

# Harness Structural test Report - LTF

Inspection certificate number: PH\_319.2020

## Manufacturer data:

Manufacturer name: **Nova Vertriebsgesellschaft m.b.H.**  
 Representative: **Philipp Medicus**  
 Street: **Auweg 14**  
 Post code place: **6124 Terfens**  
 Country: **Austria**

## Sample data:

Name: **Artus**  
 Type: **ABS**  
 Size: **M/L**  
 Serial number: **PX001**  
 Impact pad type: <sup>(1)</sup> **other**  
 Clip-in weight [kg]: **100**

Date of test: **09.11.2020**

## Atmosphere AGL:

[C°]	<b>23.5</b>
RH [%]	<b>45</b>
[hPa]	<b>1024.2</b>

## Summary of Structural test

Test id	-	Ref.	Setup	Req. Load [g]	Req. Load [N]	Min. duration [s]	Result
02	✓	5.3.2.1	Default flying position	6	6000	10	POSITIVE
03	✓	5.3.2.2	Default flying position	15	15000	5	POSITIVE
04	✓	5.3.2.3	Asymmetric, one riser	6	6000	10	POSITIVE
07	✓	5.3.2.6	Asymmetric, negative	4.5	4500	10	POSITIVE
09		5.3.2.4	Rescue attachments	15	15000	5	n/a
13	✓	5.3.2.7	Flying position before landing	15	15000	5	POSITIVE
14		5.3.2.5	Towing	5	5000	10	n/a

## Rescue deployment test

Test id	-	LTF NfL II 91/09	Setup	Min load [N]	Max. load [N]	Measured [N]	Result
RRDT	✓	6.1.5	Default flying position	20	70	<b>46.59</b>	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	<b>2435.70</b>	POSITIVE

Manufacture	Instrument	Type no	S/N	Validity Calibration
HBM	Load Sensor GE01	1-S9M/50KN-1	31314643	04.09.2023
Burster	Sensor Burster	8431-10000	1185483	04.09.2023
JDC elec	Geos n°11 Skywatch	Geos n°11	Unit11	18.06.2025

Air Turquoise SA, having thoroughly assessed the sample mentioned above, declare it was found conform with  
 Airworthiness Requirements LTF NfL II 91/09 - EN12491:2015 5.3.2

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

<sup>(1)</sup> If Impact pad available, see test report no. 94.22 and inspection certificate no. 94.20

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\_319.2020**

model: **Artus**

## Harness Structural test

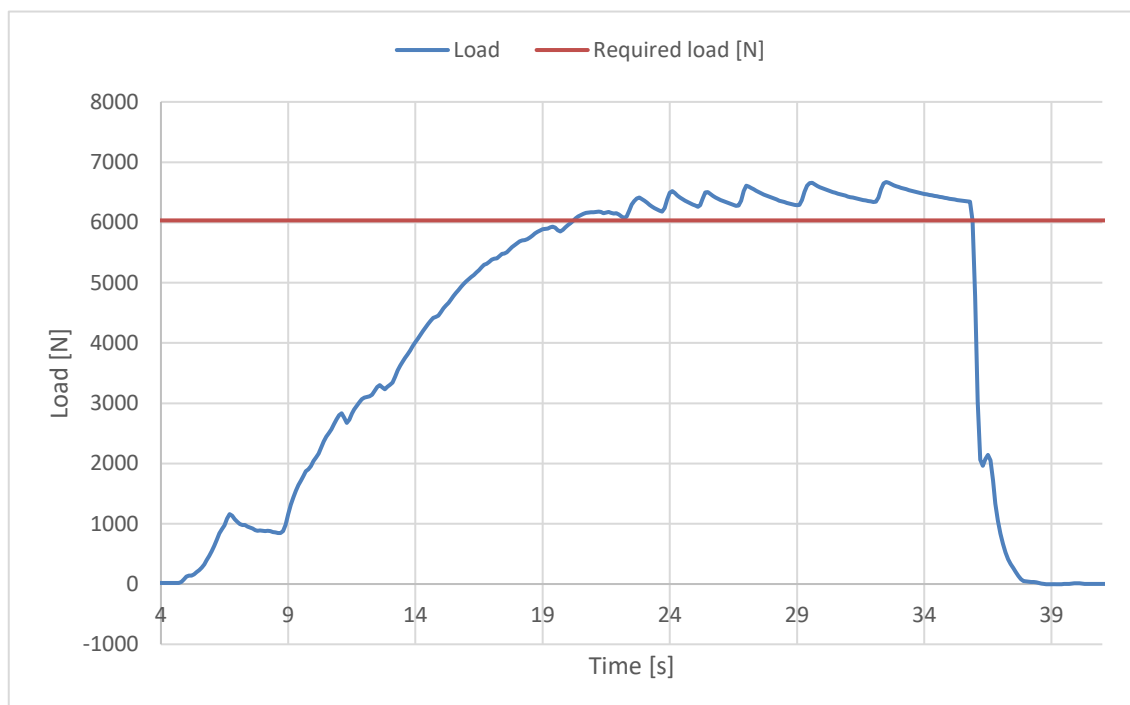
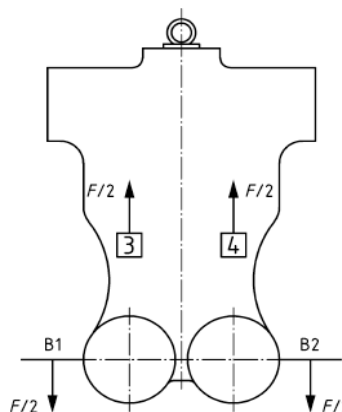
Test ID 02

