

## LINE BREAKING STRENGTH after 5000 bendings

## TEST REPORT LI

## LI LINE PARAGLIDERS

Test report number: LI\_924.2021

## MANUFACTURE

Name: AirDesign GmbH  
Representative: Stephan Stiegler  
Street: Rhomberstrasse 9, 4. Stock  
Post code / place: A-6067 Absam  
Country: Austria

## SAMPLE DATA

Manufacturer: Edelrid  
Type no: 230  
Material core: Aramid  
Type of seam: Splice  
Date of sample reception: 15.02.2021  
Remark:

Line name: 8000U  
Diameter [mm]: 1.30  
Material coat: n/a  
Color: Red  
Test sample length [mm]: 500-550

## TEST DATA

Standards: EN 926-1:2015/ LTF NfL 91/09

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: 16.02.2021

Strength test date : 16.02.2021

Date of issue: 26.02.2021

Place of test: Villeneuve

Inspector: Alain Zoller

Test manager signature:

## ATMOSPHERE AGL

## Bending test

## Strenght test

[C°]

21

22

RH [%]

29

28

[hPa]

1014

1009

## TEST RESULTS

[daN]

## Lines shape description after bending:

LI Original (no bending)

220.7

LI 1

141.1

No visible damage

LI 2

126.9

No visible damage

LI 3

139.2

No visible damage

Uncertainty K=2

2.2

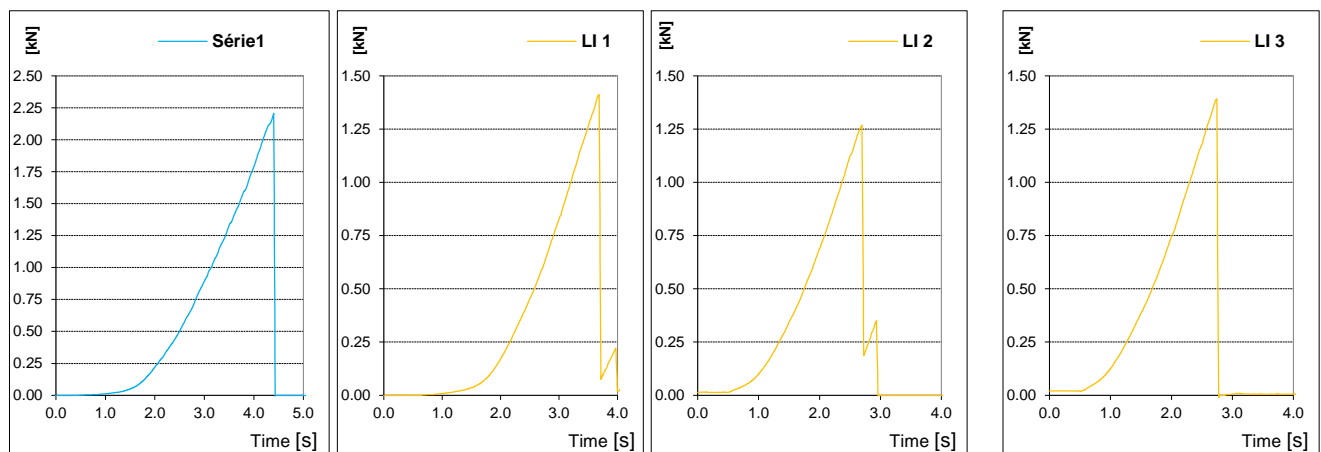
## Calculated value

124.7

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	04.09.2023	Line strength test
USB interface	Burster / MTS	9205-V001	10000469	04.09.2023	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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Line name	Type no.	Diameter	Core	Coat	Color
8000U	230	1.30	Aramid	n/a	Red

Original [daN]	LI 1 [daN]	LI 2 [daN]	LI 3 [daN]
220.7	141.10	126.90	139.20