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

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**Electrical equipment of industrial machines -- Electromagnetic
compatibility -- Emission limits for machine tools**

工业机械电气设备 电磁兼容 机床发射限值

(English Translation)

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Foreword

In addition to this standard and Appendix E Appendix D, and the terms "Note" outer non-mandatory, the remaining terms are mandatory.

This standard equivalent European standard EN50370-1.2005 "Electromagnetic compatibility (EMC) standard machine tools Class Part 1. emission

Limits "(in English).

For ease of use, this standard the following editorial changes made.

--- will apply to the European standard expression changed to apply to our standard representations (including punctuation);

--- the EN50370-1.2005 standard name "Electromagnetic compatibility (EMC) - Product family standard machine tools - Part 1. Emission limit" change

This standard name "industrial mechanical and electrical equipment electromagnetic

emission limits compatible with the machine."

--- deleting the EN standard preface.

Footnotes --- Chapter 1 scope for the introduction of explanation.

This standard Appendix A, Appendix B, Appendix C is a normative, Appendix D, Appendix E is informative appendix.

The standard proposed by China Machinery Industry Federation.

This standard by the National Standardization Technical Committee Electrical Industrial Machinery Systems (SAC/TC231).

This standard is drafted. solid tech (Shenzhen) Co., Ltd. and Beijing Machine Tool Research Institute.

Participated in the drafting of this standard. Beijing KND CNC Technology Co., Ltd., the state machine Quality Supervision and Inspection Center, Hangzhou Machine Tool Group Limited.

1 Scope 1)

The standard provides for similar purposes or industrial environment, the line voltage does not exceed the rated 1000Va. c. Or 1500Vd. c. The machine

Bed electromagnetic emission limits, but does not include electric discharge machine (EDM).

1) EN50370-1 standard is to coordinate the EU EMC Directive.

And if this standard machine tools for export to the European Union, please note. This standard does not include fixtures 2004/108/EC Electromagnetic Compatibility Directive defined.

Note: the machine may be equipped with an electric motor, heating element, or a combination thereof, may include. an electrical or electronic circuits, power grid or other power source may be driven.

This standard relates to electromagnetic emission frequency range 9kHz ~ 400GHz. Other frequencies are not listed in this standard consideration.

2 Normative references

Terms of the following documents become provisions of this standard by reference in this standard. For dated reference documents, all later

Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to agreements based on this standard

Whether the latest versions of these documents. For undated references, the latest version applies to this standard.

GB 4824-2004 industrial, scientific and medical (ISM) radio disturbance characteristics Limits apparatus and methods of measurement (CISPR11.

2003, IDT)

GB 9254-2008 Limits and methods of measurement of radio harassment information technology equipment (IEC /CISPR22.2006, IDT)

GB/T 6113.101-2008 radio disturbance and immunity measuring apparatus and methods - Part 1-1. Radio Sao

Disturbance and immunity measuring apparatus measuring equipment (CISPR16-1-1.2006, IDT)

GB/T 6113.102-2008 radio disturbance and immunity measuring apparatus and methods - Part 1-2. Radio Sao

Interference immunity measuring apparatus and ancillary equipment Conducted disturbances (CISPR16-1-2.2006, IDT)

GB/T 6113.103-2008 radio disturbance and immunity measuring apparatus and methods - Part 1-3. Radio Sao

Disturbance and immunity measuring apparatus - Ancillary equipment - Disturbances power (CISPR16-1-3.2004, IDT)

GB/T 6113.104-2008 radio disturbance and immunity measuring apparatus and methods - Part 1-4. Radio Sao

Interference immunity and radiation measuring apparatus harassment aid (CISPR16-1-4.2005, IDT)

GB/T 6113.105-2008 radio disturbance and immunity measuring apparatus and methods - Part 1-5. Radio Sao

And interference immunity measuring apparatus 30MHz ~ 1000MHz antenna calibration test sites (CISPR16-1-5.2003, IDT)

GB/T 21067-2007 industrial machinery electrical equipment electromagnetic compatibility requirements general immunity

3 Terms and Definitions

The following terms and definitions apply to this standard.

3.1

Portable non-mechanical operation, is driven by an external power supply, for machining solid metal products, including turning, milling, grinding, drilling, mechanical

Processing with a machining chips, also including such as bending, forging chipless forming process.

Machines are typically equipped with power supply, power and control electrical and electronic equipment, it is also provided with one or more drive device of the movable element

Member or moving parts.

3.2

Mechanical, pneumatic, hydraulic, electrical and/or electronic components (for example. base, the tool holder, the sensor, the spindle unit, and comprising a control NC

, A man-machine interface, programmable logic controller (PLC) and the power transmission apparatus cabinet etc.) apparatus composed of only the expected load is provided for

Industrial combined operation or standby system. Elements may also be considered a component.

3.3

Electromagnetic elements or components associated with aspects related to the emission means, due to its electromagnetic properties easily cause electromagnetic interference effects can make it means

These emission characteristics of a typical device the element or component.

3.4

Specific interfaces specified equipment with the external environment.

[GB/T 21067-2007 3.1.1]

Note: In this standard, "port" or machine components for the specified function and specific interfaces electromagnetic environment. Interface means or the physical boundaries of the whole machine assembly.

3.5

Machine for connecting the power distribution within the range required.

NOTE: Component port can be connected to the port of the machine, or other interface components can be formed in the machine.

3.6

The mechanical structure of the machine and each of the separated components related to