

ICS 21.060.20
CCS J 13



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

GB/T 6177.1-2016

**Hexagon nuts with flange, style 2
(English Translation)**

Issued on: February 24, 2016

Implemented on: June 1, 2016

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine**

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Foreword

This Part of GB/T 6177 is one of national serial standards of "Hexagon Nuts (Part)", such series 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 (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 Nuts with Flange, Style 2;
- GB/T 6177.2 Hexagon Nuts with Flange, Style 2 - Fine Pitch Thread.

This Part belongs to Part 1 of GB/T 6177.

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

This Part replaced GB/T 6177.1-2000 Hexagon Nuts with Flange; compared with GB/T 6177.1-2000, this Part has the major technical changes as follows.

- Modify the standard name;
- Delete "If other technical requirements are necessary,... selection in GB/T

3098.2 AND GB/T 3103.1." (Clause 1 of 2000 Edition);

- Unify the quoted thread standards into GB/T 193 and GB/T 9145 (Clause 2 of this Edition);
- Modify the mechanical property class of steel nuts. 8, 10 (QT), 12 (QT) (Table 2 of this Edition);
- Add the mechanical property of steel nuts. QT - quenching and tempering (Table

2 of this Edition);

- Add the untreated steel nuts surface; delete the oxidization treatment (Table 2 of this Edition);

This Part was proposed by China Machinery Industry Federation.

This Part shall be under the jurisdiction of National Technical Committee for Standardization of Fastener (SAC/TC 85).

Drafting organizations of this Part. China Productivity Center for Machinery.

Participating drafting organizations of this Part. Gem-Year Industrial Co., Ltd., Shaoxing Sunny High-Pressure Fastener Co., Ltd., and Shandong Tenda Stainless Steel Fasteners Co., Ltd.

This Part shall be interpreted by the Secretariat of National Technical Committee for Standardization of Fastener.

The historical editions replaced by this Part are as follows.

- GB/T 6177-1986;
- GB/T 6177.1-2000.

Hexagon Nuts with Flange, Style 2

1 Scope

This Part of GB/T 6177 specifies the type and dimension, technical conditions and mark of hexagon nuts with flange, style 2.

This Part is applicable to the hexagon nuts with flange, style 2 with thread specification of M5~M20, property class of 8, 10, 12 and A2-70, product grade A and B. Product

grade A is applied to nuts with $D \leq 16\text{mm}$; while product grade B is applied to nuts with $D > 16$.

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 3098.15 Mechanical Properties of Fasteners - Nuts Made of Stainless-Steel (GB/T 3098.15-2014, ISO 3506-2.2012, MOD)

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

GB/T 5267.1 Fasteners - Electroplated Coatings (GB/T 5267.1-2002, ISO 4042.1999, Fasteners - Electroplated Coatings, IDT)

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