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

GB 25525-2010

**Track-type loading machine underground mine - Safety
requirements**

地下矿用履带装载机械 安全要求

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Table of Contents

- 1 Scope
 - 1.1 Sharp edges, angular components stab or stabbed
 - 1.2 Fasteners, parts, components projectile
 - 1.3 High-pressure fluid jet
 - 1.4 And machinery related to slips, trips and falls
 - 1.5 Vibration dangerous
- 2 Normative references
 - 2.1 Direct electric shock
 - 2.2 Indirect contact
- 3 Danger List
- 4 Fire and Explosion Hazards
 - 4.1 General Requirements
 - 4.2 Guards and protective devices
 - 4.3 Operating system and braking system
 - 4.4 Gas, hydraulic system requirements
 - 4.5 Lighting and electrical system requirements
 - 4.6 Diesel loaders
 - 4.7 Stability
- 5 Use Information
 - 5.2 User's Guide
 - 5.3 Signs, symbols, text warning
- 6 Energy dangerous failure or other malfunctions generated
 - 6.2 Failure Control System
- 7.2 Incorrect maintenance and repair
- 7.3 Operator fatigue or improper operation

Foreword

Chapter 3 of this standard are recommended, the rest are mandatory. The standard proposed by China Machinery Industry Federation. This standard by the National Mining Machinery Standardization Technical Committee (SAC/TC88) centralized. This standard is drafted by: Nanchang Kama Co., Ltd. Participated in the drafting of this standard. strong Zibo Mining Machinery Co., Ltd., Luoyang Mining Machinery Engineering Design &

Research Institute Co., Ltd. The main drafters of this standard. Wei Ping Jin, Sun Mingwen, now Li Yang, left Lizhen, Li Bing, Wang Yadong, Zhang flowers. This standard was first published. Underground mining machinery - Safety requirements crawler loader

1 Scope

GB 25525-2010 is the Chinese national standard on track-type loading machine underground mine - safety requirements, in the field of mining and minerals. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 1 December 2010 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 October 2011. Classification: ICS 73.100.10, CCS D92. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the underground mine track list containing dangerous machinery, safety requirements and/or safety measures and determination, usage information. This standard is a predetermined physical properties and the use of underground mining machinery Tracked load limit raised. The safety standards required Requirements apply to all stages of the loader dangerous life of GB/T 15706.1 specified in generated. This standard does not relate to the hazard and GB/T 15706.1, GB/T 15706.2 agreement on a common mechanical, electrical, hydraulic, pneumatic And other dangerous devices, are not included in this standard. This standard applies to adoption crawler manner bucket rock loader, vertical claw loaders, backhoe loaders, underground mining loaders and other crab claw Products (hereinafter referred to as loader).

1.5 Vibration dangerous

2 electrical hazards

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 1147.1 and medium power internal combustion engines - Part 1. General requirements

GB/T 3766 Hydraulic System General technical conditions (GB/T 3766-2001, eqv ISO 4413.1998)

GB 3836.1 Electrical apparatus for explosive gas atmospheres - Part 1. General requirements (GB 3836.1-2000, eqv IEC 60079-0.1998)

GB 3836.2 Electrical apparatus for explosive gas atmospheres Part 2. Flameproof "d" (GB 3836.2-2000, eqv IEC 60079-1.1990)

GB 5083 production equipment with safety and health General

GB 5226.1 mechanical and electrical safety of machinery - Electrical equipment - Part 1. General requirements (GB 5226.1-2008, IEC 60204-1.2005, IDT)

GB/T 6072.1 reciprocating internal combustion engine performance - Part 1. Power, calibration and test methods of fuel consumption and lubricating oil consumption Additional requirements for engines for general use (GB/T 6072.1-2008, ISO 3046-1.2002, IDT)

GB/T 7932 pneumatic systems General technical conditions (GB/T 7932-2003, ISO 4414.1998, IDT)

GB/T 8196 mechanical safety devices fixed and movable guards design and manufacture of general requirements (GB/T 8196- 2003, ISO 14120.2002, MOD)

GB/T 8419 moving machinery - Seat vibration laboratory evaluation (GB/T 8419-2007, ISO 7096.2000, IDT)

GB/T 8595 moving machinery operating device (GB/T 8595-2008, ISO 10968.2004, IDT)

GB/T 9969 General Instructions industrial products Rubber-sheathed cables - Part 1

GB/T 12972.1 mine. General Provisions

3 Danger List

Loader lifetime risk that may arise in the transportation, installation, use and maintenance process are shown in Table 1. Table

4 Fire and Explosion Hazards

By ignoring the danger in the design ergonomics produced 5

5.1 operating device layout is unreasonable

5.2 insufficient lighting

4.1 General Requirements

4.1.1 The manufacturer shall for each type of hazard risk assessment loader according to Table 1, risk factors, and the ultimate basis for risk assessment knot If you decide whether

you need to reduce the risk.

4.1.2 loaders security measures intended to be used should be consistent with the requirements of GB/T 15706.1 of.

4.1.3 loaders should be ergonomically designed to reduce labor intensity, to avoid operator fatigue.

4.1.4 The basic principles of health and safety loader design, general requirements, specific requirements should be consistent with GB 5083 and GB/T 15706.2 of Provisions.

4.1.5 Operation of the loader may loose parts and components, should take effective security measures to prevent loosening dangerous.

4.1.6 loaders should be set appropriate safety technical measures according to their structural characteristics and mode of operation, design safety guards and barrier Device to prevent overload may occur, the risk of material defects or other damage arising. Rotary drive system, swing, pan, and so on engagement Moving parts, should be installed in the inner fender or hood in line JB/T 3249 regulations.

4.1.7 into the operation and maintenance of the position of the channel device shall comply with GB/T 17300 of. It should be provided with a reliable starting and stopping the device and should be accurate, flexible on

4.1.9 When the power or control signal is interrupted, loaders braking work or transport institutions should ensure a safe state. Reliable hoisting apparatus should be set on

4.1.10 loaders and must ensure smooth lifting and to avoid overturning or plastic deformation.

4.1.11 When the loader to install driver's seat, seat comfort requirements should be consistent with the provisions of GB/T 8419's.

4.1.12 loaders and transport equipment should be safe and reliable connection means.

4.1.13 loaders noise limits should be consistent with GB 16710.1 requirements. Set on

4.1.14 loaders safety signs and hazard pictorials shall comply with the provisions of GB 20178.

4.2 Guards and protective devices

4.2.1 Li claw loaders, backhoe should be installed FOPS crab claw on loaders and loader. FOPS not hinder installation Normal operational activities of the operator. FOPS shall comply with GB/T 17771 of.

4.2.2 Loader moving parts design, manufacture and installation should be able to avoid the risk of GB/T 15706.1 and described in Table 1, and shall make Operator as little as possible in the danger zone for manual operation. Design