

LINE BREAKING STRENGTH after 5000 bendings

TEST REPORT LI

LI LINE PARAGLIDERS

Test report number: LI_454.2016

MANUFACTURE

Name: AirDesign GmbH
 Representative: Stephan Stiegler
 Street: Rhomberstrasse 9, 3. Stock
 Post code / place: 6067 Absam
 Country: Austria

SAMPLE DATA

Manufacturer: Edelrid Line name: 8000-U
 Type no: 90 Diameter [mm]: 0.8
 Material core: Aramid Material coat: n/a
 Type of seam: Splice Color: Red
 Date of sample reception: 01.06.2016 Test sample length [mm]: 500-550

TEST DATA

Directive: EN 926-1:2015 chapter 4.6 / LTF NfL 91/09 - NfL 2-251-16, chap 3.2.3

Three specimens of each line type with a length 0,5 m with loops on each end, used in the suspension line system are conditioned and then its breaking strength is measured. A line under a constant tension of $2 \text{ N} \pm 10\%$ is bent back and forward around a cylinder the same diameter as the nominal diameter of the line given by the manufacturer of the line ($\pm 0,1 \text{ mm}$) with a minimum of 0,7 mm. The centre point of the bend is to be aligned with the weakest point of the line. The minimum rotation required for a cycle is 350° . A complete cycle shall take a maximum of 2 s (2 bendings).

After 5 000 complete bending cycles, the breaking strength of the test specimen is measured.. The speed rate of the test device for applying the load shall be between 0,7 m/min and 1 m/min. For the calculation, the lowest value out of the three test specimens is measured.

Bending test date test: 07.06.2016

Strength test date : 09.06.2016

Date of issue: 09.06.2016

Place of test: Villeneuve

Inspector: Alain Zoller

Test manager signature:

ATMOSPHERE AGL

Bending test

Strenght test

[C°] 24.5

23.1

RH [%] 54

58

[hPa] 1021.1

1019.7

TEST RESULTS

[daN]

Lines shape description after bending:

If initial breaking strength manufacturer

n/a

LI Orininal (no bending)

86.5

LI 1

57.5

No visible damage

LI 2

48.1

No visible damage

LI 3

64.5

No visible damage

Uncertainty K=2

1.5

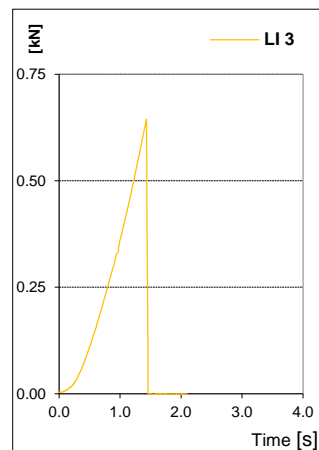
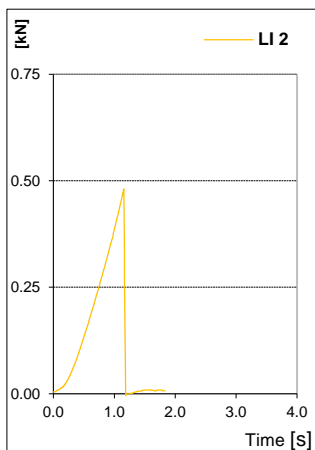
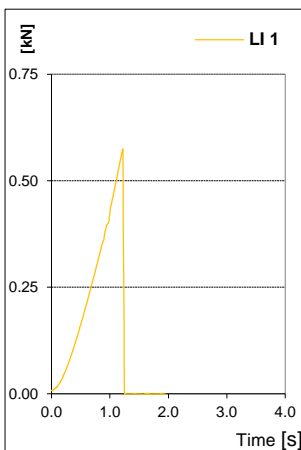
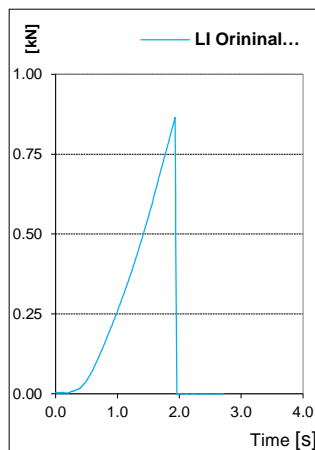
Calculated value

46.6

Calculated value include the lowest 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%.

RESULTS GRAPHIQUE [kN]

Load speed AT system: 0.016 [m/s]



Item	Manufacturer	Type nr.	S/N	Valid	Involved test
Bending machine	JPJ	n/a	n/a	15.12.2025	Line bending tes
Load Cell (axial)	Burster / MTS	8431-10000	1185483	11.06.2016	Line strength test
USB interface	Burster / MTS	9205-V001	10000469	11.06.2016	Line strength test

The validation of this test report is given by the signature of the test manager on page 1/2

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Strength test date inspection: **09.06.2016**

Manufacturers name : **Edelrid**

Line name	Type no.	Diameter	Core	Coat	Color
8000-U	90	0.80	Aramid	n/a	Red

Original [daN]	LI 1 [daN]	LI 2 [daN]	LI 3 [daN]
86.5	57.50	48.10	64.50