分类

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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.

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Terminology and classification of recycled high temperature alloy raw materials

1 Scope

This document defines the terminology of recycled high-temperature alloy raw materials, gives the classification of recycled high-temperature alloy raw materials, and specifies the product names and product Logo.

This document is applicable to recycled high-temperature alloy raw materials used as raw materials when smelting high-temperature alloys.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Superalloy scraps

High-temperature alloy parts or scraps that have lost their original value of use or have not lost their value of use but have been discarded or abandoned, which may Contamination or mixing with non-high temperature alloy materials.

3.2

The high temperature alloy recycled materials (3.1) are pre-processed by sorting (3.6) and other methods, and the obtained materials meet the relevant regulations on environmental protection and safety, and can be used for production Recycled primary raw material for recycled high-temperature alloy raw material (3.3).

Note 1. Based on the original forming method of the material, it can be divided into recycled deformed high-temperature alloy return material, recycled cast high-temperature alloy return material and recycled powder high-temperature alloy return material. Return material.

Note 2. Based on their physical shapes, they can be divided into three categories. block materials, chip materials and powder materials.

Note 3. According to the matrix material, it can be divided into three categories. iron-based recycled high-temperature alloy return materials, nickel-based recycled high-temperature alloy return materials and cobalt-based recycled high-temperature alloy return materials.

Note 4. For the classification and grading of recycled high-temperature alloy return materials, as well as examples and typical photos, see Appendix A.

3.3 Figure 1 Processing flow of recycled high-temperature alloy raw materials

The recycled high-temperature alloy return material (3.2) is obtained through physical treatment such as sorting (3.7) and processing, and can be directly put into the furnace as raw material.

Materials for refining high-temperature alloys.

Note 1. Materials that can be directly put into the furnace as raw materials to melt deformed high-temperature alloys are called recycled deformed high-temperature alloy raw materials.

Note 2. Materials that can be directly put into the furnace as raw materials for melting and casting high-temperature alloys are called recycled casting high-temperature alloy raw materials.

Note 3. Materials that can be used as raw materials to directly enter the furnace to melt powder high-temperature alloys are called recycled powder high-temperature alloy raw materials.

Note 4. See Figure 1 for the processing flow of recycled high-temperature alloy raw materials.