

## Harness inspection certificate - EN

Inspection certificate number: PH\_359.2022

Impact pad number: PH\_359.2022

### Manufacturer data

Manufacturer name: Sky Paragliders a.s.  
 Representative: Michal Sotek  
 Street: Okruzni 39  
 Post code / place: 73911 Frydlant n.O.  
 Country: Czech Republic

### Sample data:

#### Harness

#### Impact pad

Name:	Twin 2	Name Impact pad: <sup>(1)</sup>	n/a
Type:	ABS	Impact pad integrated: <sup>(1)</sup>	Yes
Size:	L	Impact pad type:	Foam
Weight of Sample [kg]:	2.82	Weight of Sample [kg]: <sup>(1)</sup>	0.54
Serial number:	2752-13-5715	Serial number: <sup>(1)</sup>	2752-13-5715
Clip-in weight [kg]:	120	Date of reception:	03.05.2022
Integrated container for rescue system:	Yes		
Volume container [cm <sup>3</sup> ]:			
			9000 max 6000 min
Date of reception:	03.05.2022		

### Test report summary

#### Structural test

#### Impact pad test

Result	POSITIVE	POSITIVE
Place	Villeneuve	Villeneuve
Date	03.05.2022	03.05.2022

### Issue data

Place of declaration: Villeneuve  
 Date of issue: 01.06.2022  
 Managing Director: Andrea Wigger  
 Signature:



This signature approve the validity of the test reports 94.21b and 94.22 (only if test reports are applicable)

Air Turquoise SA, has thoroughly tested the sample mentioned above and certifies its conformity with the following standards:

EN1651:2018+A1:2020<sup>(2)</sup> and EN12491:2015+A1:2021<sup>(2)</sup>

<sup>(1)</sup> If Impact pad is NOT integrated in the harness, it will have independently Inspection number, and serial number. Definition of integrated impact pad is impact pad which can not be dismounted from the harness, e.g. airbag

<sup>(2)</sup> These standards are NOT covered by accreditation D-IS-19457-01

The certificate of inspection is completed with test reports, if available, number: 94.21b and 94.22  
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Route du Pré-au-Comte 8 • CH-1844 Villeneuve • +41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses  
and paraglider reserve parachutes



## Paragliding Harness - EN

Inspection number : **PH\_359.2022**  
Manufacturer : **Sky Paragliders a.s.**  
Model and size : **Twin 2 L**  
Maximum pilot weight [kg] : **120**  
Integrated container for rescue system: **Yes**  
If Yes. Volume of the container [cm<sup>3</sup>] : **6000 min      9000 max**  
Serial number: \_\_\_\_\_  
Production date (year / month) : \_\_\_\_\_

## Harness protector (impact pad)

Impact pad type: **Foam**  
Impact pad integrated: **Yes**  
Impact pad number: **PH\_359.2022**  
If not integrated : Manufacturer ..... Serial number: .....  
Production date (year / month) : \_\_\_\_\_

**Warning : Read the operating manual before using this equipment!**

A sample has been tested and certifies its conformity with the following standards: **EN1651:2018+A1:2020** and **EN12491:2015+A1:2021**. This model corresponds with the tested sample and its airworthiness.

# Harness Structural test Report - EN

Inspection certificate number: **PH\_359.2022**

## Manufacturer data:

Manufacturer name: **Sky Paragliders a.s.**  
 Representative: **Michal Sotek**  
 Street: **Okruzni 39**  
 Post code place: **73911 Frydlant n.O.**  
 Country: **Czech Republic**

## Sample data:

Name: **Twin 2**  
 Type: **ABS**  
 Size: **L**  
 Serial number: **2752-13-5715**  
 Impact pad type: <sup>(1)</sup> **Foam**  
 Clip-in weight [kg]: **120**