Standard **LTF NfL II 91/09**  
Reference **5.3.2.1**  
Test setup **Default flying position**  
Attachment points **Both main riser attachment (3,4)**  
Anchor points **Dummy (B1, B2)**

Required load [g] **6**  
Required load [N] **6000**  
Minimum test duration [s] **10**

## Result

Test duration [s] **15.6**  
Any signs of structural failure **No**  
Test results **POSITIVE**



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model: **Artus**

## Harness Structural test

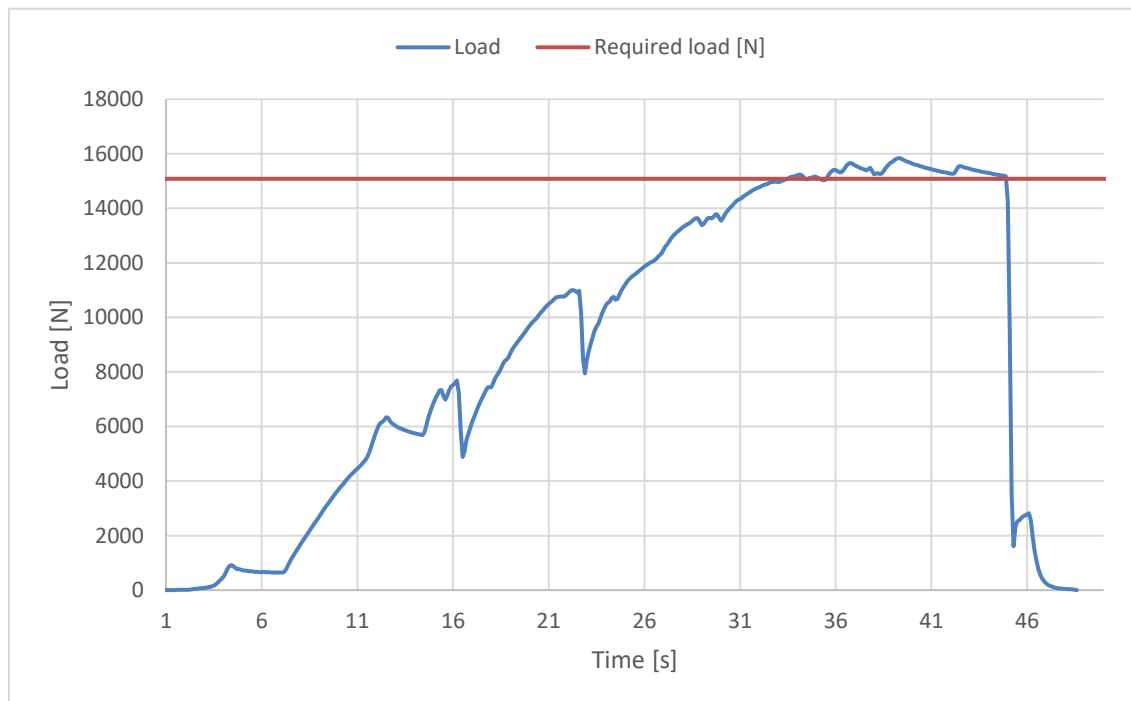
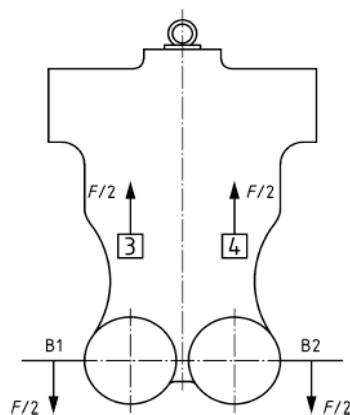
Test ID 03

