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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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MJ thread spline-drive self-locking nuts for aerospace

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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.

This document is modified to adopt ISO 9157.2002 "Aerospace nuts, splines, self-locking, MJ threads, grade. 1100MPa (chamber

temperature)/425°C, 1100MPa (room temperature)/650°C, 1210MPa (room temperature)/425°C, 1210MPa (room temperature)/730°C, 1550MPa

(room temperature)/235°C, 1550MPa (room temperature)/425°C, 1550MPa (room temperature)/600°C Dimensions?.

Compared with ISO 9157.2002, this document has made the following structural adjustments.

--- This document adds Chapter 3 "Terms and Definitions";

--- 4.1 of this document corresponds to Chapter 3 in ISO 9157.2002, adding 4.2.

The technical differences between this document and ISO 9157.2002 and the reasons are as follows.

---Changed part of the dimensioning symbols of self-locking nuts (see Figure 1 and Table 1), which is more in line with domestic standards for dimensioning fasteners

Habit;

--- Added the diameter D2 of the outer circle before the closure of the self-locking nut (see Figure 1 and Table 1), as a reference dimension for three-dimensional modeling;

--- Added technical requirements such as materials, heat treatment, surface treatment, threads, marking examples of self-locking nuts (see 4.2), these technical requirements

It is an important basis for the manufacture and selection of self-locking nuts;

--- Added the reference document HB/Z5074 (see 4.2.3) for the electroplating silver process of self-locking nuts to guide the development of silver plating and electroplating of self-locking nuts

Acceptance of silver plating layer;

--- The reference document ISO 8641 (see 4.2.6) of the technical specification for self-locking nuts has been added, which specifies the metallurgical properties, force

Technical indicators such as mechanical properties and acceptance methods are used to guide the manufacture and acceptance of self-locking nuts.

The following editorial changes have been made to this document.

--- In order to coordinate with the existing standard, change the name of the standard to "MJ thread twelve-point spline self-locking nut for aerospace";

--- Corrected the labeling error of dimension K in ISO 9157.2002 (corresponding to dimension D1 in Figure 1 of this document).

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

1 Scope

This document specifies the structure, dimensions and technical specifications of self-locking nuts with MJ thread twelve-point splines (hereinafter referred to as "self-locking nuts") for aerospace applications.

technical requirements.

This document is applicable to GH2132A self-locking nuts and strength grades with a strength grade of 1100MPa and a maximum service temperature of 650°C

Design, manufacture and testing of GH4738 self-locking nut with 1210MPa and maximum service temperature of 730 degrees C.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document.

HB/Z5074 Electroplating silver process

ISO 5855-2 Aerospace MJ threads Part 2.Limiting dimensions of bolts and nuts
(Aerospace-MJthreads-

ISO 7403 Aerospace dodecagonal spline drive dimensions metric series
(Aerospace-Splinedrives-Wrenc-

ISO 8641 Procurement Specifications for Aerospace-Self-lockingnuts with Temperatures
Above 425°C

ISO 8788 Aerospace-Nuts, metric-Toleranceofform

3 Terms and Definitions

This document does not have terms and definitions that need to be defined.

4.1 Structure and dimensions

The structure and size of the self-locking nut shall comply with the regulations in Figure 1 and Table 1.