

ICS 65.160
CCS X 94

YC

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

YC/T 10.12-1993

Replacing YC/T 10.12-2006

**Tobacco Machinery General Technical Conditions Part 12:
Assembly
(English Translation)**

Issued on: April 3, 2018

Implemented on: April 15, 2018

Issued by: State Tobacco Monopoly Administration

Table of Contents

Foreword
1 Scope
2 Normative references
3 General requirements

Foreword

YC/T 10 "General Technical Conditions for Tobacco Machinery" is divided into 16 parts.

- Part 1. Cutting parts;
- Part 2. Cold work;
- Part 3. Welded parts;
- Part 4. Gray cast iron parts;
- Part 5. Ductile iron castings;
- Part 6. Cast carbon steel parts;
- Part 7. Copper alloy castings;
- Part 8. Aluminum alloy castings;
- Part 9. Forgings;
- Part 10. Metal plating and chemical treatment;
- Part 11. Painting;
- Part 12. Assembly;
- Part 13. Packaging;
- Part 14. Electrical control systems;
- Part 15. Electrical control system assembly;
- Part 16. Polished and brushed stainless steel parts.

This part is the 12th part of YC/T 10.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part replaces YC/T 10.12-2006 "General Technical Conditions for Tobacco Machinery Part 12. Assembly", and YC/T 10.12-Compared with 2006, the main technical changes

except editorial changes are as follows.

--- Increased the requirements of the assembly environment, the requirements for the sharp edges of the assembled parts, the requirements for surface preparation, and the assembly of the repair method (see 3.2).

3.5, 3.6, 3.7);

---Modified the assembly requirements of hydraulic system and pneumatic system (see 5.10, 5.11, 2006 version 3.6);

--- Change fastener assembly to connection and assembly (see Chapter 4, Chapter 4 of the 2006 edition);

---Modified taper pin, split pin, riveting, bonding assembly requirements (see 4.2, 4.5, 4.6, 2006 edition 4.5, 4.6, 4.7, 4.8);

--- Increased torque wrench assembly requirements, tightening force requirements, double nut assembly requirements (see 4.1.2, 4.1.5, 4.1.6);

--- Increased assembly requirements for pin connections, key (spline) connections, expansion sleeve connections, riveting, bonding, and interference connections (see 4.2, 4.3, 4.4, 4.5, 4.6, 4.7);

---Modify the bearing assembly to a rolling bearing (see 5.1, 5.1 of the 2006 edition);

--- Increased assembly requirements for plain bearings (see 5.2);

--- Modify the assembly of the worm gear and gear to the worm, worm gear, gear and gear box (see 5.3, 5.2 of 2006 edition);

--- Increased the verticality requirements of the gear reference end face and axis, bevel gear pairing requirements, gearbox assembly requirements (see 5.3.6, 5.3.7, 5.3.8, 5.3.9, 5.3.10, 5.3.11, 5.3.12);

---Modified the assembly of keys and splines, and incorporated the content into Chapter 4 (see 4.3, 5.3 of 2006 edition);

--- Increased assembly requirements for guide rails, brakes and clutches, couplings, hydraulic systems, pneumatic systems, and piping (see 5.4, 5.8, 5.9, 5.10, 5.11, 5.14);

---Modify the pulley assembly to the general pulley and belt drive (see 5.5, 5.5 of the 2006 edition);

--- Increased the requirements for belt drive tension (see 5.5.5);

--- Modify the assembly of the sprocket and chain to a sprocket and chain drive (see 5.6, 5.6 of 2006 edition);

--- Increased the tensioning method of the chain drive (see 5.6.5, 5.6.6);

- Modify the assembly of the timing belt to the timing pulley and belt drive (see 5.7, 5.7 of 2006 edition);
- Modify the assembly of the seal to a seal (see 5.12, version 5.8 of 2006);
- Increased assembly requirements for exterior parts (see Chapter 6);
- Increased the handling requirements for oil, water, gas and steam for products that have passed tests and inspections (see 7.6);
- Increased the technical characteristics and applicable range of the common bolt tightening torque, interference connection various assembly methods, and the pressing force when pressing Determination of heating temperature and time during calculation, hot charging, determination of cooling temperature and time during cooling, and requirements for allowable compensation of couplings (See Appendix A, Appendix B, Appendix C, Appendix D, Appendix E, Appendix F).

This part is proposed by the National Tobacco Monopoly Bureau.

This part is under the jurisdiction of the National Tobacco Standardization Technical Committee Smoke Machine Subcommittee (SAC/TC144/SC3).

This section drafted by. China Tobacco Machinery Technology Center Co., Ltd., Kunming Marine Equipment Group Co., Ltd., Shanghai Tobacco Machinery Limited liability company, Changde Tobacco Machinery Co., Ltd., Xuchang Tobacco Machinery Co., Ltd., Qinhuangdao Tobacco Machinery Co., Ltd.

1 Scope

This part of YC/T 10 specifies the general requirements for the assembly of tobacco machinery, the connection method, the assembly of typical components, the assembly of exterior parts and the final assembly.

General technical requirements.

This section applies to the assembly of tobacco machinery products.

2 Normative references

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

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

General rules and safety requirements for GB/T 3766 hydraulic drive systems and their components GB/T 6557 Winding rotor mechanical balance method and criteria GB/T 7932 pneumatic system general technical conditions General technical conditions for GB/T 7935

hydraulic components GB/T 9239.1 Mechanical vibration constant (rigid) rotor balance quality requirements - Part 1 GB/T 9239.14 Mechanical vibration rotor balance - Part 14. Assessment procedures for balance error GB/T 10089 cylindrical worm and worm gear precision GB/T 10095.1 Precision of cylindrical gears - Part 1. Definitions and permissible values GB/T 10095.2 Precision of cylindrical gears - Part 2. Definitions and permissible values of radial integrated deviation and radial runout GB/T 10096 rack accuracy GB/T 11365 bevel gear and hypoid gear precision JB/T 7929 gear transmission cleanliness YC/T 10.15 General technical requirements for tobacco machinery - Part 15. Electrical control system assembly YC/T 319-2009 Tobacco mechanical timing belt pulley and its retaining ring

3 General requirements

3.1

Assembly shall be carried out in accordance with the design, process requirements and this part and the relevant standards of the product.

3.2

The assembly environment should be clean. The assembly environment temperature, humidity, dustfall, lighting, etc. of high-precision products shall comply with relevant regulations.

3.3

All parts (including self-made parts, purchased parts, external parts, etc.) that are mechanically assembled shall be qualified and have a conformity mark or certificate.

Perform assembly.

3.4

Parts should be cleaned and cleaned prior to assembly. No burrs, flash, scale, chips, rust, sand, dust and oil, etc.

And should meet the appropriate cleanliness requirements. The tubes and components of the vacuum piping system are cleaned and blown dry with a cleaning agent.

3.5

Except for special requirements, the sharp corners and sharp edges of the parts should be blunt before assembly.

3.6

The surface to be treated shall be processed according to the process requirements and shall be cleaned after processing.