# CERTIFICATE

## EU Type – Examination

**According to Directive 2014/33/EU, (Module B, annex IV)**

**Certificate No: LF/KSA/A-C-0175/ 17**

Product Certification
No.of Certificate 27

| | |
|---|---|
| *Identification No of Certification body*: | MIRTEC s.a CE 0437 |
| *Name & Address of the Certificate Holder* : *of the Manufacturer:* | **TEKİN** MAKİNA SANAYİ A.Ş. 75. YIL OSB MAHALLESİ 2006. CADDE NO: 33 ODUNPAZARI / ESKİŞEHİR, TÜRKİYE |
| *Date of Submission for EU Type-Examination :* | 17/10/2011 |
| *Product of Safety Component*: | **Instantaneous safety gear with 1 roller and part of a protection system against unintended car movement** |
| *Type:* | **T3** |
| *Applicable Standards*: | 2014/33/EU, annex I, EN 81-50:2014 § 5.3.2, § 5.8. EN 81-20:2014 § 5.6.2.1, § 5.6.7. |
| *Examination Period:* | October 2011, October 2017 |
| *Test Laboratory :* | MIRTEC |
| *Place of testing:* | A' Industrial Area GR38500, Volos |
| *Date & No of laboratory Report:* | LF/A-R-1192b/11, 26/10/2011 LF/KSA/A-R-0175/17, 20/10/2017 |
| *Documents annexed*: *to the Certification*: | Product description, Drawings , Installation & maintenance instructions, Material list |
| *Field of application Load, speed, guide rails* : | ANNEX 1 |

Validation conditions / Additional instructions:

The production of the safety gear falls under random inspections from the certification body.
For all changes on the materials, drawings and production-assembly methods the certificate holder must inform the certification body.
The safety gear housing should have a label with the necessary information (Sr.Nr, Year of production, Field of application Load, speed, and guide rails)

Result of the examination - Declaration:

**Herewith we certify that the type of the product mentioned above, meets the requirements of the Directive 2014/33/EU.**

Only the products detailed in the test report have been subjected to tests.

*Date of issue*: **26.10.2011 Revision 06/11/2017**
**Reissued on 20/07/2026**

For MIRTEC S.A.

Signed by:
CHRISTOS SPILIOTOPOULOS
25ECEC0EF5C741B...

C. SPILIOTOPOULOS
Certification department of lifts

EBETAM·MIRTEC 0437 Notified Body

# ANNEX 1

Part of the EU Type-examination LF/KSA/A-C-0175/17

**(Reissued on 20/07/2026)**

Product Certification
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## Field of application

Max. Nom. Speed :
Car downwards: 0.63 m/s,
Counter weight or Balancing weight: 1.0 m/s

Max. tripping speed by overspeed governor:
Car: 1.0 m/s,
Counter weight : 1.0 m/s

Tripping speed by lifts with rupture valve
Min: 115% of the nominal speed downwards
Max: as the overspeed governor .

Guide rails :
Thickness 16 mm, Min gripping area 30 mm

Allowable total mass:
The max. allowable mass of empty car with relevant car components and nominal rated load-mass or balancing weight mass, in relation to the tripping speed of the overspeed governor , for one pair of the safety gear. :

| **tripping speed** of the overspeed governor (m/s) | **max. allowable mass (F+Q),( Kg )** for Guide rails, thickness 16mm |
|---|---|
| 0.50 | 3379 |
| 0.60 | 3251 |
| 0.70 | 3112 |
| 0.80 | 2966 |
| 0.90 | 2816 |
| 1.00 | 2665 |
| 1.20 | 2371 |
| 1.40 | 2097 |
| 1.65 | 1793 |

This instantaneous safety gear may be used as a stopping element in a protection system against unintended car movement. It has been tested at different low speeds for this scope and it is assured that allows the stopping of the car in the ranges of stopping distances that refers to 5.6.7.5. of the standard EN 81-20.

