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

GB/T 22188.1-2008

**Ergonomics design of control centre -- Part 1: Principles for the
design of control centre**

控制中心的人类工效学设计 第1部分：控制中心的设计原则

(English Translation)

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Foreword

GB/T 22188 "Control Center Ergonomic design" intends divided into the following sections.

- Part 1. Design principles Control Center;
- Part 2. Control arrangement principles supporting chamber;
- Part 3. Control room layout;
- Part 4. Layout and dimensions of workstations;
- Part 5. displays and controls;
- Part 6. Control Room environmental requirements;
- Part 7. Control Center assessment principles;
- Part 8. for a specific application Ergonomics requirements.

This section GB/T 22188 Part 1.

This part identical with ISO 11064-1:2000 "control center Ergonomic design - Part 1. Control Center design principles Then "(in English), and in accordance with ISO

11064-1:2000 draft translation.

This section of the Appendix A, Appendix B is an informative annex.

This part is proposed by the China National Institute of Standardization.

This part of the National Standardization Technical Committee on Human Ergonomics centralized.

This section drafted by. China National Institute of Standardization, Tsinghua University, Institute of Psychology, Chinese Academy of Sciences, Lenovo Group, the General Logistics Department Quartermaster loaded Preparation by.

Introduction

In a more secure, more reliable and more efficient operational requirements driven by innovations in information technology have made automation technology and centralized supervision Control technology is increasingly applied to the user - interface and its associated operating system environments. Although these developments, monitoring and management of complex when hybrid automation systems, operator continues to play a key role. With the expansion of the scale of automation solutions, equipment failure and human the consequences of failure are also increasingly prominent.

The operator of the job requirements are sometimes very high. In the control room, due to improper operation of the operator, such as negligence, authorization Errors, timing errors and erroneous sequences such acts are likely to bring hidden dangers. Therefore, this section is intended to establish a common framework for the design and application-specific requirements and recommendations Ergonomic aspects of the assessment of the control center, in order to eliminate or minimize human errors may Possibilities.

Specific control center project is usually part of a more large-scale system design projects. Design control center should not be alone, but should take into account the goals and objectives and background of large systems more relevant. Therefore, it is necessary to control room design are involved in human Ergonomic factors to be checked from the beginning or from a traditional point of view and look Ergonomic design issues unrelated to the scope of the project. Required for each specific Judge issues, not just on the basis of regulatory steps to make a decision.

This section contains the basic principles and processes can be used to control the center of the design project, design and physical requirements of the final design and construction assessment Meeting these requirements and recommendations apply to both the design of the control room of each unit (such as a workstation and the overall design of the display), but also for the entire Overall planning and design of the project. Other parts of this series of standards are set forth more specific requirements for a particular unit of the control center.

GB/T 22188.1-2008/ISO 11064-1:2000 Ergonomic design of control centers Design
Principles Control Center. Part 1

1 Scope

This section GB/T 22188 specifies the ergonomics design for the control center and the control center expansion, renovation and technological upgrading Learn the principles, recommendations and requirements.

This section applies to all types of control centers, including the control center for the process industry, transportation and logistics control systems and the control center for the deployment of personnel services.

Although this section is mainly applied to non-mobile control centers, but many of the principles set forth therein apply equally to mobile control center, for example, the control center and the aircraft on the ship.

2 Normative references

The following documents contain provisions which, through reference GB/T 22188 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.

Ergonomic principles GB/T 16251 design of work systems (GB/T 16251-2008, ISO 6385:2004, IDT) Ergonomic design - Part 3 ISO 11064-3 Control Center. Control room layout

3 Terms and Definitions

The following terms and definitions apply to this section.

Functionally related and located in the same location of the control room, control room, and a combination of supporting local control station.

[ISO 11064-3:1999 is defined in 3.1] 3.2 Functional entities and their associated physical structure of the core, the operator here to exercise centralized control, monitoring and management responsibilities.

[ISO 11064-3:1999 is defined in 3.4] 3.3 A set of functions associated with the room, the control room located in the same position and surrounded by the control room, a control room support area locations. example as related offices, equipment rooms, lounge and training room.

[ISO 11064-3:1999 is defined in 3.6] 3.4 A detailed description of the control room features include supporting the arrangement of rooms, equipment, and operator workstation display controllers, including these special Zheng meet the control center in the development, procurement and construction aspects of the general requirements.

GB/T 22188.1-2008/ISO 11064-1:2000