# SKG

#### **TEST REPORT**

Report number

Date test

Date report

**Applicant** 

Project number Applicant

Report size

**Subject** 

**Technical Manager** 

Inspector

Conclusion

15.00293

18 March 2015

9 April 2015

**Euroll Service B.V.** 

Patroonsweg 5 3892 DA ZEEWOLDE Netherlands

150318

This report consists of 10 pages (including appendices)

Testing concerning "Mechanical aspects" of safe opening and protection against unintended movements, of an Euroll electrically powered Rolling Shutter, type EUSEC 6.2, with clear opening dimensions of 5160 x 2700 mm (W x H).

Ir. J.T. Boersma

M.F. van Dijk/ P. Scheerman

The tested Rolling Shutter of Euroll Service B.V. satisfied the requirements in accordance with sections 4.3.1 and 4.3.4 of EN 12604.

SKG

*bezoekadres* Nieuwe Kanaal 9F 6709 PA Wageningen

*postadres* Postbus 362 6700 AJ Wageningen

T 0317 - 421 720 F 0317 - 421 677 E info@skg.nl I www.skg.nl



Notified Body NB 0960





Report number: SKG 15.00293

# **Table of contents**

1.	Aim of the investigation.	-
2.	l echnical specification	-
3.	Accountability and methodology	1
4.	Observations	1
ວ.	Conclusion	
ю.	Appendices	6
/	Appendix 1: Drawings of the tested door	7
1	Appendix 2: User & installation manual of the Rolling Shutter and the drive including operation	. 10



#### Report number: SKG 15.00293

### 1. Aim of the investigation

SKG was instructed by Euroll Service B.V. based in Zeewolde (Netherlands) to test an electrically powered Rolling Shutter with the aim of determining compliance of "Mechanical aspects" related to safe opening and protection against unintended and/or uncontrolled movements in the case of the collapse of suspension and/or power components of the doors when static or moving with the requirements of NEN-EN 12604.

This test is part of the ITT (initial type testing) as referred to in product standard EN 13241-1: 2003 for industrial and commercial garage doors and gates.

SKG is known in Europe as a so-called Notified Body, no. 0960.

SKG is accredited for testing under ISO 17025, by the Dutch Accreditation Council RvA under registration number: L 406.

# 2. Technical specification

The Rolling Shutter of Euroll tested by SKG was a type electrically powered, with Euroll type designation EUSEC 6.2, with serialno. 1503091, produced in march 2015.

The Rolling Shutter had clear opening dimensions of 5160 x 2700 mm (W x H).

The weight of (the movable part) of the roller curtain amounted to 84 kg.

#### Construction:

The rolling shutter curtain composed of interconnected steel laths made of steel plate with applied thicknesses of 1 mm and with a height of 95 mm.

The roller curtain was fixated to the  $\emptyset$  108 mm roller tube (wall thickness 3,2 mm), with 8 pcs M8 bolts and profile sheets.

The guide rails consisted of steel profiles with dimensions of 80 x 34 x 4 mm, were mounted in between the mounting frame tubes.

The bottom of the rolling shutter curtain was provided with an aluminium bottom profile type 1268 with a height of 104 mm.

The closing edge was equipped with a special formed EPDM-rubber profile with a height of 25 mm. (see sectional drawings, part of appendix 3).

The Rolling Shutter was driven by a 3\* 400V AC motor with gear unit of the brand Elero, type DFM 170 NHK and controlled by an adaptive controller of the brand Adolf Tedsen type "Logi Ted" with the typeno. MO710 RFE. The motor gear unit delivers a maximum torque of 170 Nm at 12,5 rpm.

The most relevant parameter settings of the control unit were:

- The settings of the dip-switches on the mainboard were: 2 (On) and 1, 3, 4, 5, 6 (Out).
- Up and down direction, configured in "hold to run mode".

The Rolling Shutter was equipped with the following protections:

- Anti drop device of the brand Simu type D.
- Operation in "hold to run mode";
- A presence sensing device: Safety light curtain, of the brand Cedes type GRS Mini Tx-2030-33.