Certification department of lifts

Signed by:
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# ANNEX 2 ( Guiderails 16mm)

**Part of the EU-Type examination LF/KSA/A-C-0175/17**

**Safety gear type:** Calculations according to EN 81-50 § 5.3.2.3.

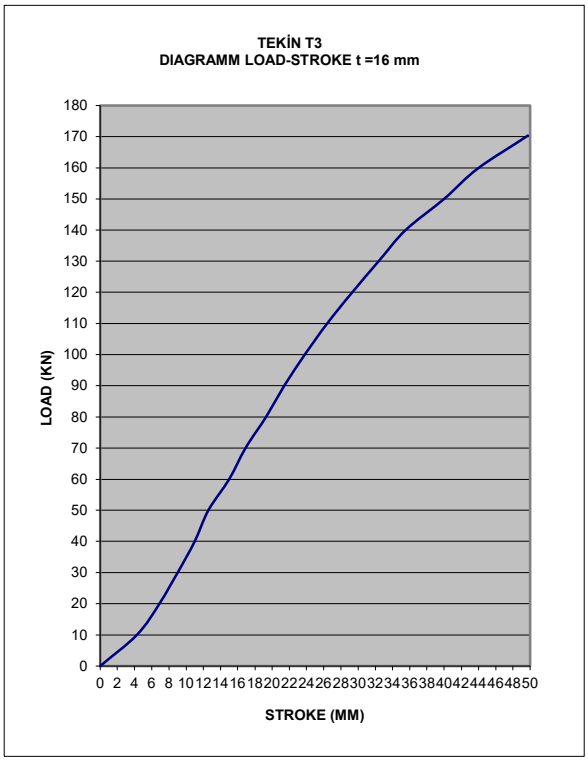
**INSTANTANEOUS SAFETY GEAR WITH 1 ROLLER**

**TYPE : T-3**

**(DIAGRAM LOAD-STROKE ) Guiderails 16 mm Thickness**

Η δοκιμή έγινε στα εργαστήρια της EBETAM A.E στον Βόλο στις 17/10/2011

Test performed in Mirtec's Lab in Volos 17/10/2011




**ΥΠΟΛΟΓΙΣΜΟΙ CALCULATIONS**

Υψος ελέυθερης πτώσης: ( h: Height of free fall )

hi= Vi^2 / (2*g)+0.1+0.03 ( V: Relevant speed )

| | | | |
|---|---|---|---|
| h1= | 0,269 | V1 | 1,65 m/s |
| h2= | 0,230 | V2 | 1,4 m/s |
| h3= | 0,203 | V3 | 1,2 m/s |
| h4= | 0,181 | V4 | 1 m/s |
| h5= | 0,171 | V5 | 0,9 m/s |
| h6= | 0,163 | V6 | 0,8 m/s |
| h7= | 0,155 | V7 | 0,7 m/s |
| h8= | 0,148 | V8 | 0,6 m/s |
| h9= | 0,143 | V9 | 0,5 m/s |

tripping speeds of regulator according to
EN 81-50 § 5.6.2.2.1. and EN 81-20 §5.6.2.1.2.

Συνολική απορροφούμενη ενέργεια σε J:
(P+Q) =(2/I)*Kολ/g*h
**(Absorbed Energy in J ) Kολ=4731,6**
Με τη βοήθεια του σχεδιαστικού πακέτου AUTOCAD 2002 λαμβανω ως επιφανεια του διαγραμματος μετακίνησης - δυναμης: **Kολ=4731,6**

Λαμβάνεται συντελεστής ασφαλείας I=2 για τους υπολογισμούς
Επομένως έχουμε:

(P+Q) =(2/2)*Kολ/g*h

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Για h1=** | **0,269** | **V1=** | **1,65** | **(P+Q) 1=** | **1793 Kg** |
| **Για h2=** | **0,230** | **V2=** | **1,40** | **(P+Q) 2=** | **2097 Kg** |
| **Για h3=** | **0,203** | **V3=** | **1,20** | **(P+Q) 3=** | **2371 Kg** |
| **Για h4=** | **0,181** | **V4=** | **1,00** | **(P+Q) 4=** | **2665 Kg** |
| **Για h5=** | **0,171** | **V5=** | **0,90** | **(P+Q) 5=** | **2816 Kg** |
| **Για h6=** | **0,163** | **V6=** | **0,80** | **(P+Q) 6=** | **2966 Kg** |
| **Για h7=** | **0,155** | **V7=** | **0,70** | **(P+Q) 7=** | **3112 Kg** |
| **Για h8=** | **0,148** | **V8=** | **0,60** | **(P+Q) 8=** | **3251 Kg** |
| **Για h9=** | **0,143** | **V9=** | **0,50** | **(P+Q) 9=** | **3379 Kg** |

Certification Dept. MIRTEC S.A.

Signed by: CHRISTOS SPILIOTOPOULOS
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