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

GB/T 26498-2011

**Industrial automation systems and integration -- Physical
device control -- Dimensional Measuring Interface Standard
(DMIS)**

工业自动化系统与集成 物理设备控制 尺寸测量接口标准 (DMIS)
(English Translation)

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Foreword

This standard is identical with ISO 22093:2003 "Industrial automation systems and integration - Physical device control - Dimensional Measuring Interface Standard" (DMIS) (in English).

The standard of technical content and composition and structure of ISO 22093:2003 is consistent, in the preparation of the format in line with our national standard GB/T 1.1-2000 "Standardization Guide Part 1. Standard structure and drafting the rules." Our system is based on national standards Statutory requirements and for ease of use, made the following editorial changes.

- The "ISO 22093:2003" to "GB/T 26498";
- Remove the ISO 22093:2003 Foreword, and in accordance with the requirements of national standards for the preparation redrafting the foreword;
- The ISO 22093:2003 Chapter 3, "Normative references" in the introductory phrase to GB/T 1.1-2000 stipulated cited Lead;
- ISO 22093:2003 process inspection/statement section index Quality Information System "CLAMPID" should "CLMPID", in the present Standard has been modified;
- Which has been translated into national standards with international standards in this standard appears renumbered national standard number, and the corresponding national standard International standard version uses quasi-placed in parentheses after the number of national standards, ease of use and access. International standard unconverted Approved leave;
- Deletion of the original text does not meet the standard of written words.

This standard is a normative appendix Appendix C, Annex A, Annex B, Appendix D,

Appendix E is informative appendix.

The standard proposed by China Machinery Industry Federation.

The standard automation systems and integration by the National Standardization Technical Committee (SAC/TC159) centralized.

Drafting of this standard. Beijing Machinery Industry Automation Research Institute, Beijing Machine Tool Research Institute.

Introduction

DMIS will provide a test program passes to the size measuring device and the measured value and the process returns to the analysis of data collected and/or naturalization Vocabulary file system. A device interfaces and other devices can be used directly DMIS vocabulary, may also have a pre-processor to its own DMIS native data format to format, and/or the DIMS format to post-processor through its own data structure.

In Figure 1, there is described a use DMIS format as a data exchange standard environment. 1, a test program can to create a number of ways. Create an examination procedure may be assisted CAD system, the non-image systems, automated system, or hand Construction workers. A programming system may require a pre-processor to program into DMIS format. Such a program may DMIS inspection Running in different sizes measuring equipment (DME) on. In Figure 1, DMEI DMIS device has a pre-processor and post-processor DMIS converting data into its own unique data format. DMEIV equipment DMIS as its own native format and therefore does not Require pre-processor and post-processor. Similarly, a host computer is used to control devices and DMEIII DMEII equipment. The Host There are post-processor to decode DMIS program and drive two DME equipment, or through DMIS format, or by some sort of user set Defined data exchange format.

It can be subjected to a variety of different situations in DMIS format for transferring data back as a result. For example, data may be directly DMIS Form or transmitted through the post-processor. As a result the following data is typically transmitted to the analysis system and/or storage system, such as a mass the amount of information systems (QIS).

Manual interface show DMIS programs can be written by hand and manual analysis results without the use of computer-aided. In addition, many other Applications can use DMIS data exchange format.

DMIS implementation depends on the individual user. DMIS simply defines a neutral data exchange format that can DMIS ASCII-file system from a transfer to another support. The method of transmission, storage and management of these files by user Lai.

This version includes a drive DMIS CMM, video test equipment and a discrete mechanical and electronic components of the size and power Statements mixing process verification

system needs can test. DMIS aims to provide an exchange for all size measuring device standard.

Further applications can be extended to support performance.

- 1) expression and robots for workpiece measurement.
- 2) additional terms for the verification process and the adjustment process in the closed-loop manufacturing unit.

The first edition of ISO standard DMIS has been completely re-organized former American National Standard DMIS3.0ANSI/CAM-I 101-1995. In order to be consistent with part ISO/IEC Guide 3, it requires such restructuring. In addition to this restructuring, all from DMIS 3.0ANSI/CAM-I101-1995 published since been approved changes have been included. This release includes the following aspects Additional features. sensor definition, classification sensor element, compound positioning, CAD connectivity, soft function measurement, quality information systems, various lengths PROMPT statement to relax and use operator interface limits. The main changes included in the approved Chapter 7; although reorganize We do more inclined to recommend changes, the rest of the text does not make significant changes. DMIS National Standards Committee confirmed their support and participation European DMIS User Group (EDUG) developed DMIS04.0 version. Significant changes are listed below.

(Labelname) allows the use of a period in the label name. "." ACLRAT input format is changed.

ALGDEF additional statement is used to define an algorithm, and assign it a label name.

BADTST new statement is used to capture the specified error.

Format profile changes become extended Backus - Naur Form. See 5.5 and Appendix C.

CMPNTGRP additional statement for combining a plurality of sensor elements together, as a single component handling.

CONST (inputformat4) scalable performance.

CONST (inputformat8) statement is used to build a new offset feature.

CONST (inputformat9) new statement for soft function measurements.

CONST (inputformat10) new statement for soft function measurements.

CONST (inputformat11) statement is used to copy a feature new entity and convert it to another coordinate system.

CONST (inputformat12) statement is used to build a new circle on a real vertebral bodies.

CONST (inputformat13) to build a new statement to the nearest point from a nominal point by positioning the CAD geometry.

CROSCl new statement to improve the performance of rotating tool stations.

DECL add a vector (VECTOR) variable types and multidimensional arrays.

DECPL new statement is used to define the decimal output precision.

DMESW increase the delay (DELAY) as a sub-word option.

DMISMD now DMIS version of this statement is mandatory.

DMISMN now DMIS version of this statement is mandatory.

EQUATE new statement to make two equal coordinate system.

ERROR several changes to improve error capture.

EXTENS new statement to define the extended sensor.

EXTFIL this standard after a major release, SYS times the word has been deleted.

FEAT/ARC (inputformat1) arc must be removed and restrictions on the plane parallel to the plane of the current work.

FEAT/ARC (inputformat2) arc must be removed and restrictions on the plane parallel to the plane of the current work.

FEAT/EDGEPT statement to define a new edge point.

FEAT/GEOM new statements for use have been previously defined geometry to define a feature.

FEAT/T ORUS new statement is used to define a torus feature. Add this statement also brings to CONST statements (Inputformat1), GEOALG statement, MEAS statement, RMEAS statement (inputformat5), TOL/DIAM statement TOL/GTOL statements and 5.3.2.1.1 changes.

FEDRAT input format is changed.

Fig marked all the figures in order to be consistent with the renaming ISO format.

FILNAM The DMIS version of this statement is now mandatory.

FLY additional statement is used to set or disable continuous motion mode of the controller.

GECOMP new statement is used to open or close the geometric correction.

GEOM new statement to define CAD geometry related properties.

GOTO statement GOTO extended performance.

GROUP statement to define a new set of previous good calibration sensor.

More changes for internal function returns system information.