The speed in the closing direction was 0,13 m/s, (measured at an opening of 1000 mm).

Drawings of the Rolling Shutter as well as the user & installation manual of the electric drive and control were received and form part of the report as an appendix (see Appendix 3 and 4).





#### 3. Accountability and methodology

The testing and report are based on the European standards, NEN-EN 12604: 2000 and NEN-EN 12605: 2000.

The test result provides an important indication of the safety in use concerning CE marking as referred to in Annex ZA of the product standard EN 13241-1 + A1: 2011, for industrial and commercial garage doors and gates.

The Rolling Shutter offered for testing and assessment was tested on:

Safe opening, protection against unintended and uncontrolled movements.

#### 4. Observations

The Rolling Shutter was inspected and tested for the following 'defect possibilities' 1):

- A: During and after 10 cycles with fully opening and closing of the Rolling Shutter there were no abnormalities observed;
- B: The verification test of the provisions against disengagement with the stationary obstacle (rigid cube) is successfully passed. After this test the Rolling Shutter was still functioning well.
- C: The anti drop device and its mounting have been inspected and approved
- D: The state of a disconnected drive unit (worst case) and in a partially open position (1 metre from floor level). After simulation of the sudden collapse of the drive mechanism, the measured dropping distances were 220 and 225 mm.
- E: The shutter curtain is properly attached to the roller tube, the fixings will not succumb
- F: In case of failure of the safety light curtain, cause no direct hazards, the controller goes into failsafe mode. That is to say that regardless of the settings, in closing direction the shutter will be only operable in "Hold to run mode".
- This concerns possible defects in a single component, with the additional requirements being that one defective component may never result in improper operation and/or defects in other components.



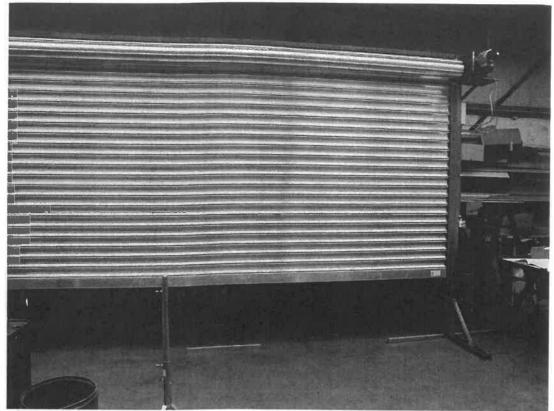


Photo of the tested Rolling Shutter

#### 5. Conclusion

From the observations of the tested Rolling Shutter it can be concluded that the tested Rolling Shutter of Euroll Service B.V., with clear opening dimensions of 5160 x 2700 mm (W x H), satisfied the requirements in accordance with sections 4.3.1 and 4.3.4 of EN 12604.

Drawn up at Wageningen on 9 April 2015

S.K.G.

