

ICS 13.180
CCS A 25



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

GB/T 22188.3-2010

**Ergonomic design of control centre -- Part 3: Control room
layout**

控制中心的人类工效学设计 第3部分：控制室的布局
(English Translation)

Issued on: January 14, 2011

Implemented on: July 1, 2011

Issued by: Standardization Administration of China

Table of Contents

Introduction
Introduction
1 Scope
2 Normative references
3 Terms and definitions
Ergonomic design school 4 Control Center
Appendix A (informative) Control room layout Example
References

Foreword

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

- Part 1. Design principles for the control center
- Part 2. Control room layout principles set
- Part 3. Control room layout
- Part 4. Layout and dimensions of workstations
- Part 5. Monitor and Controller
- Part 6. Environmental requirements for control room
- Part 7. Assessment of the principle of the control center
- Part 8. Specific applications Ergonomic requirements this section GB/T 22188 Part 3.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses redrafted Law Amendment uses ISO 11064-3:1999 "control center Ergonomic design - Part 3. Control the layout of the room. " The main technical differences between this part and the international standards are as follows.

- In Chapter 2, "Normative references" added "GB/T 10000-1988 Chinese adult human dimension";
- Removed in 4.3.3.1 "minimum of not less than 9m2";
- Remove Appendix B "World population anthropometric data." this part of the National Standardization Technical Committee learned Ergonomics (SAC/TC7) and focal points.

This section drafted by. China National Institute of Standardization, Air Force Institute of Aviation Medicine, Institute of Psychology, Chinese Academy of Sciences, Beijing University of Aeronautics and Astronautics University, Lenovo (Beijing) Limited.

Introduction

This section GB/T 22188 gives the layout of the control room ergonomics requirements, recommendations and guidelines.

User demand is the central theme of this section, at all stages of the design process must take into account the needs of users. Processing user needs entire Policy body has been described in detail in GB/T 22188.1.

This section gives guidance control room design and planning. Workstations, monitors and controls the work environment and physical design requirements in ISO 11064-4 to ISO 11064-6 in both elaborate. ISO 11064-7 describes the assessment principles Control Center.

ISO 11064-1 to ISO 11064-7 applies to the control area covers Ergonomic design basic principles. The ISO 11064-8 it is given for special application areas or specific requirements. Requirements specified in ISO 11064-8 and ISO 11064-1 need to ISO 11064-7 used together.

The main beneficiaries of this section is the control room of the operator or other user. These users demand for international standard setters to mention Control room design for ergonomic requirements. While end users may not be reading this standard, we do not even know the existence of the standard, but should the application of this standard user interface easier to use and more consistent with the operating requirements of the work environment, in order to develop to the greatest Extent reduce errors and improve the efficiency of design.

Design size formula given in this section from the practice, may be appropriate user population data into the calculation. Anthropometric data, see table GB/T 10000-1988.

Ergonomic design of control centers Part 3. Control room layout

1 Scope

GB/T 22188 in this part of the ergonomic principles given in the control room layout, including the control room layout, workstation layout, work Outside the station and control room visual display using maintenance requirements, recommendations and guidelines.

This section applies to all types of control center, including control centers in the process industry, transportation and emergency services dispatch system. although However, this part applies to non-mobile control centers, but many of the principles apply equally to mobile control center, such as ships and aircraft the control center on.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 1251.2-2006 Ergonomics - Visual danger signals - General requirements, design and testing (ISO 11428:1996, IDT) GB/T 5703 for the technical design of the Basic human body measurements (GB/T 5703-2010, ISO 7250-1:2008, MOD) GB/T 10000-1988 Chinese adult body size ISO 9241-3:1992 using a visual display terminal display terminals (VDTs) Ergonomic requirements for office - Part 3. Visual Display requirements ISO 9241-5:1998 using a visual display terminal display terminals (VDTs) Ergonomic requirements for office Part 5. Work

Table layout and postural requirements

3 Terms and Definitions

GB/T 5703 and as defined in the following terms and definitions apply to this document.

NOTE: This chapter includes two explanatory diagram (Figure 1 and Figure 2), to help understand these definitions.

Control Center controlcentre Functionally related and in the same location of the control room, control room, and a combination of sets of local control station (see Figure 1).

Console controlconsole Framework for structural support apparatus, Face and storage space, the composition of the control console workstation.

Control Panel the board is equipped with a separate display and control groups. The control panel can be mounted on the control workstation or wall (see Figure 2).

Control Room Functional entities and their associated physical structure of the core, the operator here to exercise centralized control, monitoring and management responsibilities.