

ICS 65.160
CCS X 94

YC

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

YC/T 10.6-1993

Replacing YC/T 10.6-2006

**Tobacco machinery. General requirements - Part 6: Carbon steel
castings**
(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 sixth 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 10.6-2006 "General Technical Conditions for Tobacco Machinery Part 6. Cast Carbon Steel Parts", and YC/T 10.6-Compared with 2006, the main technical

changes except editorial changes are as follows.

--- Revised the requirements of "preferred casting grades and chemical composition" (see Table 1, Table 1 of the 2006 edition);

--- Revised the requirements of "mechanical properties" (see Table 2, Table 2 of the 2006 edition);

--- Revised the scope of the "Mechanical Performance Regulations" (see 3.2, 3.2 of the 2006 edition);

--- Modified the dimensional tolerance class requirements on the casting drawings (see 3.3, 3.3 of 2006).

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 technical requirements, test methods and inspection rules for carbon steel castings for tobacco machinery.

This section applies to cast carbon steel castings (hereinafter referred to as castings) for sand casting 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.

GB/T 6060.1-1997 Surface roughness comparison specimen casting surface GB/T 6414-2017 Casting dimensional tolerances, geometric tolerances and machining allowances GB/T 11352-2009 cast carbon steel for general engineering JB/T 5105 casting moulding draft

3 General requirements

3.1

The preferred casting grade and chemical composition shall comply with the requirements of Table 1.

Table 1 Preferred casting grades and chemical compositions

Brand

Quality score $\leq$ /%

C Si Mn SP

Residual element

Ni Cr Cu Mo V

Residual element

Total amount

ZG200-400 0.20

ZG230-450 0.30

ZG270-500 0.40

ZG310-570 0.50

ZG340-640 0.60

0.60

0.80

0.90

0.035 0.035 0.40 0.35 0.40 0.20 0.05 1.00

Note 1: For the upper limit of 0.01% carbon, it is allowed to increase the manganese by 0.04%, and the manganese of ZG200-400 is up to 1.00%, and the other four grades of manganese are up to 1.20%.

Note 2: Unless otherwise specified, residual elements are not used as acceptance basis.

3.2

The mechanical properties of the castings are to comply with the requirements of Table 2. Where the area shrinkage and impact absorption work, if required by the purchaser, the supplier chooses one of them.