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

GB/T 23423-2024

Aircraft main deck container cargo loader

飞机主舱集装箱货物装载机

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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 is required. This document replaces GB/T 23423-2009 "Functional requirements for wide-body aircraft main cabin container and pallet loaders" and is compatible with GB/T 23423- Compared with.2009, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- a) The scope of application of the text has been changed (see Chapter 1, Chapter 1 of the.2009 edition);
- b) the normative reference to ISO 4166 has been deleted (see Chapter 1 of the.2009 edition);
- c) Added "Terms and Definitions" (see Chapter 3);
- d) added "Classification" (see Chapter 4);
- e) Added "General requirements" and test methods (see 5.1, 6.2);
- f) Added "safety requirements" and test methods (see 5.2, 6.3);
- g) Added the requirements and test methods for "structural safety factor" (see
- h) The requirements and test methods for wind resistance stability have been changed (see 5.4.1, 6.7 of the.2009 edition);
- i) Added requirements and test methods for stabilizing devices (see 5.4.2, 6.5.2~6.5.8);
- j) The requirements and test methods for "outer diameter of the channel circle" have been changed (see 5.5.1, 6.6.1, and 6.4 of the.2009 edition);

1 Scope

GB/T 23423-2024 is the Chinese standard for main deck container loaders, the large scissor-lift platforms that raise unit load devices to the main deck door of a freighter. They are among the heaviest and most exacting pieces of ground support equipment: the platform lifts several tonnes to a height of five metres or more, it must dock against an aircraft skin without touching it, and it must hold position while a loaded pallet rolls across it,

so stability and structural safety factor are set explicitly rather than left to general machinery rules. The standard sets the categories, then the technical requirements in detail: the general requirements, the safety requirements, the structural safety factor, the stability, the manoeuvrability, the operational performance, the drive and lifting systems, the conveyance and transfer decks, the guidance and restraint of the load, the controls, the electrical and hydraulic systems, the lighting and the environmental adaptability. It then covers the test methods, the inspection rules and the marking, packaging, transport and storage. It took effect on 23 August 2024.

2 Test methods Test Cab. Steady state damp heat test GB 2893 Safety Colors

GB/T 4094.2 Marking of electric vehicle controls, indicators and signal devices

GB/T 4208 Enclosure protection degree (IP code)

GB/T 9969 General principles for instructions for use of industrial products

GB/T 12540 Measurement method for minimum turning diameter, minimum turning channel circle diameter and swing value of automobiles

GB/T 12543 Automobile acceleration performance test method

GB/T 12544 Test method for maximum speed of motor vehicles

GB/T 12547 Test method for minimum stable speed of motor vehicles

GB/T 12673 Measurement methods for main dimensions of automobiles

GB/T 12674 Measurement methods for mass parameters of vehicles, trailers and vehicle trains

GB/T 12678 Vehicle reliability driving test method

GB/T 14436 General Principles for Industrial Product Warranty Documents

GB 18384 Safety requirements for electric vehicles

GB/T 18387 Limits and measurement methods for electromagnetic field emission intensity of electric vehicles

GB/T 18488.1 Drive motor system for electric vehicles Part

GB/T 20234.2-2015 Connection device for conductive charging of electric vehicles Part 2: AC charging interface

GB/T 20234.3-2023 Connection device for conductive charging of electric vehicles Part 3: DC charging interface

GB 20891 Emission limits and measurement methods for exhaust pollutants from diesel

engines for non-road mobile machinery (China Phase III and IV)

GB/T 27930-2023 Digital communication protocol between off-board conductive chargers and electric vehicles

GB/T 32960.3 Technical Specification for Electric Vehicle Remote Service and Management System Part

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