Date of test: **03.05.2022**

## Atmosphere AGL:

[C°]	<b>21</b>
RH [%]	<b>39</b>
[hPa]	<b>1003</b>

## Summary of Structural test

Test id	- EN 1651	Setup	Req. Load		Min. duration [s]	Result
			[g]	Req. Load [N]		
01 <sup>(3)</sup>	✓ 5.5.1.1	Positive symmetric load (Slippage)	4.5	5400	5	POSITIVE
03 <sup>(3)</sup>	✓ 5.5.1.1b	Positive symmetric load	15	18000	5	POSITIVE
05	✓ 5.5.1.2	Positive asymmetric load	6	7200	5	POSITIVE
06	✓ 5.5.1.6	Negative asymmetric load	6	7200	5	POSITIVE
08 <sup>(5)</sup>	5.5.1.9	Anti falling-out system	4.5	5400	5	n/a
09 <sup>(3)(4)</sup>	5.5.1.3	Positive symmetric load rescue points	15	18000	5	n/a
10 <sup>(3)(4)</sup>	5.5.1.4	Negative symmetric load rescue points	15	18000	5	n/a
11	5.5.1.8	Connecting element for rescue	n/a	24000	0.3	n/a
12 <sup>(3)</sup>	✓ 5.5.1.7	Upright (landing) position load	6	7200	5	POSITIVE
14	5.5.1.5	Negative symmetric load towing points	5	6000	5	n/a

## Rescue deployment test

Test id	- EN 1651	Setup	Min load		Measured [N]	Result
			[N]	Max. load [N]		
RRDT	✓ 5.5.1.11	Default flying position	20	70	57.38	POSITIVE

## Rescue Deployment Handle strength test

Test id	- EN 12491	Setup	Req. Load [N]	Min. duration [s]	Breaking strength [N]	Result
RRST	✓ 5.3.2	Two end points of handle	700	10	1367.85	POSITIVE

Manufacturer	Instrument	Type no	S/N	Validity
HBM	Load Sensor GE01	1-S9M/50KN-1	31314643	04.09.2023
Burster / MTS	Load sensor 10kN SL2	8431-6010-N000S000	593507	21.04.2026
JDC elec	Geos n°11 Skywatch	Geos n°11	Unit11	18.06.2025

Air Turquoise SA, has thoroughly tested the sample mentioned above and certifies its conformity with the following standards:

**EN1651:2018+A1:2020<sup>(6)</sup> and EN12491:2015+A1:2021<sup>(6)</sup>**

The validation of this test report is given by the signature of the test manager on the Inspection Certificate no 94.20b

<sup>(1)</sup> If Impact pad available, see test report no. 94.22 and inspection certificate no. 94.20b. <sup>(3)</sup> Slipping test of any adjustable components: No slippage of any adjustable element more than 10 mm at 4500N for 5 s. The marks should be added with a pre-load of 1000N. <sup>(4)</sup> For harness with integrated Y bridle, test in the end loop <sup>(5)</sup> Attach to anti-falling out system without connecting the crotch straps (breast straps)

<sup>(6)</sup> These standards are NOT covered by accreditation D-IS-19457-01

Calculated value in tests reports include the value minus the uncertainty (on safe side) / The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k = 2. The value of the measurand lies within the assigned range of values with a probability of 95%

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Inspection certificate number: **PH\_359.2022**

