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

MH/T 6048-2020

Replacing MH/T 6048-2008

**Luggage/Cargo Tractor
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces MH/T 6048-2008 "Baggage Tractor". Compared with MH/T 6048-2008, the main changes are as follows.

- Modified the standard name, from the original "Luggage Tractor" to "Luggage/Cargo Tractor";
- Added general requirements (see 4.1);
- Modified the technical requirements for speedometer, odometer, working hour meter, fuel meter, electricity meter, etc. (see 4.1.16, 2008 edition 4.1.20);
- Added general safety requirements (see 4.2.1);
- General requirements for electric tractors have been added (see 4.2.2.1);
- Insulation requirements have been added (see 4.2.2.2);
- Increase the technical requirements of batteries (see 4.2.2.3);
- Added the technical requirements of the motor (see 4.2.2.4);
- Increase the maneuverability requirements (see 4.3);
- Modified the technical requirements for vehicle speed when the tractor is unloaded (see 4.3.1.3, 4.3.4 of the 2008 edition);
- Modified the technical requirements for the minimum ground clearance, approach angle, departure angle, and ramp passing angle for baggage/cargo tractors (see 4.4.1, 4.4.2, 4.3.2 of the 2008 version);
- Added the technical requirements for the enclosed cab (see 4.5);
- Added the technical requirements of the hydraulic system (see 4.7);
- Added the technical requirements of the control device (see 4.8);
- Modified the technical requirements for fuel gauges of internal combustion tractors and electricity meters of electric tractors (see 4.8.1, 2008 edition 4.2.6);
- Increase the technical requirements for external noise of tractors (see 4.9.1);
- Increased the technical requirements for the ear noise of internal combustion tractors and electric tractors (see 4.9.2);
- Increase the technical requirements for the emission limits of exhaust pollutants from internal combustion tractors (see 4.9.3);
- Added that the diesel engine of the internal combustion tractor adopts the free

acceleration method for smoke measurement, and the emission measured by the opaque smoke method the air-light absorption coefficient should meet the requirements of GB 36886 (see 4.9.4);

- Added environmental requirements (see 4.10);
- Modified the reliability requirements of tractors (see 4.11, 4.4.10 of the 2008 edition);
- Delete the basic requirements of tractors (see 2008 version 4.1) - Deleted battery tractor (see 2008 edition 4.2);
- Delete the structure size and performance parameters (see 2008 version 4.3);
- Delete other properties (see 2008 version 4.4);

This standard was proposed and interpreted by the Airport Department of the Civil Aviation Administration of China.

This standard was approved by the Aircraft Airworthiness Certification Department of the Civil Aviation Administration of China.

This standard is under the jurisdiction of the China Academy of Civil Aviation Science and Technology.

Drafting organizations of this standard. Civil Aviation Professional Engineering Quality Supervision Station, National Construction Machinery Quality Supervision and Inspection Center, Zhejiang Jixinxiang Forklift Manufacturing Co., Ltd., Shanghai Zhonggang Aviation Ground Equipment Co., Ltd.

1 Scope

This standard specifies the technical requirements, test methods, inspection rules, signs, and signs of luggage/cargo tractors used in civil airports.

Identification, instructions for use, packaging, transportation and storage.

This standard applies to luggage/cargo tractors (hereinafter referred to as tractors) used in civil airports.

Note: Tractors include internal combustion tractors and electric tractors.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB 1495 Limits and measurement methods of noise outside the vehicle during acceleration
GB/T 3766 General rules and safety requirements for hydraulic transmission systems and

their components GB/T 4094.2 Marks for electric vehicle controls, indicators and signal devices GB/T 7593 Symbols for driver control devices and other display devices of motorized industrial vehicles GB/T 7935 General technical conditions for hydraulic components GB/T 9969 General Rules for the Use of Industrial Products GB/T 12544 Maximum speed test method for automobiles GB/T 12547 Lowest stable vehicle speed test method GB/T 12673 Measuring method for main dimensions of automobiles GB/T 12674 Method for determination of automobile quality (weight) parameters GB/T 12678 Automobile Reliability Driving Test Method GB/T 14436 General Rules of Guarantee Documents for Industrial Products GB/T 18488.1 Drive motor system for electric vehicles Part 1: Technical conditions GB/T 18849 brake performance and component strength of motor industrial vehicles GB 20891 Diesel engine exhaust pollutant emission limits and measurement methods for non-road mobile machinery (China Phase III and IV) GB/T 21268 General technical conditions for off-highway tourist sightseeing vehicles GB 36886 Non-road mobile diesel machinery exhaust smoke limit and measurement method GJB 150.3 Military equipment environmental test method high temperature test GJB 150.4 Military equipment environmental test method Low temperature test GJB 150.9 Military Equipment Environmental Test Method Warm Test JB/T 5943 General technical conditions for welding parts of construction machinery JB/T 10750 tractor MH/T 0023 Graphical symbols for aircraft ground service equipment QC/T 484 Automotive paint coating QC/T 625 coating and chemical treatment layer for automobile

3 Terms and definitions

The following terms and definitions apply to this document.

Luggage/cargo tractor in civil airports, motor vehicles used to tow aircraft container/bulk cargo trailers and various ground equipment.

Maximum tow force

On a flat, dry concrete ground, the towing vehicle drives with a fixed height level traction load test vehicle with a traction bolt, electric traction when the vehicle motor reaches the maximum allowable current of the 5 min working system or the governor overcurrent protection, the traction motor is blocked, and the driving wheel is slipping, it acts on the horizontal tension on the fixed height hook.

On a flat, dry concrete ground, the towing vehicle drives with the fixed height level of the traction bolt to tow the load test vehicle, internal combustion type traction Until the engine stalls (hydraulic transmission tractor is in a torque converter stall state) or the drive wheels completely slip, acting on a fixed height the horizontal pull on the hook.

[From JB/T 10750 "Tractor"] 3.3 Rated tow force on a flat, dry concrete ground, the towing vehicle drives with a fixed height level traction load test vehicle with a traction bolt, electric traction the horizontal pulling force acting on the fixed height hook when the traction motor