Standard **LTF NfL II 91/09**  
Reference **5.3.2.2**  
Test setup **Default flying position**  
Attachment points **Both main riser attachment (3,4)**  
Anchor points **Dummy (B1, B2)**

Required load [g] **15**  
Required load [N] **15000**  
Minimum test duration [s] **5**

## Result

Test duration [s] **9.4**  
Any signs of structural failure **No**  
Test results **POSITIVE**



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model: **Artus**

## Harness Structural test

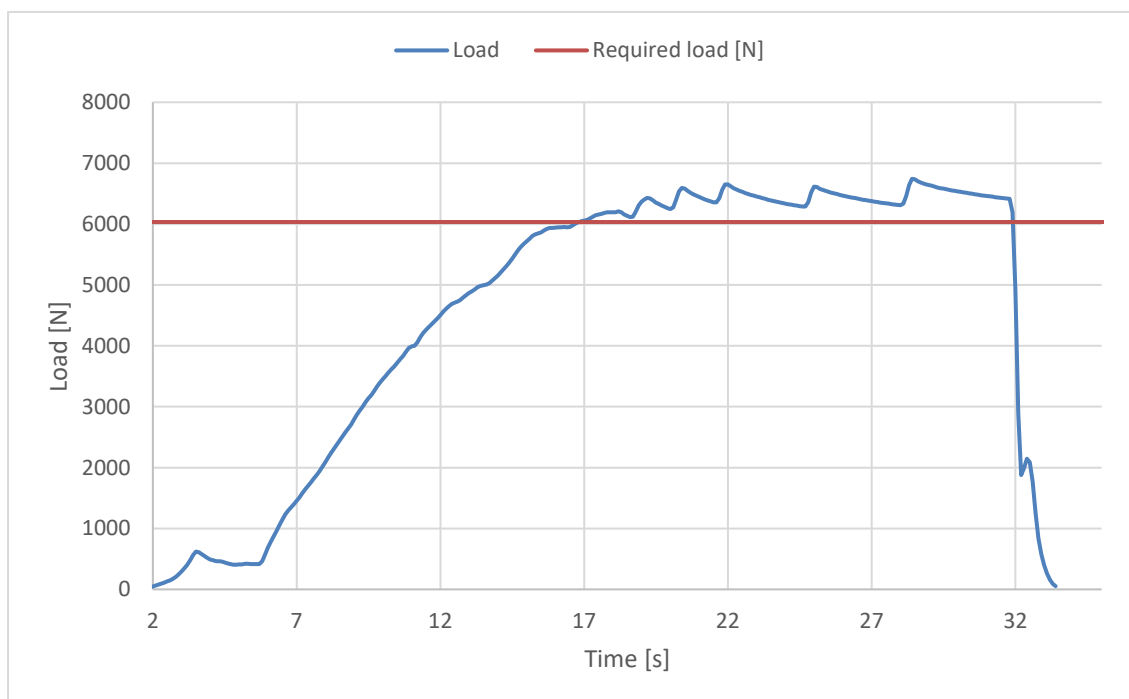
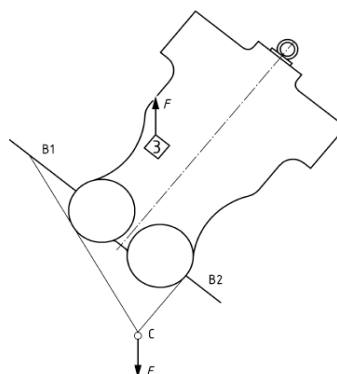
Test ID 04

Standard **LTF NfL II 91/09**  
Reference **5.3.2.3**  
Test setup **Asymmetric, one riser**  
Attachment points **One main riser attachment (3)**  
Anchor points **Dummy (B1,B2)**

Required load [g] **6**  
Required load [N] **6000**  
Minimum test duration [s] **10**

