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

GB/T 24537-2009

Replacing GB/T 24537-2009

**Fall protection - Guided type fall arrester including a flexible
anchor line**

坠落防护 带柔性导轨的自锁器

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 24537-2009 "Self-locking devices for flexible guide rails of fall protection belts" and is consistent with GB/T 24537-2009.

In addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2009 edition);
- b) The definitions of self-locking device, flexible guide rail, connecting rope, connector, and fall distance have been changed (see 3.1, 3.2, 3.4, 3.6, 3.12, 2009 Versions 3.2, 3.1, 3.6, 3.5, and 3.9);
- c) The definitions of safety rope, buffer, opening device and descent distance have been deleted (see 3.3, 3.4, 3.7 and 3.8 of the 2009 edition);
- d) Added self-locking device with flexible guide rail, buffer device, blocking device, maximum rated load, minimum rated load, guide bracket, lock Terms and definitions of stopping distance (see 3.3, 3.5, 3.7 to 3.11);

- e) Change "General Principles" and "General Requirements" to "Design and Construction" (see 4.1, 4.1 and 4.2 of the 2009 edition);
- f) The overall static performance technical requirements and test methods have been modified (see 4.2.1, 5.2.1, and 4.3 and 5.1 of the 2009 edition);
- g) Added technical requirements and test methods for static performance of buffer devices (see 4.2.2 and 5.2.2);
- h) The technical requirements and test methods for static performance of guide rails have been modified (see 4.2.3, 5.2.3, and 4.5 and 5.3 of the 2009 edition);
- i) Changed "overall dynamic load performance" to "dynamic performance" and changed the technical requirements and test methods (see 4.3, 5.3, 4.4 and 5.2 of the 2009 edition);
- j) The technical requirements for "locking performance under special circumstances" have been modified (see 4.6, 4.8 of the 2009 edition);
- k) The test method has been changed (see Chapter 5, Chapter 5 of the 2009 edition);
- l) Change "marking" to "permanent marking" (see Chapter 7, 7.1 and 7.2 of the 2009 edition);
- m) The content of "Information provided by the manufacturer" has been changed (see Chapter 8, 7.3 of the 2009 edition).

1 Scope

This document specifies the technical requirements, inspection rules, permanent marking and information to be provided by the manufacturer for self-locking devices with flexible guide rails.

Corresponding test methods.

This document applies to self-locking devices with flexible guide rails installed within an angle of 15° from the vertical direction.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB 6095 Fall protection safety belt GB/T 10125 Artificial atmosphere corrosion test Salt spray test GB/T 12903 Terminology of Personal Protective Equipment GB 23469 Fall

protection connector

3 Terms and Definitions

The terms and definitions defined in GB/T 12903 and the following apply to this document.

A component attached to the guide rail that can slide along the guide rail as the user moves, and the falling action triggers a braking effect.

Flexible guide rail flexible anchor line when in use, the self-locking device (3.1) is hung on the flexible connecting part of the upper hanging point, and the self-locking device (3.1) slides on the guide rail. When falling, the self-locking device can be locked in on the guide rail.

Note: Flexible guide rails are usually fiber ropes, wire ropes or webbings.

A component consisting of a self-locking device (3.1) and a flexible guide rail (3.2) forming part of a fall protection system.

Note: The self-locking device and flexible guide rail are tested, confirmed and used as a whole. See Appendix A for a schematic diagram of the structure.

connecting line

Part used to connect the self-locking device (3.1) and the lacing connection point.

Note: The connecting rope is usually a safety rope, a buffer device, a connector or any combination of the three.

A component used to absorb impact energy in a self-locking device (3.1) with a flexible guide rail (3.2).