model: **Twin 2**

**Harness Structural test**

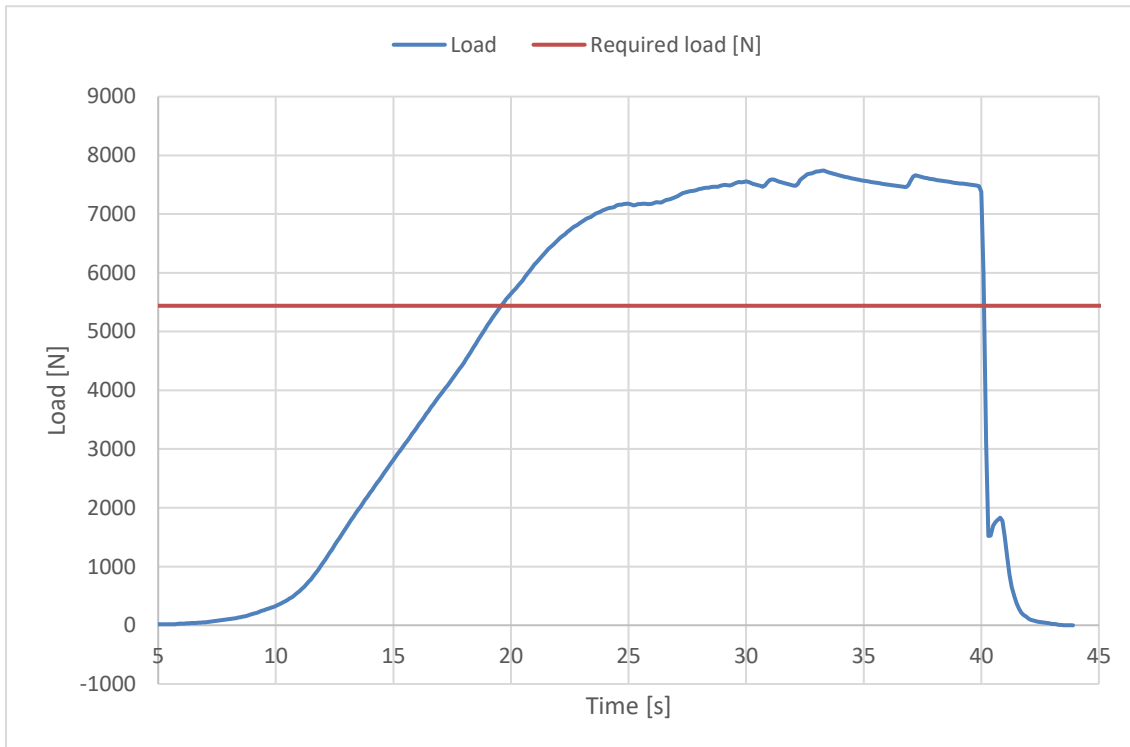
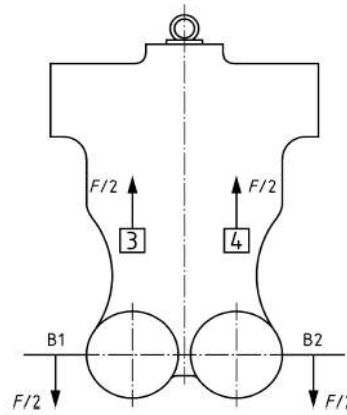
**Test ID 01**

Standard **EN 1651**  
 Reference in standard **5.5.1.1**  
 Test setup **Positive symmetric load (Slippage)**  
 Attachment points **Both main riser attachment (3,4)**  
 Anchor points **Dummy (B1, B2)**

Required load [g] **4.5**  
 Required load [N] **5400**  
 Minimum test duration [s] **5**

**Result**

Test duration [s] **20.6**  
 Any signs of structural failure **No**  
 Slippery test OK **Yes**  
 Test results **POSITIVE**



The validation of this test report is given by the signature of the test manager on the Inspection Certificate no 94.20b