## Result

Test duration [s] **15.1**  
Any signs of structural failure **No**  
Test results **POSITIVE**



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model: **Artus**

### Harness Structural test

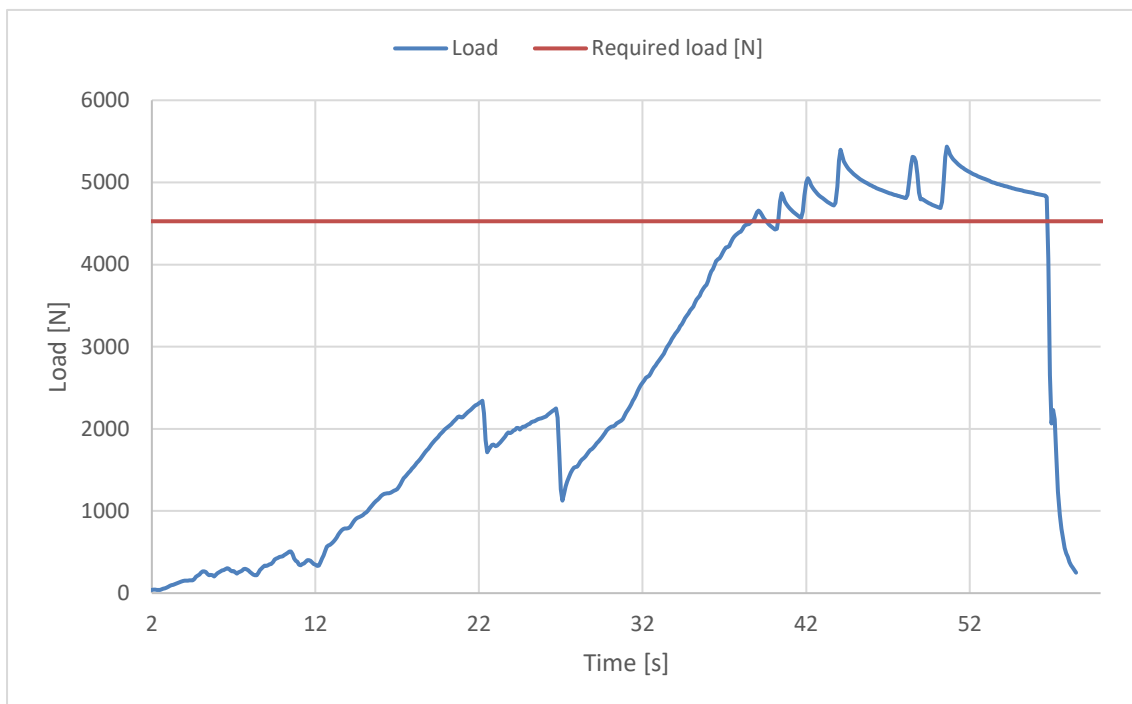
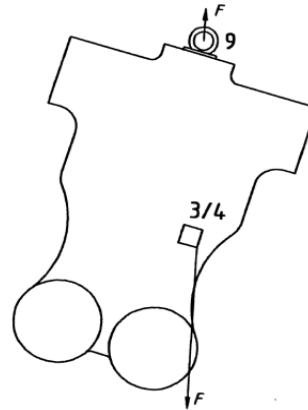
Test ID 07

Standard **LTF NfL II 91/09**  
Reference **5.3.2.6**  
Test setup **Asymmetric, negative**  
Attachment points **One main riser attachment (3 or 4) downwards**  
Anchor points **Dummy (9)**

Required load [g] **4.5**  
Required load [N] **4500**  
Minimum test duration [s] **10**

### Result

Test duration [s] **16.5**  
Any signs of structural failure **No**  
Test results **POSITIVE**