Ir J.T. Boersma, Technical Manager



# 6. Appendices

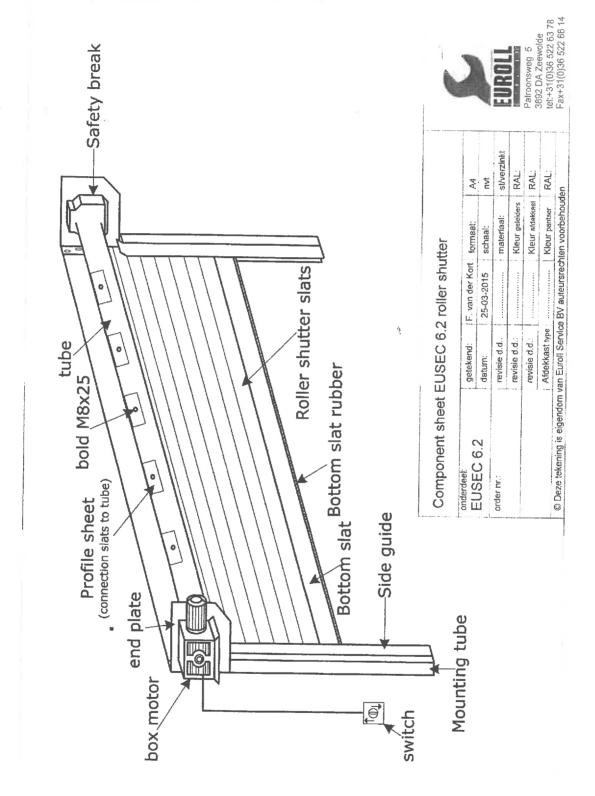
Report number: SKG 15.00293

Appendix 1: 1-1 1-2 1-3	Drawings of the tested door: 3 pages Component sheet EUSEC 6.2 roller shutter; Horizontal cross-section EUSEC 6.2 roller shutter Side view bottom slat and rubber and slat 6.2	25-03-2015 11-03-2015 26-03-2015
<b>Appendix 2:</b> 2-1 2-2	User & installation manual of the Rolling Shutter and Euroll Service User/ Installation & Maintenance manual Tedsen Teletaster Manual motor controller MO710	the drive 1) version E.1.01 version 4V



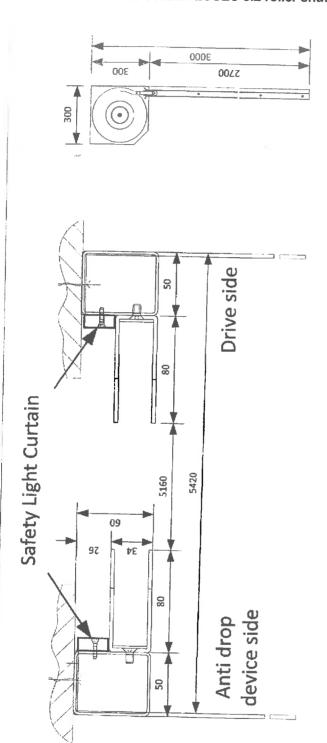
# Appendix 1: Drawings of the tested door: 3 pages

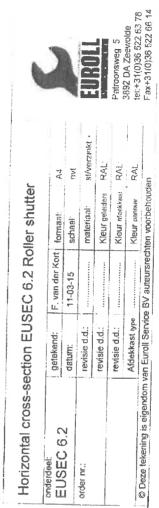
#### 1-1 Component sheet EUSEC 6.2 roller shutter





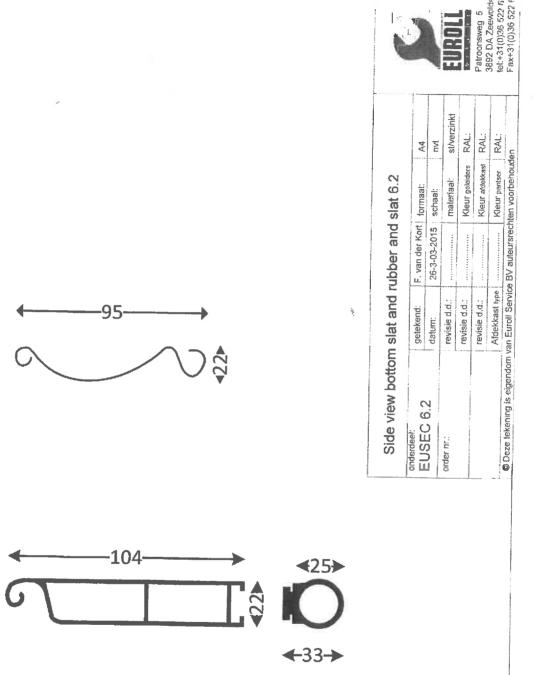
# 1-2 Horizontal cross-section EUSEC 6.2 roller shutter







# 1-3 Side view bottom slat and rubber and slat 6.2



Report number: SKG 15.00293

# Appendix 2: User & installation manual of the Rolling Shutter and the drive including operation

2-1	Euroll Service User/ Installation & Maintenance manual	version F.1.01	1)
	Tedsen Teletaster Manual motor controller MO710	version 4V	1)

1) For downloads of the separate documentation: From Euroll B.V: www

www.euroll.nl

From Tedsen Teletaster Benelux B.V.: www.tedsen.com