

Test report Kite security system

tested and certified after NF S52-503

Manufacturer:	Skywalk GmbH & Co. KG	Cert.no.	KS 004.2016
Adresse:	Windeckstr.4 83250 Marquartstein Germany	Model:	Inf. 3.0 QR
		SN:	511502815
		Place/date:	Villeneuve, 13/04/2016
		minimum weight	40 kg
		maximum weight	120 kg

Complete System

Test id.

- 1 **4.3.1.1 Verify installation of complete system; Main release, 2nd release and power system**
In the report: Main release → chicken loop & 2nd release → Leash release
Remarks if not according to user manual.
- 2 **4.3.1.2.1 Test the complete system (new) at 15 daN**

Main release	6,8
2nd release	3,4
Power adjustment	Done, OK
- 3 **4.3.1.2.2 Test the complete system (new) at 2 times the maximum weight 10 power-ups**

Done, OK

Security System

- 4 **4.3.1.3.2 Accessibility**

at 15°	Done, OK
at 45°	Done, OK
Horizontally	Done, OK
- 5 **4.3.1.3.3 Releasing or accidental disconnection in load of 10 daN**
It is verified that main release and 2nd release can not be activated unexpectedly

Done, OK

- 6 **4.3.1.3.4 Implementation with a load of 10 daN**

at 15°	Done, OK
at 45°	Done, OK
Horizontally	Done, OK
- 7 **4.3.1.3.4.1 Single Action of both release system**

Main release & 2nd release	Main Release	2nd release
at 15°	Done, OK	Done, OK
at 45°	Done, OK	Done, OK
Horizontally	Done, OK	Done, OK

3.1.4.5.1 and 3.1.4.5.2

8 4.3.1.3.4.2 Axis implementation

Verify that the ergonomics and kinematics of the axis of implementation
Verify the systems are properly marked

Done, OK



9 4.3.1.3.4.3 Area Implementation with a load of 10 daN

to 15 ° from the vertical
to 45 ° from the vertical
to horizontal

Done, OK

Done, OK

Done, OK

Verify that the implementation of the control has no significant risk to the rider.

Main Release System

10 4.3.2.1.1 Measuring releasing time < 2s at maximum weight

15 ° from the vertical
horizontally

Done, OK

Done, OK

Each test is repeated 5 times

11 4.3.2.1.2 Overload the System upto 3 times maximum weight

tension gradually 3-6 seconds

Done, OK

12 4.3.2.1.3 Deploy the security control, measuring of time and force

deploy force less than 10 daN and < 0.5s

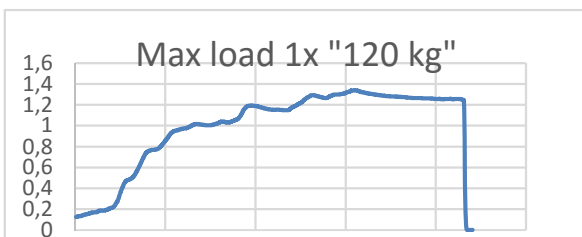
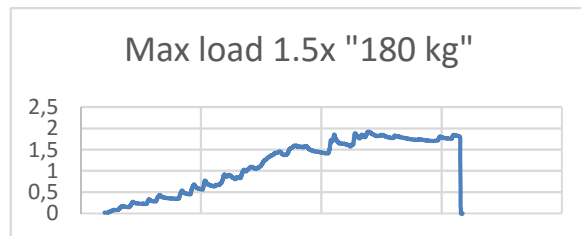
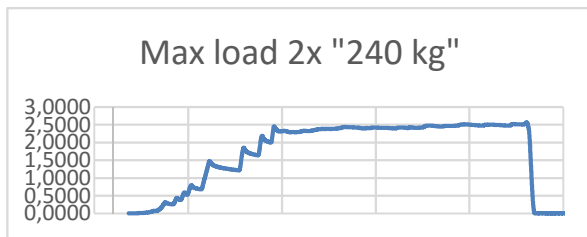
- # 2 times the maximum weight
- # 1.5 times the maximum weight
- # the maximum weight
- # 15 daN

7,6

6,5

6,0

6,6



13	4.3.2.1.3 / In a dry environment, test done without cleaning	
	# 2 times the maximum weight	9,9
	# 15 daN	9,9
14	4.3.2.1.3 / In wet environment, test done without cleaning, drying	
	# 2 times the maximum weight	9,8
	# 15 daN	7,9
15	4.3.2.1.3 / In cold environment, test done without drying	
	# 2 times the maximum weight	8,1
	# 15 daN	6,1

2nd Release System

16	4.3.2.2.3 Deploy the security control, measuring of time and force	
	deploy force less than 10 daN and < 0.5s	
	# 1.5 times the maximum weight	5,0
	# the maximum weight	3,4
	# 15 daN	2,0

17	4.3.2.2.3 / In a dry environment, test done without cleaning	
	# 1.5 times the maximum weight	6,9
	# 15 daN	3,6
18	4.3.2.2.3 / In wet environment, test done without cleaning, drying	
	# 1.5 times the maximum weight	9,2
	# 15 daN	3,5
19	4.3.2.2.3 / In cold environment, test done without drying	
	# 1.5 times the maximum weight	5,6
	# 15 daN	3,6

Information

Environments physicochemical**13&17 4.3.1.3.5.1 In a dry environment**

The test specimen is mixed with dry sand for 10 s in the sand tray.

14&18 4.3.1.3.5.2 In wet environment

The test specimen is immersed in a bath of salt water at 10% and sanded to 75% of its volume.
It is mixed for 10 s.

15&19 System is placed for two hours at -18 degrees celcius.

The material is wetted by spraying water before placed in cold environment
(Air Turquoise info: Spraying in 20 s and placing vertically in freezer)

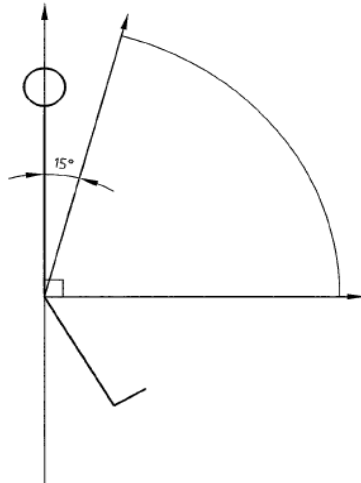


Figure 1 — Exemple de situations considérées
comme prévisibles d'utilisation du système de sécurité

Figure 1: Example situations considered foreseeable use of the security system