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model: **Artus**

## Harness Structural test

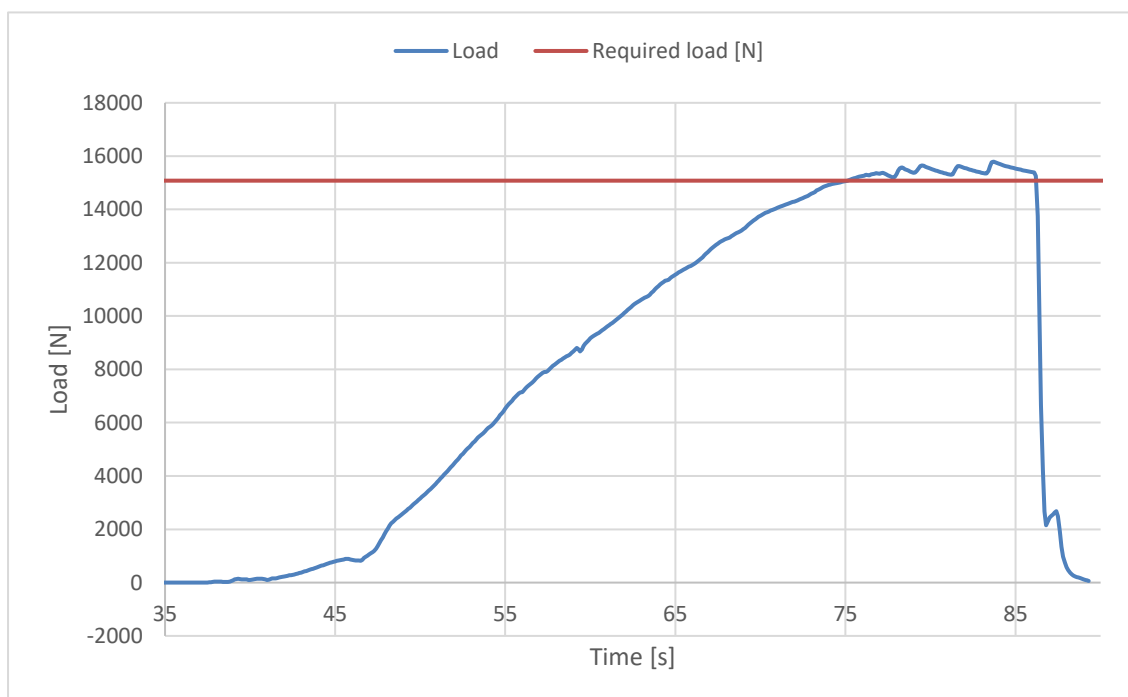
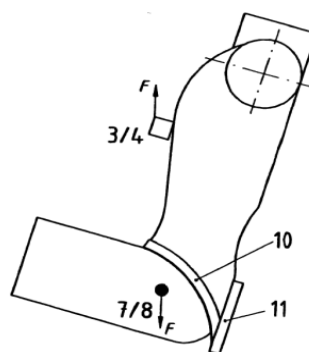
Test ID 13

Standard **LTF NfL II 91/09**  
Reference **5.3.2.7**  
Test setup **Flying position before landing**  
Attachment points **Both main riser attachment (3,4)**  
Anchor points **Dummy (7,8)**

Required load [g] **15**  
Required load [N] **15000**  
Minimum test duration [s] **5**

## Result

Test duration [s] **11.1**  
Any signs of structural failure **Yes**  
Test results **POSITIVE**



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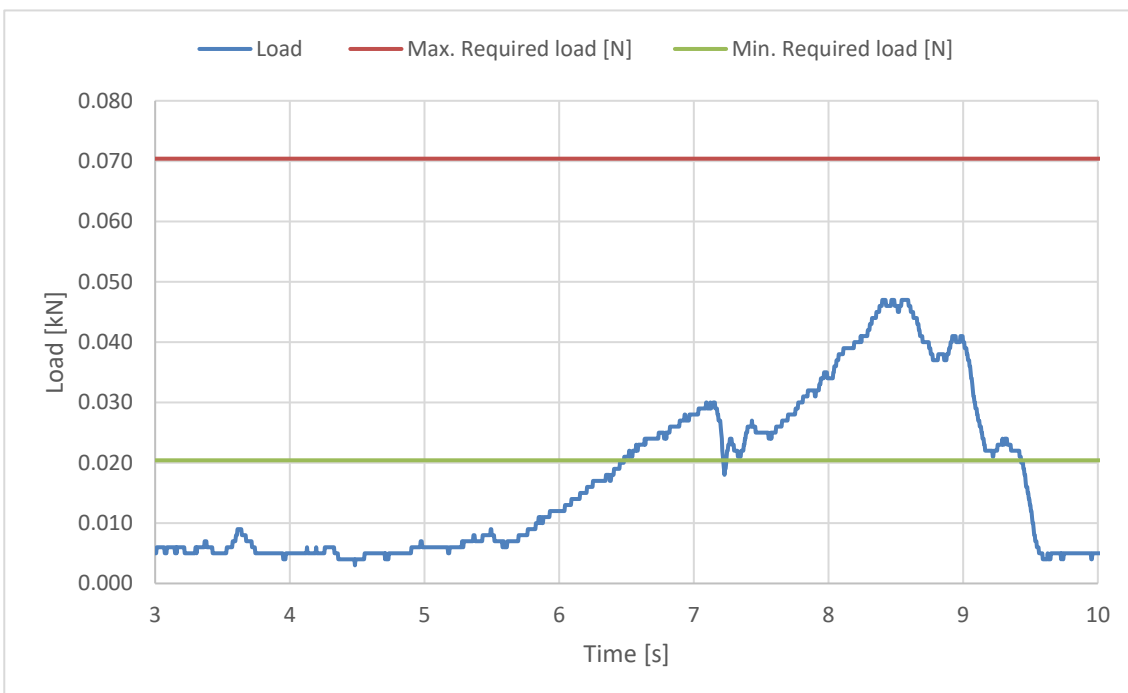
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model: **Artus**

