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PEOPLE'S REPUBLIC OF CHINA**

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Safety rules for simple lifts

简易升降机安全规程

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Foreword

This standard of Chapter 1, Chapter 2, Section 3 recommendatory, and the rest are mandatory. This standard was drafted in accordance with rules GB/T 1.1-2009 given. The standard proposed by China Machinery Industry Federation. This standard by the National Standardization Technical Committee crane (SAC/TC227). This standard is drafted. Ningbo Special Equipment Inspection Institute. Participated in the drafting of this standard. Special Equipment Inspection Institute of Fujian Province, Zhejiang Province Special Equipment Inspection Institute, Ningbo Misaki crane Armed Ltd., Taizhou Brief introduction Lifting Equipment Co., Ltd., Fujian Jinjiang City Hengsheng Electrical Crane Co., Ltd., Liaoning Province Safety Science Research Institute of Special Equipment Safety Testing and Research Institute, Henan Province, Luoyang City Special Equipment Inspection. The main drafters. Caoguang Min, Chen Feng, Wang Jian child, can LIU Ji, Wang Jian, Ma Yi-Jian, Yu-jen its bell plum member, Chen Huihuang, wool double living, Yin Xiande, Guo Pengwei. Easy lift safety regulations

1 Scope

GB 28755-2012 is the Chinese national standard on safety rules for simple lifts, in the field of materials handling equipment. 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 5 November 2012 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 February 2013. Classification: ICS 53.020.99, CCS J80. 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 basic safety requirements for simple lift design, manufacture, installation, alteration, maintenance, use, inspection and other aspects. This standard applies to traction type, compulsory, and rack and pinion type simple direct-acting hydraulic elevator. Other types of simple structure Referring lift may be used.

2 Normative references

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

GB/T 5972 crane wire rope maintenance, maintenance, installation, examination and discard

GB 6067.1-2010 crane safety regulations - Part 1. General

GB/T 7024 elevators, escalators, moving walkways term GB 8903 Elevator Rope

GB 8918 important use of wire rope

GB 25856-2010 only freight elevator manufacturing and installation of safety norms

3 Terms and Definitions

GB/T 7024 and define the following terms and definitions apply to this document.

3.1 Easy lift simplelift In the hoisting machine, winch, electric hoist, the hydraulic pump as a drive station, through the rope, rack and pinion, chains or the like hydraulic cylinders Huoxiang driven member, in the vertical direction within a hoistway or rigid guide means operating angle of less than 15 ° inclined to the vertical direction for carrying goods only Lifting machinery. 3.1.1. Traction elevator simple tractiondrivesimplelift Rely on simple friction driven elevator. 3.1.2. Forced simple lift positivedrivesimplelift By chain, non-frictional suspension rope driving an elevator simple.

3.1.3 Simple rack and pinion lift pinion-and-racksimplelift Simple rack and pinion elevator.

3.1.4 Simple direct acting hydraulic lift direct-actinghydraulicsimplelift The hydraulic cylinder

is directly connected to the cargo, the cargo elevator driven synchronously simple operation.

3.2 Cargo cage Simple elevator means for carrying cargo.

3.3 Rated weight ratedcapacity The maximum mass allowed to bear in the cargo compartment under the specified design normal operating conditions.

3.4 Rated speed ratedspeed Under the cargo compartment design speed.

3.5 Effective cargo area availablecagearea When the cargo door is closed, measured in the plane area of the load floor.

3.6 Lifting height liftingheight From the bottom end of the upper surface of the landing sill to the vertical distance between the top ridge on the surface of the end stops.

3.7 Stop protection layer parkingprotectiondevice Easy lift stop layer when loading and unloading cargo, cargo prevent the occurrence of abnormal slip, fall safety devices.

3.8 Downlink overspeed protection device descendingover-speedprotectiondevice When the cargo downward speed exceeds the rated speed a certain value, the safety device can directly cause deceleration to a stop of the cargo.

3.9 Counterweight counterweight The hoisting ropes are connected by the traction wheel through the cargo box, the device is held during the traction capacity Traction elevator simple operation.

3.10 Counterweight balancingweight Means for Ping Heng weight of the cargo compartment and arranged to save energy.

4 Basic requirements

4.1 Easy lift should work properly under the following conditions.

- a) the installation site altitude does not exceed 1000m;
- b) in the machine room air temperature is maintained at between 5 °C ~ 40 °C;
- c) running the wettest place monthly average maximum relative humidity of not more than 90%, while the mean minimum temperature not higher than 25 deg.] C; Fluctuation
- d) relative to the rated voltage of the supply voltage within a range of $\pm 10\%$;
- e) the ambient air should not contain explosive gas, flammable gas, corrosive gases, combustibile dust and conductive dust.

Note. Out of the above range, the manufacturer and the user consultation. Simple design lifts 4.2, the following parameters should be within the range, and should be given priority traction formula.

- a) From the nominal weight. not more than compulsory simple lift 1500kg, other types of simple lift is not greater than 3000kg;
- b) the rated speed. not more than 0.3m/s;
- c) lifting height. not more than traction type elevator simple 20m, other forms of easy lift is not greater than 15m;
- d) Number of landing. Traction elevator simple no more than 6 layers, other forms of simple lift no more than 4 layers.

4.3 Easy lift and all its parts, construction (structures) should be properly designed, reasonable structure, and in accordance with the mechanical, electrical, hydraulic and construction General technical requirements, hazardous materials should not be used.

4.4 Easy lift not manned operation.

4.5 Simple elevator operating device must be provided outside the cargo compartment, not any operation button disposed within cargo compartment.

5.1.1 General requirements

5.1.1.1 Simple lift the counterweight or Ping Heng weight of the cargo box should be mounted in the same hoistway.

5.1.1.2 wells should be simple lift private, shall not be installed nothing to do with the simple lift facilities in the hoistway. If the well is set at people Members can reach the space above, the bottom surface of the hoistway pit should be at least 5000N/m² design load, and.

a) the counterweight (or counterweight) buffer attached to extend to the solid pier with the solid surface; or

b) counterweight (or counterweight) mounted on a predetermined downlink comply

9.3 overspeed protection device.

5.1.2 Closed hoistway

5.1.2.1 closed Simple lift wells should be non-porous walls, floor and ceiling completely closed up. Allow only.

a) layer, a door opening;

b) access door trapdoor opening;

c) the case of fire, smoke and gas exhaust hole;

d) between the hoistway and the machine room is necessary functionality opening.

5.1.2.2 access door trapdoor 5.1.2.2.1 access doors and trap doors should be non-porous,