

ICS 25.080.20

CCS J54



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

GB/T 25661.1-2010

**Plano-machining centres with traveling overhead cross rail -
Part 1: Testing of the accuracy**

高架横梁移动龙门加工中心 第1部分：精度检验

Issued on: December 23, 2010

Implemented on: July 1, 2011

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

Table of Contents

- 1 Scope
- 2 Normative references
- 3 General requirements

Foreword

GB/T 25661 "mobile overhead beam gantry machining center" is divided into two parts.

--- Part 1. Testing of the accuracy;

--- Part 2. Technical requirements. This section GB/T 25661 Part 1. This part is proposed by China Machinery Industry Federation. This part of the National Metal Cutting Machine Standardization Technical Committee (SAC/TC22) centralized. This section is drafted.

Sichuan Changzheng Machine Tool Group Co., Ltd. The main drafters of this section. Wang Xiaohui, Xu Bank of China, Liu Lixin. Overhead beams mobile gantry machining center Part 1. Testing of the accuracy

1 Scope

GB/T 25661.1-2010 is the Chinese national standard on plano-machining centres with traveling overhead cross rail - part 1: testing of the accuracy, in the field of manufacturing engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 23 December 2010 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 July 2011. Classification: ICS 25.080.20, CCS J54. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This section GB/T 25661 specifies the geometric precision crosshead overhead gantry machining center positioning accuracy and precision to work Requirements and test methods. This section applies to the work surface width 1000mm ~ 3000mm general purpose overhead beam mobile gantry machining centers and CNC Overhead beams mobile gantry milling machine.

2 Normative references

The following documents contain provisions which, through reference

GB/T 25661 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 17421.1-1998 Test code for machine tools - Part 1. under no-load or finishing conditions Geometric accuracy of machines (eqv ISO 230-1.1996)

GB/T 17421.2-2000 Test code for machine tools - Part 2. CNC axis positioning accuracy and repeatability of determination (Eqv ISO 230-2.1997)

GB/T 19660-2005 Industrial automation systems and integration - Numerical control of machines and motion coordinate system named (ISO 841. 2001, IDT)

3 General requirements

3.1 Units All this section and the corresponding linear dimension tolerances are in millimeters (mm) represents; angle dimensions in degrees (°), said angle deviation and the corresponding Tolerance generally expressed as a ratio. However, in some cases for clarity, but also with microradians (μrad) or arcsec (") indicates its conversion relationship see The following formula. $0.010/1000 = 10\mu\text{rad} \sim 2''$

3.2 Implementation of standards When using this section shall GB/T 17421.1-1998 in Chapter 3, in particular installation, spindles and other moving part of the machine before inspection Member of the warmed air operation, testing methods and tools recommended accuracy.

3.3 Test order Inspection order under this Part may not represent the actual test sequence. In order to make an inspection tool assembly and disassembly and inspection of convenience, can be arbitrary Order of inspection.

3.4 Test Project When the test machine, according to the structural characteristics must not test all of the items in this section. When testing requirements for acceptance purposes, can Made by the user to select the manufacturer agree that some of the test items of interest, but these test items should be clearly stated at the time of ordering the machine.

3.5 inspection tool Test tools provided in this section is only an example, you can use the same amount of instructions or have other tools to test at least the same accuracy. Indicators should have a 0.001mm or higher resolution.