## Rescue Deployment Test

Test ID RRDT

Standard	<b>LTF NfL II 91/09</b>
Reference	<b>6.1.5</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>46.59</b>
Test results	<b>POSITIVE</b>



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### Rescue Deployment Handle strength test

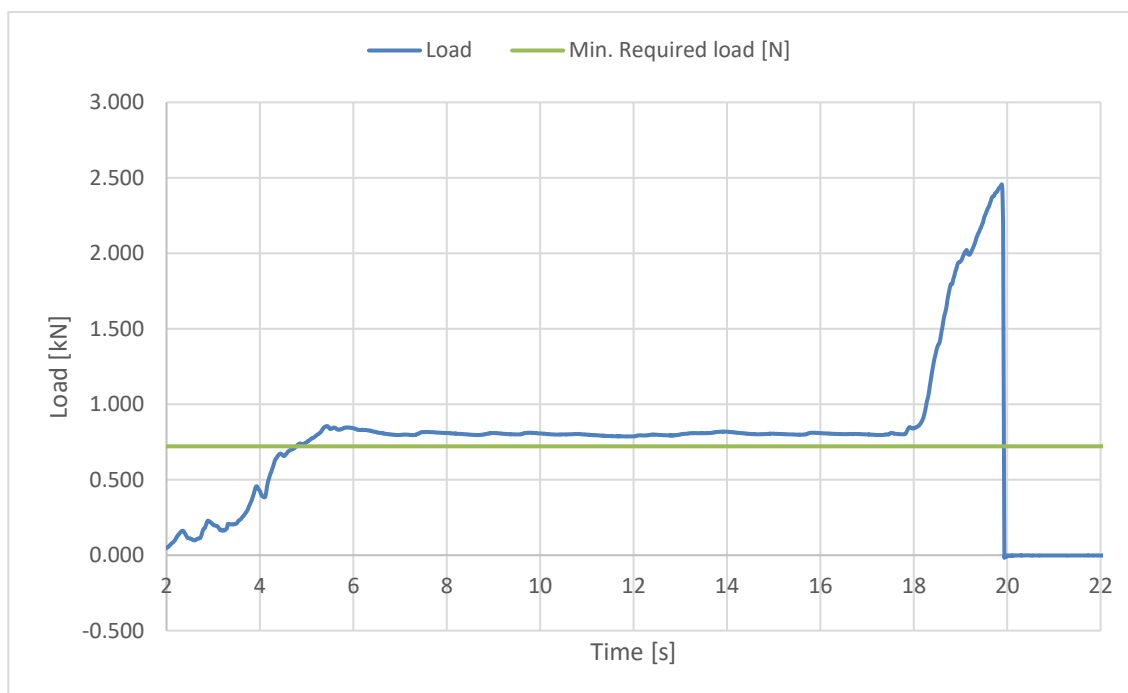
Test ID RRST

Standard **EN12491:2015**  
Reference in standard **5.3.2**  
Test setup **Two end points of handle**  
Attachment points **Sensor connect to end of handle, pull on the other side**  
The handle must support min 700 N for 10 s, after measure breaking strength

Min. Required load [N] **700**  
Minimum test duration [s] **10**

### Result

Test duration [s]: **15.1**  
Breaking strength [N] **2435.70**  
Test results **POSITIVE**



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