

Harness Structural test Report - NfL

Inspection certificate number: **PH_420.2023**

Manufacturer data:

Manufacturer name: **Niviuk Gliders**
 Representative: **Dominique Cizeau**
 Street: **C. Del Ter, 6-Nave D**
 Post code place: **17165 La Cellera de Ter Girona**
 Country: **Spain**

Sample data:

Name: **Watson 2**
 Type: **ABS**
 Size: **One size**
 Serial number: **WATSON2OS31**
 Impact pad type: ⁽¹⁾ **Airbag**
 Clip-in weight [kg]: **120**
 Integrated container: **n/a**
 Date of test: **19.10.2023**

Atmosphere AGL:

[C°]	21
RH [%]	51
[hPa]	987

Summary of Structural test

Test id	- EN 1651:1999	Setup	Req. Load [g]	Req. Load [N]	Min. duration [s]	Result
02	✓ 5.3.2.1	Default flying position	6	7200	10	POSITIVE
03	✓ 5.3.2.2	Default flying position	15	18000	5	POSITIVE
04	✓ 5.3.2.3	Asymmetric, one riser	6	7200	10	POSITIVE
07	✓ 5.3.2.6	Asymmetric, negative	4.5	5400	10	POSITIVE
09	5.3.2.4	Rescue attachments	15	18000	5	n/a
13	✓ 5.3.2.7	Flying position before landing	15	18000	5	POSITIVE
14	5.3.2.5	Towing	5	6000	10	n/a

Rescue deployment test

Test id	- NfL 2-565-20	Setup	Min load [N]	Max. load [N]	Measured [N]	Result
RRDT	6.1.5	Default flying position	20	70	0.00	n/a

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	0.00	n/a

Rescue deployment test with integrated container for rescue system

Test id	- NfL 2-565-20	Setup	Result
RDIC	4.3.2-4.3.6	Release of the container at maximum volume	n/a

Manufacturer	Instrument	Type no	S/N	Validity
HBM	Load Sensor GE01	1-S9M/50KN-1	31314643	23.08.2028
Burster / MTS	Load sensor 10kN SL2	8431-6010-N000S000	593507	23.08.2028
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:

NfL 2-565-20, EN12491:2015 and EN1651:1999

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

⁽¹⁾ If Impact pad available, see test report no. 94.22 and inspection certificate no. 94.20a

Calculated values 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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model: **Watson 2**

Harness Structural test

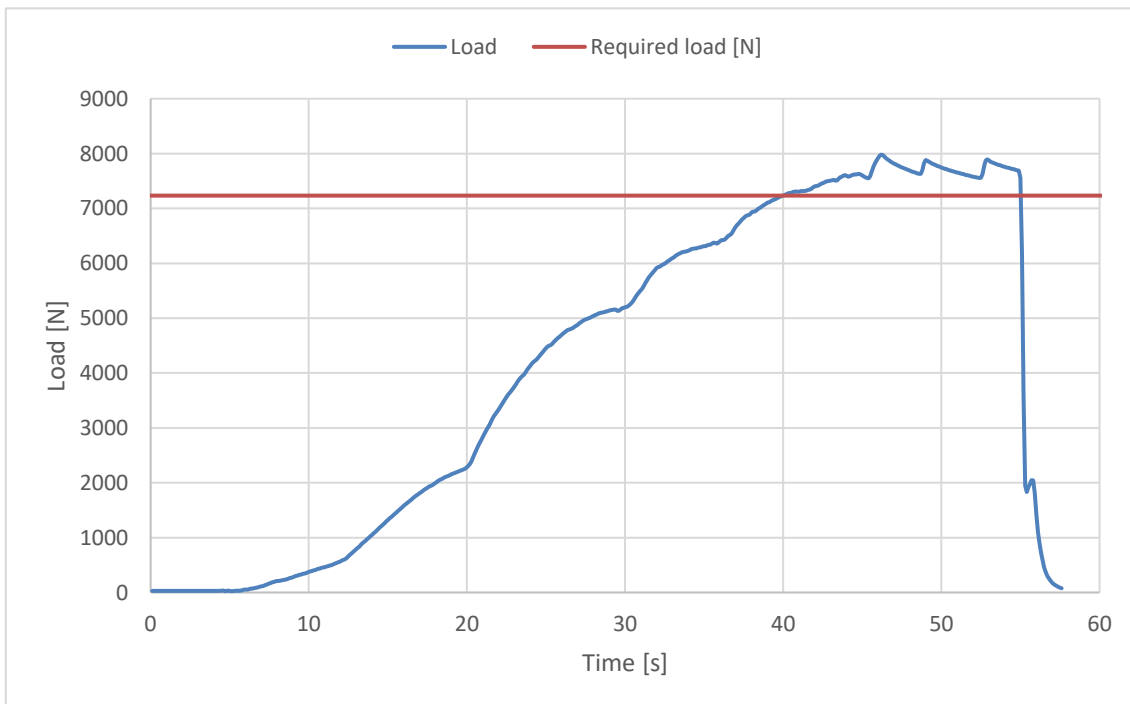
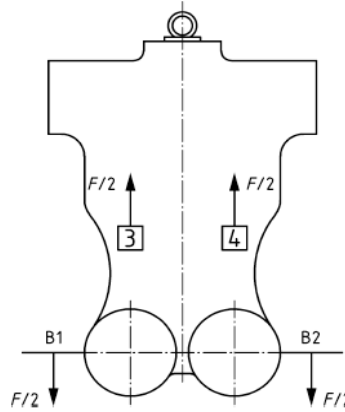
Test ID 02