Inspection certificate number: **PH\_359.2022**

model: **Twin 2**

**Harness Structural test**

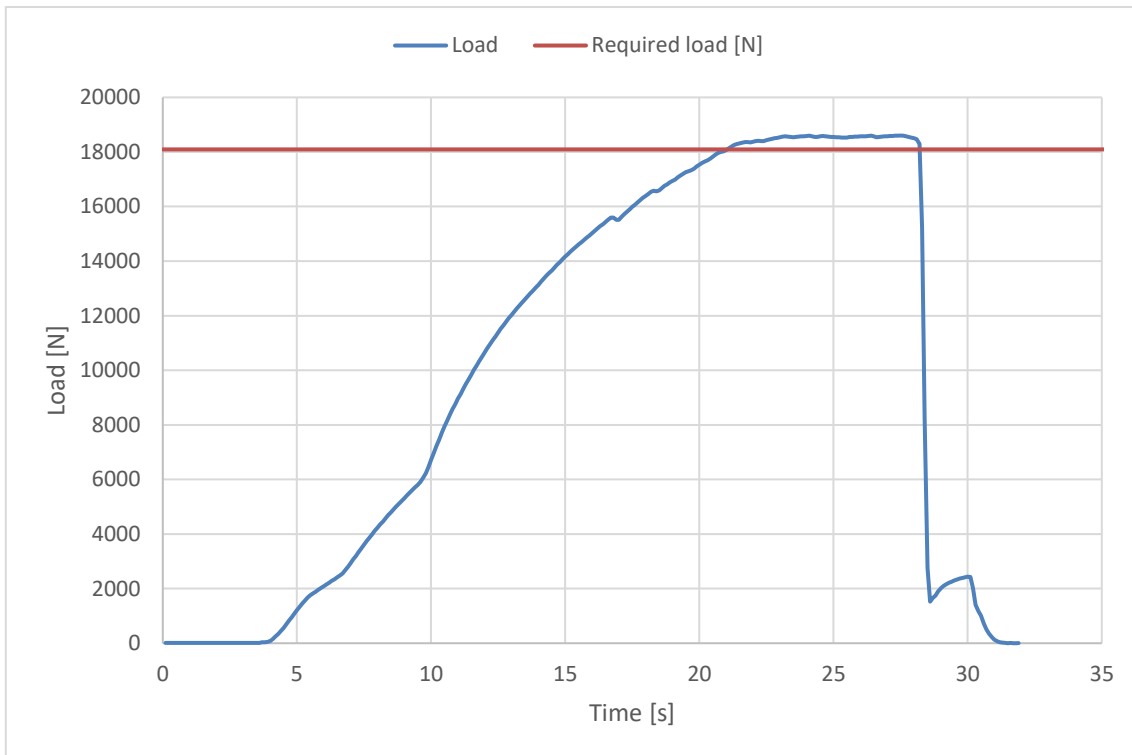
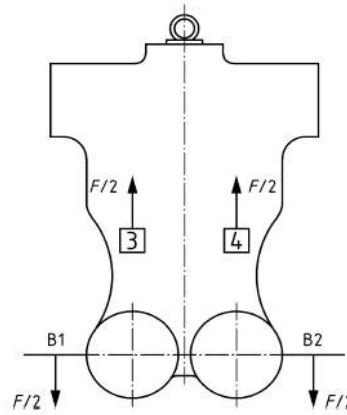
**Test ID 03**

Standard **EN 1651**  
 Reference in standard **5.5.1.1b**  
 Test setup **Positive symmetric load**  
 Attachment points **Both main riser attachment (3,4)**  
 Anchor points **Dummy (B1, B2)**

Required load [g] **15**  
 Required load [N] **18000**  
 Minimum test duration [s] **5**

**Result**

Test duration [s] **7.2**  
 Any signs of structural failure **No**  
 Slippery test OK **Yes**  
 Test results **POSITIVE**



The validation of this test report is given by the signature of the test manager on the Inspection Certificate no 94.20b

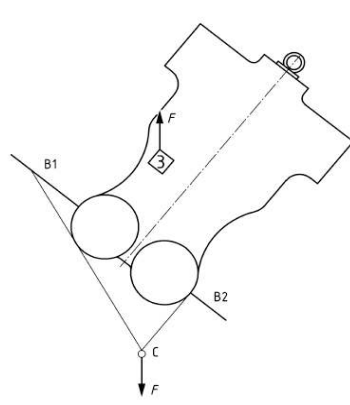
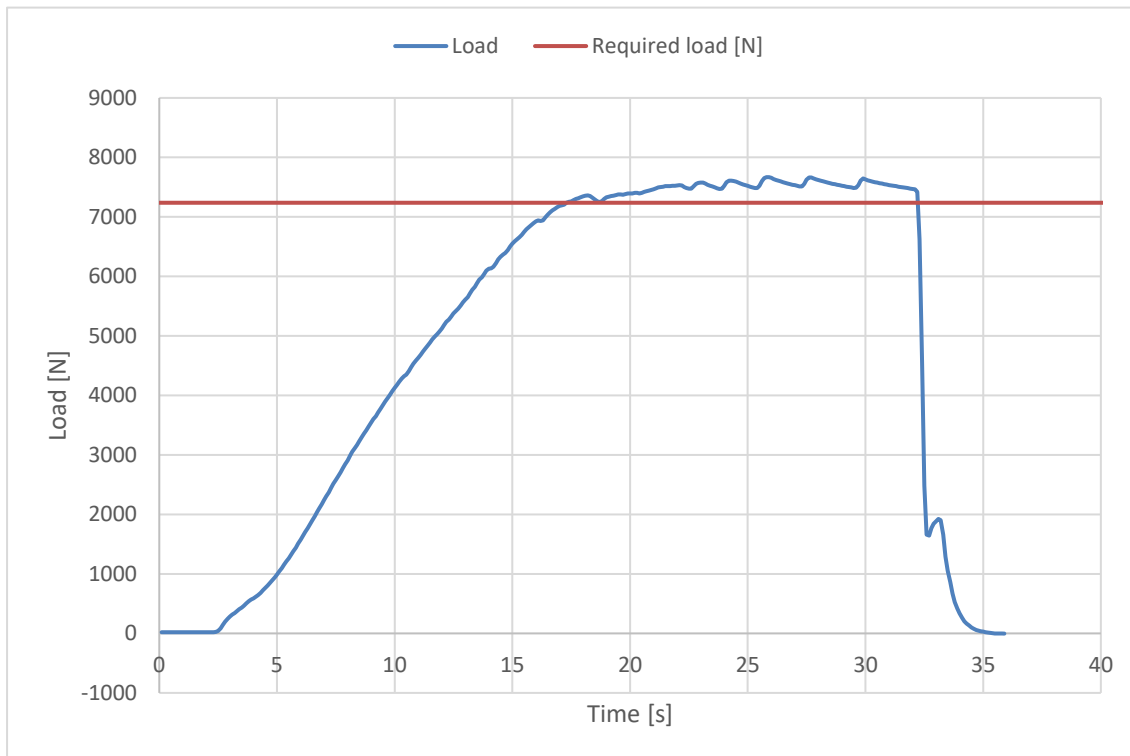
Inspection certificate number: **PH\_359.2022**

