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

GB/T 6173-2015

**Hexagon thin nuts -- Fine pitch thread
(English Translation)**

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Foreword

GB/T 6173 is one of the serial national standards of "Hexagon Nuts (Part)", which include.

- GB/T 41 Hexagon Nuts, Style 1 - Product Grade C;
- GB/T 6170 Hexagon Nuts, Style 1;
- GB/T 6171 Hexagon Nuts, Style 1 - Fine Pitch Thread;
- GB/T 6172.1 Hexagon Thin Nuts;
- GB/T 6173 Hexagon Thin Nuts - Fine Pitch Thread;
- GB/T 6174 Hexagon Thin Nuts - Unchamfered;
- GB/T 6175 Hexagon Nuts, Style 2;
- GB/T 6176 Hexagon Nuts, Style 2 - Fine Pitch Thread.

This Standard was drafted as per the rules specified in GB/T 1.1-2009.

This Standard replaced GB/T 6173-2000 Hexagon Thin Nuts - Fine Pitch Thread; compared with GB/T 6173-2000, this Standard mainly has the following technical changes.

- Delete "if other technical requirements are needed,... the selection in (GB/T

3098.15 and GB/T 3103.1)." (Chapter 1 of Edition 2000);

- Unify the reference thread standards to be GB/T 193, GB/T 9145 (Chapter 2);
- Modify the inner chamfer into $\theta=110^{\circ}\sim 120^{\circ}$ (Figure 1);

--- Increase the mechanical properties of steel nuts. QT - Quenching and Tempering (Table 3).

This Standard adopts re-drafting method to modify and use ISO 8675.2012 Hexagon Thin Nuts Chamfered (Style 0) with Metric Fine Pitch Thread - Product Grades A and B (English Edition).

This Standard has the following technical differences and causes from ISO 8675. 2012.

--- Delete ISO 8675 provision. "if other technical requirements are needed,... selection in ISO 4759-1" (Chapter 1), which don't belong to the contents specified by this Standard;

--- In the normative references, use national standards to replace the international Hexagon Thin Nuts - Fine Pitch Thread

1 Scope

This Standard specifies the type and dimension, technical conditions and markings of hexagon thin nuts - fine pitch thread.

This Standard is applicable to the chamfered hexagon thin nuts - fine pitch thread with thread nominal diameter $D = 8\text{mm} \sim 64\text{mm}$; Performance Grades 04, 05, A2-025, A2-035, A4-025, A4-035, CU2, CU3 and AL4; Product Grades A and B. Grade A is applied to the nuts with $D \leq 16\text{mm}$; while Grade B is applied to the nuts with $D > 16\text{mm}$.

2 Normative References

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this document.

GB/T 90.1 Fasteners - Acceptance Inspection (GB/T 90.1-2002, ISO 3269.2000, IDT)

GB/T 90.2 Fasteners - Marking and Packaging

GB/T 193 General Purpose Screw Threads - Diameters and Pitches (GB/T 193-2003, ISO 261.1998, MOD)

GB/T 1237 Designation System for Fasteners (GB/T 1237-2000, eqv ISO 8991.1986)

GB/T 3098.2 Mechanical Properties of Fasteners - Nuts (GB/T 3098.2-2015, ISO 898-2.2012, MOD)

GB/T 3098.10 Mechanical Properties of Fasteners - Bolts, Screws, Studs and Nuts Made of Non-Ferrous Metals (GB/T 3098.10-1993, eqv ISO 8839.1986)

GB/T 3098.15 Mechanical Properties of Fasteners - Nuts Made of Stainless Steel (GB/T 3098.15-2014, ISO 3506-2.2009, MOD)

GB/T 3103.1 Tolerances for Fasteners - Bolts, Screws and Nuts (GB/T 3103.1-2002, idt ISO 4759-1.2000)

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