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**Electrical equipment of machines - Open numerical control
system - Part 5: Software platform**

机械电气设备 开放式数控系统 第5部分：软件平台

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Foreword

GB/T 18759 "mechanical and electrical equipment open CNC system" is divided into the following parts.

Part 2. Architecture;

Part 3. Bus interface and communication protocol;

- Part 4. Hardware platform;

- Part 5. Software platform;

- Part 6. Network interface and communication protocol;

- Part 7. General technical conditions;

Part 8. Test and Acceptance.

This part is part 5 of GB/T 18759.

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1 Scope

This part of the provisions of the mechanical and electrical equipment open CNC system software platform construction and basic structure for the open CNC system

Software platform analysis, design and implementation of the reference frame to meet the mechanical and electrical equipment, CNC system open and interoperability requirements.

This part applies to metal processing machinery, textile machinery, printing machinery, sewing machinery, plastic and rubber machinery, woodworking machinery and other electrical facilities

Standby open CNC system. Other industrial machinery and equipment with the open CNC system can also refer to the implementation.

2 normative reference documents

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

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

GB/T 9387.1-1998 Information technology - Open systems interconnection - Basic reference model - Part 1. Basic model (ISO /

IEC 7498-1..1994, IDT)

GB/T 15969.3-2005 Programmable controllers - Part 3. Programming languages (IEC 61131-3..2002, IDT)

Mechanical electrical equipment - Open numerical control systems - Part 1. General

principles GB/T 18759.1-2002

Mechanical and electrical equipment - Open numerical control systems - Part 2.
Architecture - GB/T 18759.2-2006

GB/T 19769.1-2005 Functional blocks for industrial process measurement and control
systems - Part 1. Structures (IEC 61499-1..2003, MOD)

3 terms and definitions, symbols and abbreviations

3.1 Terms and definitions

The following terms and definitions apply to this section.

3.1.1 Open CNC system opennumericalcontrol (ONC) system

Application software is built on the system, which follows the system platform of openness, expansibility and compatibility, so that the application software has

Portability, operability and man-machine interface consistency.

[GB/T 18759.1-2002, 3.1]

3.1.2 System platform

By the hardware platform and software platform for the operation of numerical control applications for the movement of components to control the basic components, and the Department of CNC

Other components together to achieve the operation of the mechanical control.

[GB/T 18759.1-2002, 3.3]

3.1.3 Hardware platform hardwareplatform

Software platform and application software to run the basic components, in the basic structure of the bottom.