International Standard



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION MEXA YHAPOAHAR OPTAHUSALUN TIO CTAHAPTUSALUNOORGANISATION INTERNATIONALE DE NORMALISATION

# High-lift rider trucks – Overhead guards – Specification and testing

Chariots de manutention à grande levée à conducteur porté - Protège-conducteurs - Spécifications et essais

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# iTeh STANDARD PREVIEW (standards.iteh.ai)

ISO 6055:1979 https://standards.iteh.ai/catalog/standards/sist/5f71ffe4-34e3-4bc6-8e0bb5bf0cba1c05/iso-6055-1979

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ISO 6055-1979 (E)

# Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 6055 was developed by Technical Committee ISO/TC 110, Industrial trucks, and was circulated to the member bodies in December 1977.

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It has been approved by the member bodies of the following countries :

		ISO 6055:1979
Austria	https://https//https://https://https://https://https://https//ht	og/statuteden/sist/5f71ffe4-34e3-4bc6-8e0b-
Belgium	Japan	Switzerland
Bulgaria	Mexico	Turkey
Czechoslovakia	New Zealand	United Kingdom
Denmark	Romania	USA
France	South Africa, Rep. of	USSR
India	Spain	Yugoslavia

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Australia Germany, F. R. Poland

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# INTERNATIONAL STANDARD ISO 6055-1979 (E)/ERRATUM

NO



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# High-lift rider trucks - Overhead guards - Specification and testing

# ERRATUM

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Sub-clause 4.2.2 Delete the time given of standards.iteh.ai)

"10 min" and replace by "1 min".

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# High-lift rider trucks — Overhead guards — Specification and testing

## 1 Scope

This International Standard specifies the requirements and testing for overhead guards designed to protect the operator from falling objects, but not from the impact of a falling load equal to the rated capacity of the industrial truck.

# 2 Field of application

This International Standard applies to overhead guards for any type of high-lift rider truck, except for order picking trucks for which special regulations should be provided.

located during normal truck operation. If provided, any vertical seat adjustment is set at the mean value.

**3.2.4** For high lift trucks on which the operator stands, a vertical clearance of at least 1 880 mm (74 in) shall be maintained from the platform where the operator stands, to the underside of the section of the guard under which the operator's head is located during normal truck operation.

**3.2.5** When requested by the user, the manufacturer may reduce the normal overall guard height and the vertical clearance for the operator's head under the guard to permit operation of the truck with an overhead guard in areas where the overhead clearance limits the overall height of the truck.

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#### 3 Design features

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### 3.1 General

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**3.1.1** The overhead guard shall extend over the operator under all normal circumstances of truck operation. For overhead guards fixed to the mast, this also applies in the case of forward inclination of the mast.

Control handles may project over the plan view outline of the overhead guard in the direction of the mast for a maximum of 150 mm.

**3.1.2** Where failure of the tilt cylinder(s) or associated parts could lead to movement of the overhead guard, provision shall be made to avoid injury to the operator by the overhead guard.

### 3.2 Dimensions

**3.2.1** The guard shall be constructed in a manner that does not interfere with good visibility.

**3.2.2** Openings in the top of the overhead guard shall not exceed 150 mm (6 in) in one of the two dimensions, i.e. width or length.

**3.2.3** For high-lift trucks on which the operator is seated, a vertical clearance of at least 1 000 mm (39 in) shall be maintained from the point of maximum depression of the seat under the operator, having a mass of 75 kg (165 lb), to the underside of the section of the guard under which the operator's head is

#### 4.1 General

**4.1.1** The following tests shall be carried out on the prototype of a guard type fitted to a truck of the type and rated capacity for which it has been designed. A simulated mounting may also be used.

a) A static test.

b) A dynamic random impact test, under controllable and repeatable conditions, to determine maximum permanent deflection to the portion of the overhead guard under which the operator sits or stands.

Under certain operating conditions, a stronger guard, or one having openings of smaller size, may be specified by the user, by agreement with the truck manufacturer.

In the case of overhead guards fitted to trucks of special design, other means (for example, computation or results of prior testing) may be used in lieu of testing to determine compliance with the specified test.

**4.1.2** The truck manufacturer shall be responsible for the testing specified in 4.2 and 4.3.

**4.1.3** The static test (4.2) shall be conducted first and the same overhead guard and mounting may be used when conducting the cube drop test (4.3).

# 4.2 Static test

#### 4.2.1 Test load

The test load shall be uniformly distributed on the top of the overhead guard. The size of the load is specified in the table in relation to the rated capacity of the truck.

### 4.2.2 Procedure

The overhead guard shall be loaded with the test load for at least 10 min.

#### 4.2.3 Test results

No part of the overhead guard or its mountings shall show any evidence of failure or a vertical permanent deformation in excess of 10 mm.

## 4.3 Cube drop test

#### 4.3.1 General

The overhead guard and its mountings shall be capable of withstanding the impact of the test object specified in 4.3.2 as ARD PREVIE applied under conditions specified in 4.3.3. (standards.iteh.ai)

#### 4.3.2 Test object

The test object shall be a cube, having a mass of 45 kg (100 lb), tandards/sist/ made of hardwood (or equivalent); measuring 300 mm (12 in) on the side. The mass of the cube may be adjusted to 45 kg by c05/iso-6055 means of lead or other dense material, provided that the exterior walls of the cube are not less than 50 mm (2 in) thick.

#### 4.3.3 Procedure

The test cube shall be positioned to drop in free fall with a flat

Figure – Permitted permanent deflection after cube drop tes

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Rated capacity, Q		Test load	
kg	lb	kg	lb
up to 2 000	up to 4 400	20	2 Q
from 2 000 to 5 000	from 4 400 to 11 000	2 000 + <i>Q</i>	4 400 + <i>Q</i>
from 5 000 to 10 000	from 11 000 to 22 000	4 500 + <i>Q</i> /2	9 900 + <i>Q</i> /2
over 10 000	over 22 000	9 500	20 900

surface approximately parallel to the top of the overhead guard, and it shall not strike with a corner or edge.

The cube shall be dropped through a distance of 1 500 mm (60 in) ten times so that the whole of the cube strikes the guard at random points within a 600 mm (24 in) diameter circle whose centre is vertically above the centre point of the operator's position.

#### 4.3.4 Test results

The guard shall not show fracture or separation of parts (evidence of minor cracks is permissible). In addition, the vertical permanent deformation shall not exceed 20 mm (3/4 in) measured on the underside of the guard within a 600 mm (24 in) diameter circle whose centre is vertically above the centre point of the operator's position (see the figure).

During the cube drop test, the deformations that may occur on auxiliary fixtures (such as wire mesh or cloth) shall be ignored.

# Table – Static test loads

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