Standard **EN 1651:1999**
 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] **7200**
 Minimum test duration [s] **10**

Result

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



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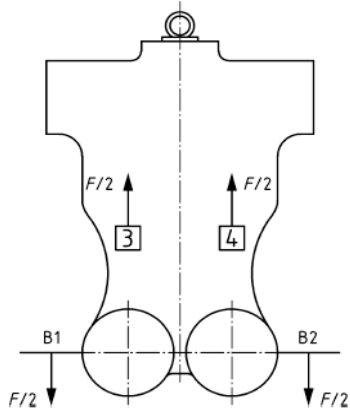
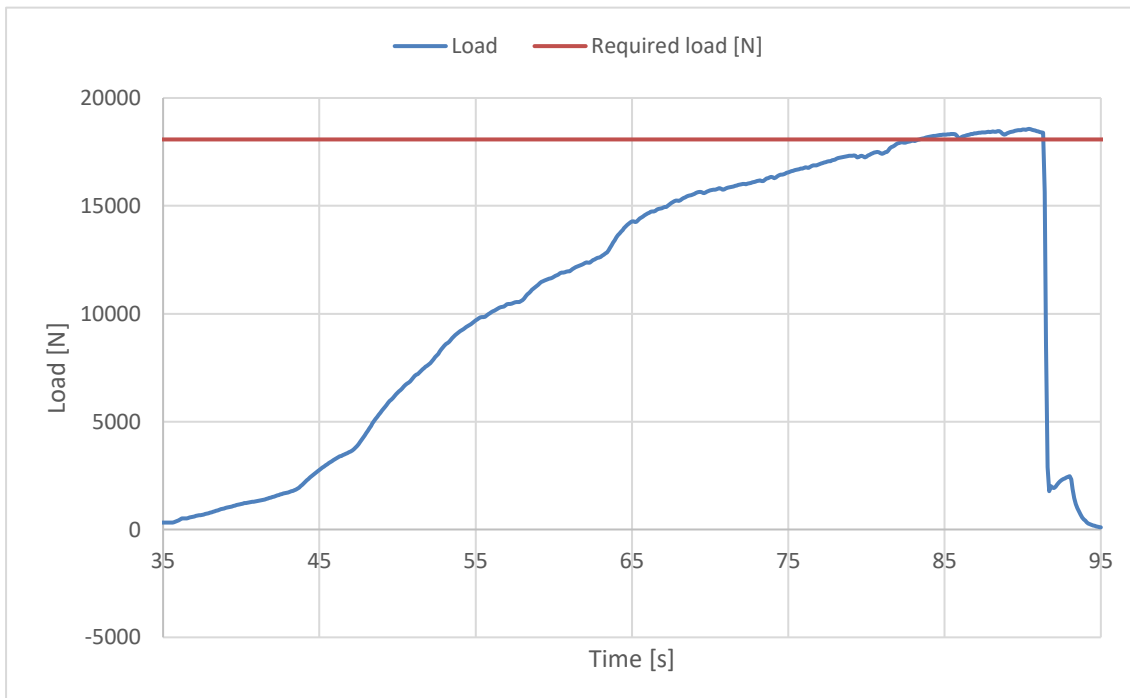
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model: **Watson 2**

Harness Structural test

Test ID 03

Standard	EN 1651:1999
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]	18000
Minimum test duration [s]	5
Result	
Test duration [s]	8
Any signs of structural failure	No
Test results	POSITIVE