model: **Twin 2**

**Harness Structural test**

**Test ID 05**

Standard	<b>EN 1651</b>
Reference in standard	<b>5.5.1.2</b>
Test setup	<b>Positive asymmetric load</b>
Attachment points	<b>One riser attachment (3 or 4)</b>
Anchor points	<b>Dummy (C)</b>
Required load [g]	<b>6</b>
Required load [N]	<b>7200</b>
Minimum test duration [s]	<b>5</b>
<b>Result</b>	
Test duration [s]	<b>14.9</b>
Any signs of structural failure	<b>No</b>
Test results	<b>POSITIVE</b>

The validation of this test report is given by the signature of the test manager on the Inspection Certificate no 94.20b

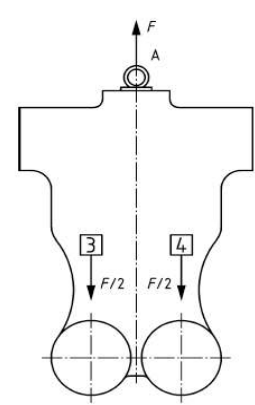
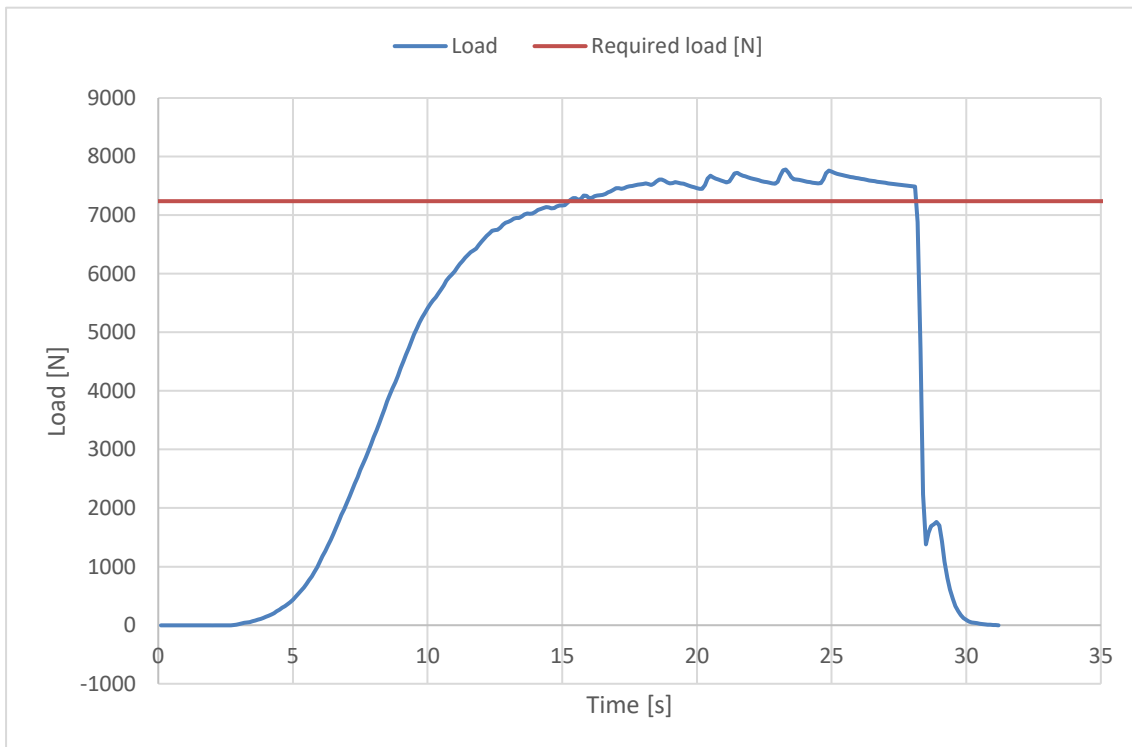
Inspection certificate number: **PH\_359.2022**

