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Safety gear for elevators

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Land, Infrastructure, Transport and Tourism through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by Japan Elevator Association (JEA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

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Safety gear for elevators

JIS A 4305: 2016

1 Scope

This Japanese Industrial Standard specifies safety conditions for safety gears installed in traction type elevators, winding drum type elevators and hydraulic elevators.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 7507 Vernier, dial and digital callipers

JIS B 7512 Steel tape measures

JIS B 7516 Metal rules

JIS B 7522 Textile tape measures

3 Terms and definitions

For the purpose of this Standard, the following terms and definitions apply.

3.1 safety gear

mechanical device installed in a car, counterweight or balancing weight which brakes the car, counterweight or balancing weight by gripping the guide rails when their speed increases abnormally

3.2 safety gear block

framing component which houses brake elements (e.g. safety gear gripping parts)

3.3 safety gear gripping parts

parts which exert braking force by gripping the guide rails

3.4 maximum permissible speed

maximum downward speed of the car, counterweight or balancing weight which satisfies the performance requirement of a safety gear

It applies to the speed at which the safety gear is tripped, and is set to 68 m/min or lower for rated speeds 45 m/min or less, and 1.4 times the rated speed or lower for rated speeds over 45 m/min.

3.5 maximum test mass

mass used in a test to determine the maximum mass the safety gear can effectively brake, which satisfies the safety gear performance requirement

3.6 minimum test mass

mass used in a test to determine the minimum mass the safety gear can effectively brake, which satisfies the safety gear performance requirement