

ICS 21.060.20
CCS H 13



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

GB/T 6171-2016

**Hexagon nuts, style 1 -- Fine pitch thread
(English Translation)**

Issued on: February 24, 2016

Implemented on: June 1, 2016

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China**

Table of Contents

Foreword...	3
1 Scope...	5
2 Normative References...	5
3 Dimensions...	6
4 Technical Requirements and Reference Standards...	7
5 Designation...	8

Foreword

GB/T 6171 belongs to a national standards series "Hexagon Nuts (Part)". The series comprises the following.

- 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 (Chamfered);
- GB/T 6173 Hexagon Thin Nuts (Chamfered) with Fine Pitch Thread;
- GB/T 6174 Hexagon Thin Nuts - Unchamfered;
- GB/T 6175 Hexagon Nuts, Style 2;
- GB/T 6176 Hexagon Nuts, Style 2, With Fine Pitch Thread;
- GB/T 6177.1 Hexagon Nus with Flange, Style 2; and
- GB/T 6177.2 Hexagon Nuts with Flange, Style 2 - Fine Pitch Thread.

This Standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard replaces GB/T 6171-2000, Hexagon Nuts, Style 1, with Fine Pitch Thread. Compared with GB/T 6171-2000, the main technical differences are as follows.

- it deletes "If, in special cases, specifications other than those listed in this Standard are required, they can be selected from existing Standards,... GB/T

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

- it adds "Note. Because the height of the nuts of fine pitch thread is insufficient, resulting in high slipping-off rate, the hexagon nuts style 2 can be used; See GB/T 6176 (Chapter 1)";
- it unifies reference thread standards into GB/T 193 and GB/T 9145 (Chapter 2);
- it increases for the mechanical properties of steel nuts. QT - Quenching and tempering (Table 3);
- it adds the technical requirements of passivating treatment of stainless steel nuts in accordance with GB/T 5267.3 (Table 3);
- it is allowed to omit in surface treatment in Designation that the surface is as processed, instead of surface galvanizing passivation (5.2).

Hexagon Nuts, Style 1 - Fine Pitch Thread

1 Scope

This Standard specifies the dimensions, technical requirements and designation of hexagon nuts, style 1 - fine pitch thread.

This Standard applies to hexagon nuts, style 1, with. thread nominal diameter 8 mm to

64 mm; property class 6, 8 and 10, A2-50, A2-70, A4-50, A4-70, CU2, CU3 and AL4;

product grades A and B; fine pitch thread. Product grade A is used for nuts with $D \leq 16$ mm; and product grade is used for nuts with $D > 16$ mm.

Note: Because the height of the nuts of fine pitch thread is insufficient, resulting in high slipping-off rate, the hexagon nuts style 2 can be used; See GB/T 6176 (Chapter 1).

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition dated applies to this document. For undated references, the latest edition of the referenced document (including any amendments) applies to this Standard.

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 Metric 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 Essential Oils and Aromatic Extracts - Determination of Residual Benzene Content (GB/T 3103.1-2002, ISO 4759-1.2000, IDT)

.....