model: **Twin 2**

**Harness Structural test**

**Test ID 06**

Standard	<b>EN 1651</b>
Reference in standard	<b>5.5.1.6</b>
Test setup	<b>Negative symmetric load</b>
Attachment points	<b>Both main riser attachment (3,4)</b>
Anchor points	<b>Dummy (A)</b>
Required load [g]	<b>6</b>
Required load [N]	<b>7200</b>
Minimum test duration [s]	<b>5</b>
<b>Result</b>	
Test duration [s]	<b>12.9</b>
Any signs of structural failure	<b>No</b>
Test results	<b>POSITIVE</b>

The validation of this test report is given by the signature of the test manager on the Inspection Certificate no 94.20b

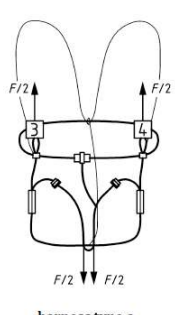
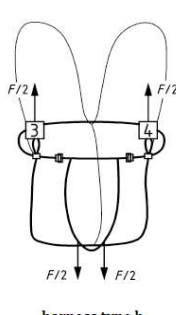
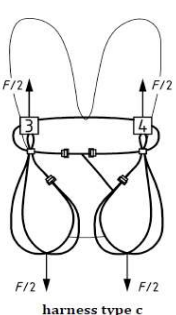
Inspection certificate number: **PH\_359.2022**