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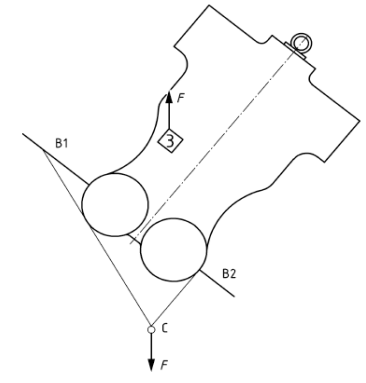
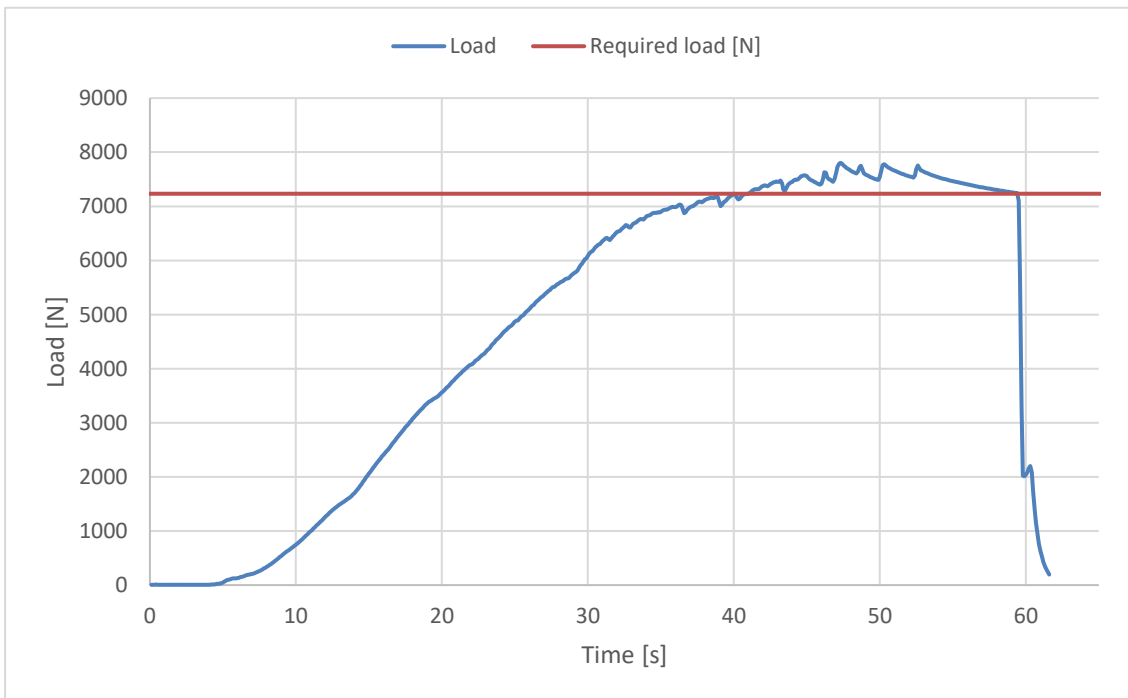
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model: **Watson 2**

Harness Structural test

Test ID 04

Standard	EN 1651:1999
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]	7200
Minimum test duration [s]	10
Result	
Test duration [s]	18.5
Any signs of structural failure	No
Test results	POSITIVE

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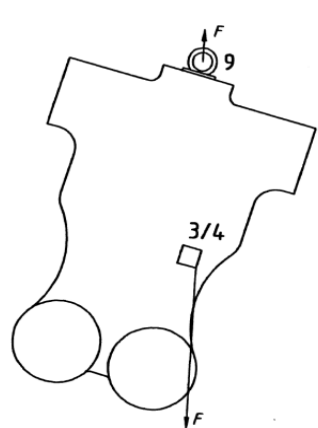
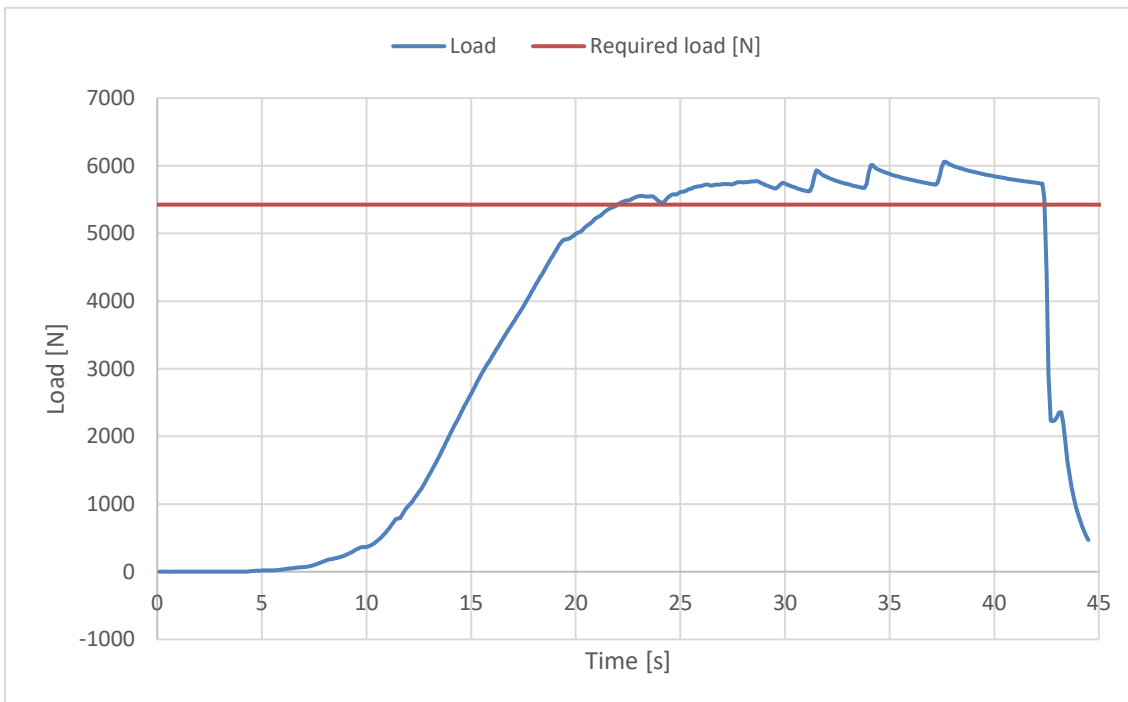
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Harness Structural test

