

LINE BREAKING STRENGTH after 5000 bendings

TEST REPORT LI

LI LINE PARAGLIDERS

Test report number: LI\_449.2016

MANUFACTURE

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

SAMPLE DATA

Manufacturer: Edelrid  
Type no: 360  
Material core: Aramid  
Type of seam: Splice  
Date of sample reception: 01.06.2016  
Line name: 8000-U  
Diameter [mm]: 1.7  
Material coat: n/a  
Color: Red  
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  $350^\circ$ . 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

[C°] 24.5  
RH [%] 54  
[hPa] 1021.1

Strenght test

23.1  
58  
1019.7

TEST RESULTS

If initial breaking strength manufacturer n/a  
LI Orininal (no bending) 289.7  
LI 1 231.6  
LI 2 252.6  
LI 3 225.4  
Uncertainty K=2 1.5

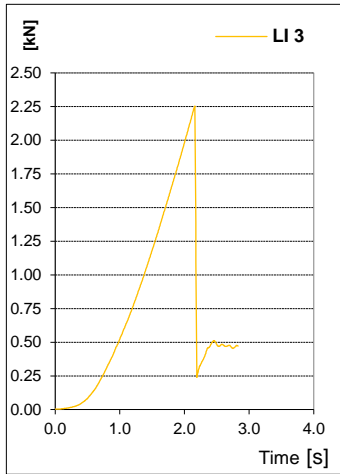
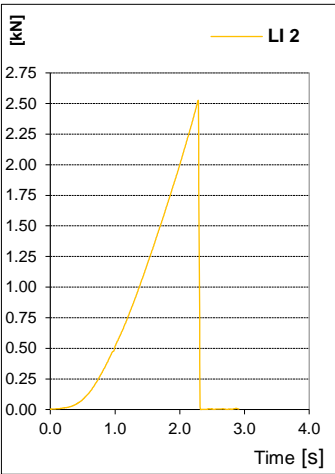
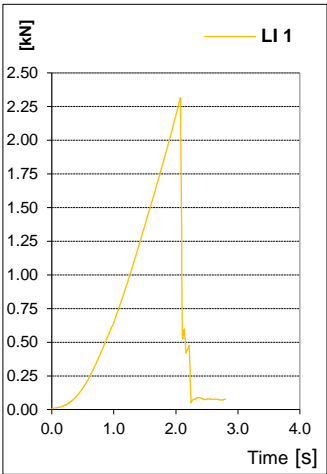
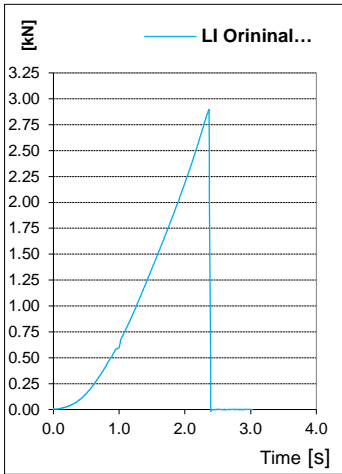
Lines shape description after bending:

No visible damage  
No visible damage  
No visible damage

Calculated value 223.9

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 test
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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Manufacturers name : **Edelrid**

Line name	Type no.	Diameter	Core	Coat	Color
8000-U	360	1.70	Aramid	n/a	Red

Original [daN]	LI 1 [daN]	LI 2 [daN]	LI 3 [daN]
289.7	231.60	252.60	225.40