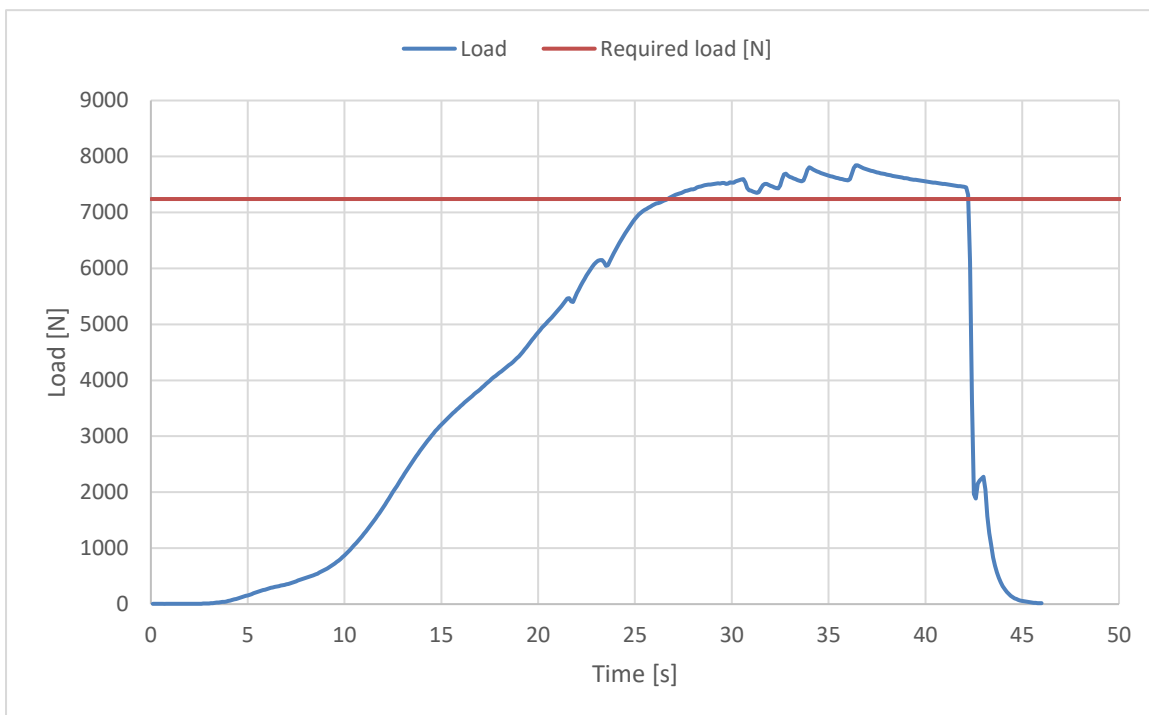
model: **Twin 2**

**Harness Structural test**

**Test ID 12**

Standard	<b>EN 1651</b>
Reference in standard	<b>5.5.1.7</b>
Test setup	<b>Upright (landing) position load</b>
Attachment points	<b>Both main riser attachment (3, 4)</b>
Anchor points	<b>Both legstrap of harness (no dummy)</b>
Required load [g]	<b>6</b>
Required load [N]	<b>7200</b>
Minimum test duration [s]	<b>5</b>
Harness type	<b>type c</b>
<b>Result</b>	
Test duration [s]	<b>15.6</b>
Any signs of structural failure	<b>No</b>
Slippery test OK	<b>Yes</b>
Test results	<b>POSITIVE</b>



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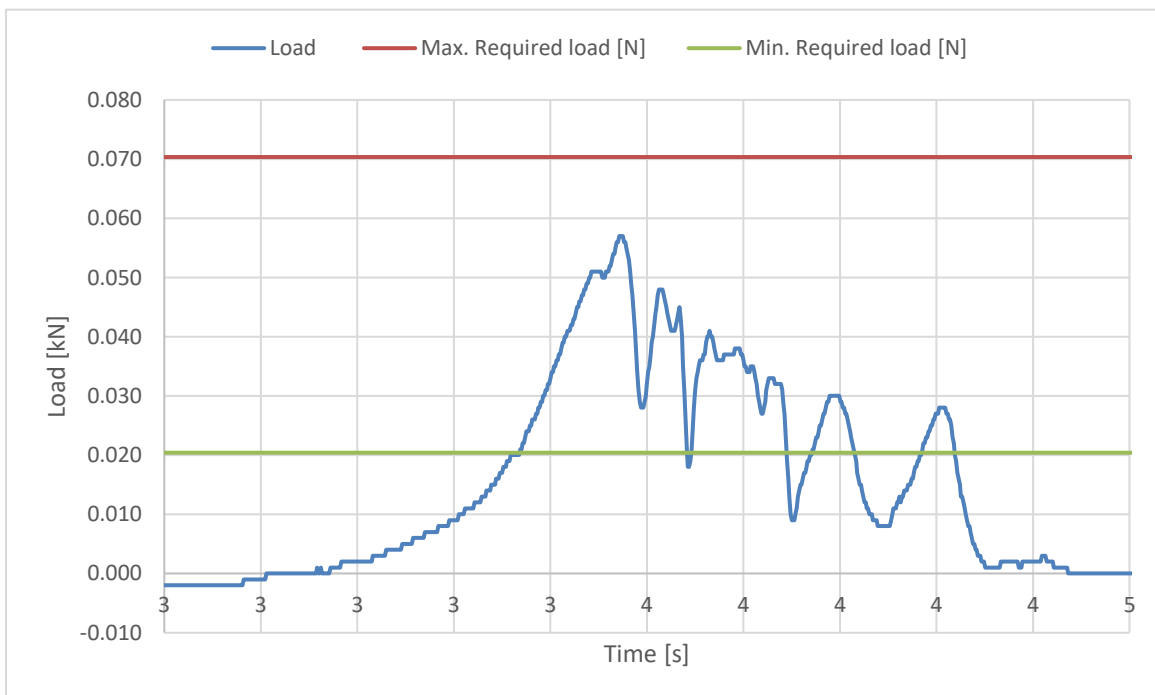
Inspection certificate number: **PH\_359.2022**

