



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

GB/T 28775-2021

**Synchronous belt drives - Pulley with T trapezoidal profile
system**

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Foreword

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

This standard replaces GB/T 28775-2012 "Synchronous Belt Transmission Metric Pitch Trapezoidal Tooth Synchronous Belt Wheel". With GB/T 28775-

Compared with.2012, the main technical changes except for editorial changes are as follows.

---Modified the addendum fillet radius and twice the pitch distance value (see Table 1,.2012 edition of Table 1);

---Modified the pitch deviation (see Table 2, Table 2 of the.2012 edition);

---The size of the unilateral retaining ring has been increased (see 5.1, 5.1 in the.2012 edition);

---The diameter of the pulley has been modified (see Table 4, Table 4 of the.2012 edition).

This standard uses the redrafting method to amend and adopt ISO 17396.2017

"Synchronous belt drive metric pitch T and AT-shaped tooth ring and

Opening belt and pulley".

Compared with ISO 17396.2017, this standard has many structural adjustments. Appendix A lists the differences between this standard and ISO 17396.2017.

A list of chapter number comparisons.

Compared with ISO 17396.2017, this standard has technical differences.

The vertical single line (I) of the setting is marked, and a list of the corresponding technical differences and their reasons is given in Appendix B.

This standard also made the following editorial changes.

---The name of the standard has been changed to harmonize with our country's existing standards.

This standard was proposed by the China Machinery Industry Federation.

This standard is under the jurisdiction of the National Belt Wheels and Belt Standardization Technical Committee (SAC/TC428).

Drafting organizations of this standard. Ningbo Fulong Synchronous Belt Co., Ltd., China Machinery Productivity Promotion Center, Sichuan Deen Precision Technology Co., Ltd.

Division, Ningbo Kai Chi Adhesive Tape Co., Ltd.

1 Scope

This standard specifies the type and marking of the metric pitch trapezoidal tooth synchronous pulley (hereinafter referred to as the pulley), the size of the groove, the size of the pulley, and the pulley

Geometric tolerance and pulley material, surface roughness and balance.

This standard applies to general industrial synchronous belt drives and is used in conjunction with the corresponding product models specified in GB/T 28774-2021.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 11357 pulley material, surface roughness and balance (GB/T 11357-2020, ISO 254.2011, MOD)

GB/T 28774 synchronous belt drive T-shaped trapezoidal tooth synchronous belt (GB/T 28774-2021, ISO 17396.2017, MOD)

3.1 Type

3.1.1 The metric pitch synchronous belt drive uses trapezoidal tooth synchronous belt wheels. The pulleys with no more than 20 teeth adopt SE-type cogging. Large number of tooth slots

The teeth of 20 adopt N-type tooth groove.

3.1.2 Involute toothed synchronous belt wheels should not be used for metric pitch synchronous belt transmission.

3.2 Marking

The pulley mark consists of the number of tooth slots, model, wheel width and tooth slot type.

Example.

Marking of pulleys with 25 cogging, model T2.5, wheel width 7.5, and cogging type N.