Test ID 07

Standard	EN 1651:1999
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]	5400
Minimum test duration [s]	10
Result	
Test duration [s]	20.4
Any signs of structural failure	No
Test results	POSITIVE

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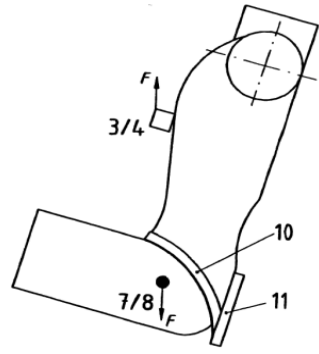
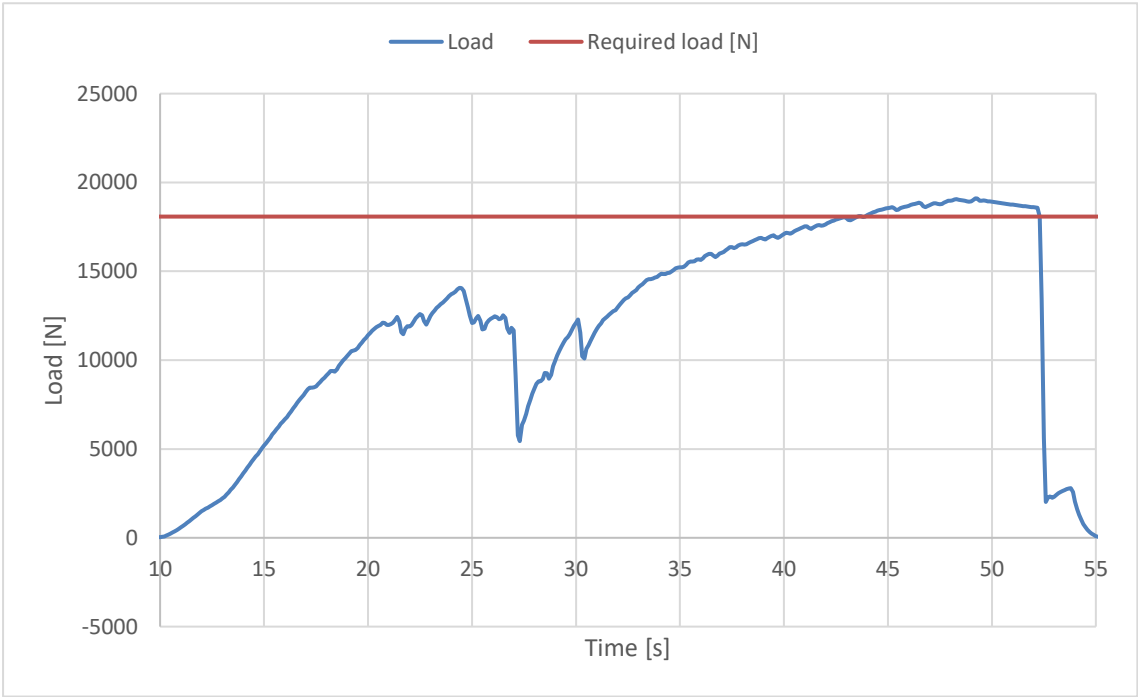
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model: **Watson 2**

Harness Structural test

Test ID 13

Standard	EN 1651:1999
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]	18000
Minimum test duration [s]	5
Result	
Test duration [s]	8.3
Any signs of structural failure	No
Test results	POSITIVE

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