model: **Twin 2**

**Rescue Deployment Test**

**Test ID RRDT**

Standard	<b>EN 1651</b>
Reference in standard	<b>5.5.1.11</b>
Test setup	<b>Default flying position</b>
Attachment points	<b>Sensor connect to handle, and pull in opening direction</b>
	The test is to simulate the load required to open the emergency parachute(1st action).
Min. Required load [N]	<b>20</b>
Max. Required load [N]	<b>70</b>
<b>Result</b>	
Load for first action [N]	<b>57.38</b>
Test results	<b>POSITIVE</b>



The validation of this test report is given by the signature of the test manager on the Inspection Certificate no 94.20b

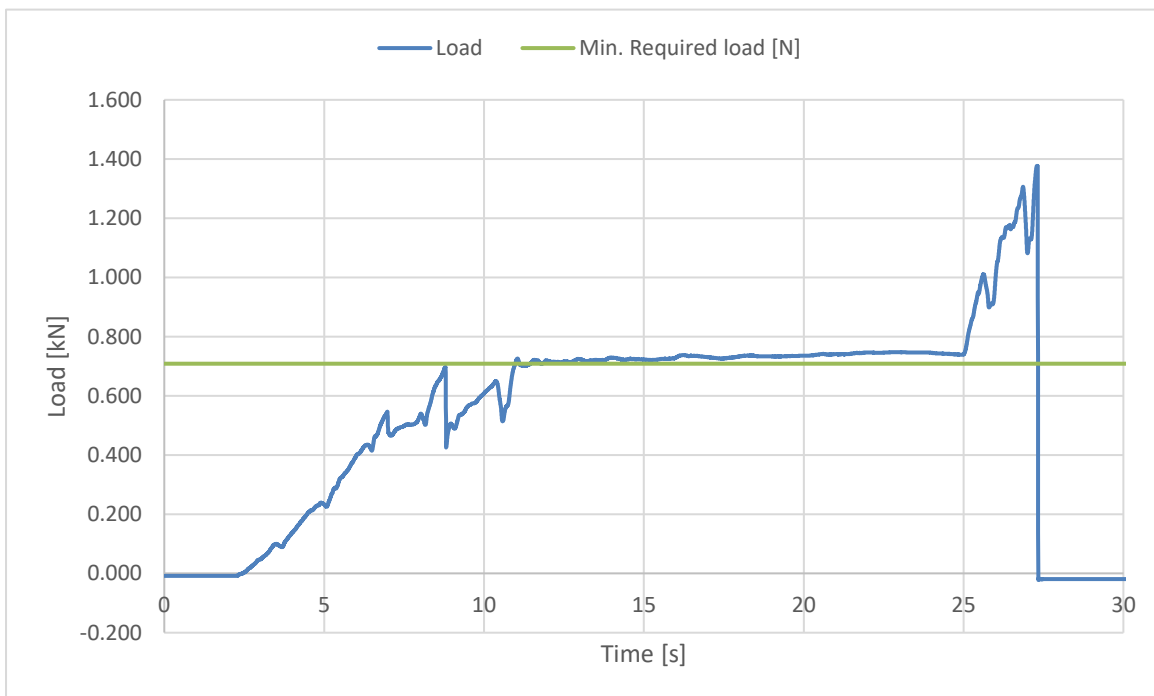
Inspection certificate number: **PH\_359.2022**

model: **Twin 2**

**Rescue Deployment Handle strength test**

**Test ID RRST**

Standard	<b>EN 12491</b>
Reference in standard	<b>5.3.2</b>
Test setup	<b>Two end points of handle</b>
Attachment points	<b>Sensor connect to end of handle, pull on the other side</b>
	The handle must support min 700 N for 10 s, after measure breaking strength
Min. Required load [N]	<b>700</b>
Minimum test duration [s]	<b>10</b>
<b>Result</b>	
Test duration [s]:	<b>15.5</b>
Breaking strength [N]	<b>1367.85</b>
Test results	<b>POSITIVE</b>



The validation of this test report is given by the signature of the test manager on the Inspection Certificate no 94.20b