



CERTIFICATE

EU Type – Examination



According to Directive 2014/33/EU, (Module B, annex IV)
Certificate No: LF/KSA/A-C-0176/ 17

Identification No of Certification body:

MIRTEC s.a 0437

Name & Address

of the Certificate Holder :
of the Manufacturer:

1) **TEKİN** MAKİNA SANAYİ A.Ş.
75. YIL OSB MAHALLESİ 2006. CADDE NO: 33 ODUNPAZARI
/ ESKİŞEHİR, TÜRKİYE

Date of Submission for
EU Type-Examination :

2)
16/11/2012

Product of Safety Component:

**Instantaneous safety gear
with 1 roller
and part of a protection system against
unintended car movement
T4**

Type:

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:

November 2012, October 2017

Test Laboratory :

MIRTEC

Place of testing:

A' Industrial Area GR38500, Volos

Date & No of laboratory Report:

LF/A-R-13016/12, 26/11/2012
LF/KSA/A-R-0176/17, 20/10/2017

Documents annexed:
to the Certification:

Product description, Drawings ,
Installation & maintenance instructions, Material list
ANNEX 1

Field of application

Load, speed, guide rails :

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:

**05.12.2012 Revision 06/11/2017
Reissued on 20/07/2026**

Signed by: For MIRTEC S.A.

CHRISTOS SPILIOTOPOULOS

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C. SPILIOTOPOULOS
Certification department of lifts





ANNEX 1

Part of the EU Type-examination LF/KSA/A-C-0176/17

(Reissued on 20/07/2026)



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 16-19 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 16-19mm
0.50	16026
0.60	15421
0.70	14761
0.80	14067
0.90	13356
1.00	12641
1.20	11247
1.40	9946
1.65	8504

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:

CHRISTOS SPILIOTOPOULOS

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C. SPILIOTOPOULOS



ANNEX 2 (Guiderrails 16-19mm)

Part of the EU-Type examination LF/KSA/A-C-0176/17

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

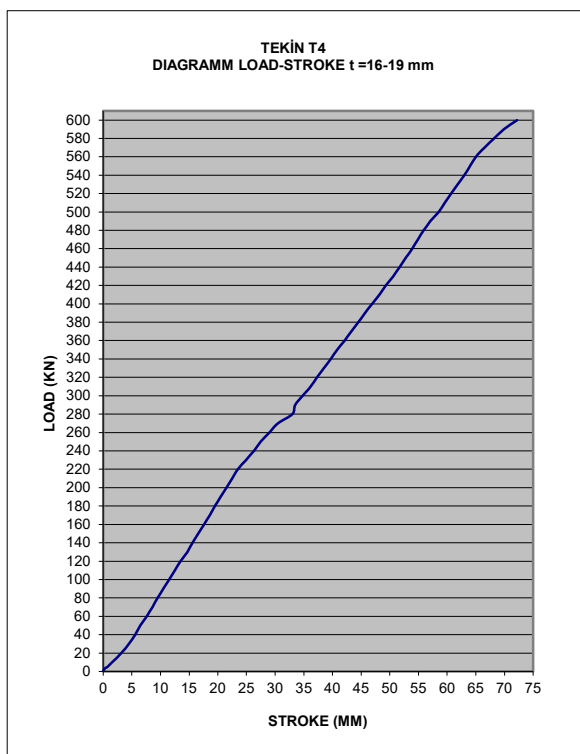
INSTANTANEOUS SAFETY GEAR WITH 1 ROLLER

TYPE : T-4

(DIAGRAM LOAD-STROKE) Guiderrails 16-19 mm Thickness

Η δοκιμή έγινε στα εργαστήρια της EBETAM A.E στον Βόλο στις 26/11/2012

Test performed in Mirtec's Lab in Volos 26/11/2012



ΥΠΟΛΟΓΙΣΜΟΙ

CALCULATIONS

Υψος ελεύθερης πτώσης: (h: Height of free fall)
 $h_i = V_i^2 / (2 \cdot g) + 0.1 + 0.03$ (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:

(Absorbed Energy in J) **Kολ=22441,6**

$(P+Q) = (2/l) \cdot K_{ol} / g \cdot h$

Με τη βοήθεια του σχεδιαστικού πακέτου AUTOCAD
 2002 λαμβανω ως επιφανεια του διαγράμματος
 μετακίνησης - δυναμής: **Kολ=22441,6**

Λαμβάνεται συντελεστής ασφαλείας $l=2$ για τους υπολογισμούς

Επομένως έχουμε:

$$(P+Q) = (2/2) \cdot K_{ol} / g \cdot h$$

Για h1=	0,269	V1=	1,65	(P+Q) 1=	8504 Kg
Για h2=	0,230	V2=	1,40	(P+Q) 2=	9946 Kg
Για h3=	0,203	V3=	1,20	(P+Q) 3=	11247 Kg
Για h4=	0,181	V4=	1,00	(P+Q) 4=	12641 Kg
Για h5=	0,171	V5=	0,90	(P+Q) 5=	13356 Kg
Για h6=	0,163	V6=	0,80	(P+Q) 6=	14067 Kg
Για h7=	0,155	V7=	0,70	(P+Q) 7=	14761 Kg
Για h8=	0,148	V8=	0,60	(P+Q) 8=	15421 Kg
Για h9=	0,143	V9=	0,50	(P+Q) 9=	16026 Kg



Certification Dept. MIRTEC S.A.

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