

Harness Structural test Report

Inspection certificate number: **PH_274.2019**

Manufacturer data:

Manufacturer name: **Davinci Products Inc.**
 Representative: **Jihun Lee**
 Street: **53 sinchon-gil, Okcheon-myeon, Yangpyeon**
 Post code place: **Gyeonggi-do 12505**
 Country: **Republic of Korea**

Sample data:

Name: **Harmony Passenger Air**
 Type: **ABS**
 Size: **Unique**
 Serial number: **HHA-100491**
 Impact pad type: ⁽¹⁾ **Airbag**
 Clip-in weight [kg]: **110**

Date of test: **27.05.2019**

Atmosphere AGL:

[C°]	21.4
RH [%]	40
[hPa]	978.1

Summary of Structural test

Test id	- EN 1651:2018	Setup	Req. Load		Min. duration [s]	Result
			[g]	Req. Load [N]		
1 ⁽³⁾	V 5.5.1.1	Positive symmetric load (Slippage)	4.5	4950	5	POSITIVE
1 ⁽³⁾	V 5.5.1.1b	Positive symmetric load	15	16500	5	POSITIVE
2	V 5.5.1.2	Positive asymmetric load	6	6600	5	POSITIVE
3 ⁽³⁾⁽⁴⁾	5.5.1.3	Positive symmetric load rescue points	15	16500	5	n/a
4 ⁽³⁾⁽⁴⁾	5.5.1.4	Negative symmetric load rescue points	15	16500	5	n/a
5	5.5.1.5	Negative symmetric load towing points	5	5500	5	n/a
6	V 5.5.1.6	Negative symmetric load	6	6600	5	POSITIVE
7 ⁽³⁾	V 5.5.1.7	Upright (landing) position load	6	6600	5	POSITIVE
8	5.5.1.8	Connecting element for rescue	24	26400	0.3	n/a
9 ⁽⁵⁾	V 5.5.1.9	Anti falling-out system	4.5	4950	5	POSITIVE

Rescue deployment test

Test id	- NfL II 91/09	Setup	Min load		Measured [N]	Result
			[N]	Max. load [N]		
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

Manufacture	Instrument	Type no	S/N	Validity Calibration
HBM	Load Sensor GE01	1-S9M/50KN-	31314643	04.09.2023
Burster	Sensor Burster	8431-10000	1185483	04.09.2023
JDC elec	Geos n°11 Skywatch	Geos n°11	22	08.05.2020

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

(1) If Impact pad available, see test report no. 94.22 and inspection certificate no. 94.20. ⁽³⁾ Slipping test of any adjustable components: No slippage of any adjustable element more than 10 mm at 4500N for 5 s. The marks should be added with a pre-load of 1000N. ⁽⁴⁾ For harness with integrated Y bridle, test in the end loop ⁽⁵⁾ Attach to anti-falling out system without connecting the crotch straps (breast straps)

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%.

This declaration must not be reproduced in part without the written permission of AIR TURQUOISE SA.

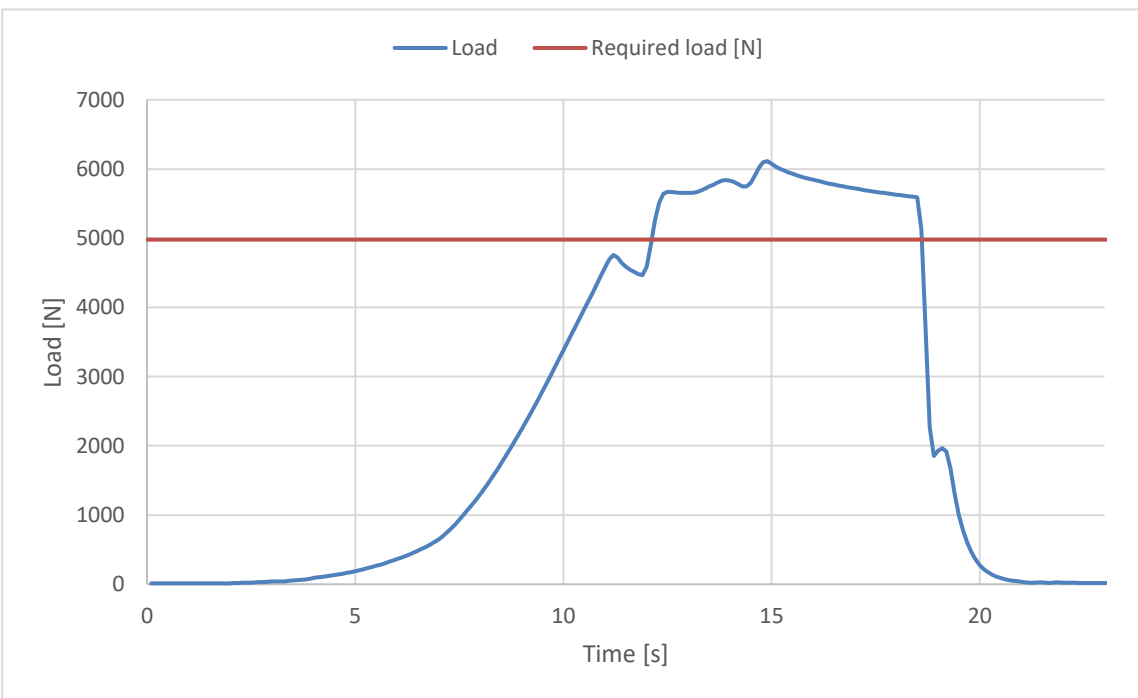
Inspection certificate number: **PH_274.2019**

model: **Harmony Passenger Air**

Harness Structural test

Test ID 1

Standard	EN 1651:2018	
Reference in standard	5.5.1.1	
Test setup	Positive symmetric load (Slippage)	
Attachment points	Both main riser attachment (3,4)	
Anchor points	Dummy (B1, B2)	
Required load [g]	4.5	
Required load [N]	4950	
Minimum test duration [s]	5	
Result		
Test duration [s]	6.5	
Any signs of structural failure	No	
Slippery test OK	n/a	
Test results	POSITIVE	



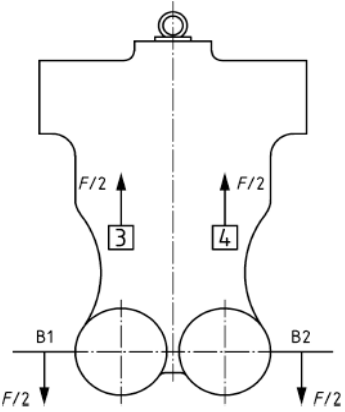
The validation of this test report is given by the signature of the test manager on the Inspection Certificate no 94.20

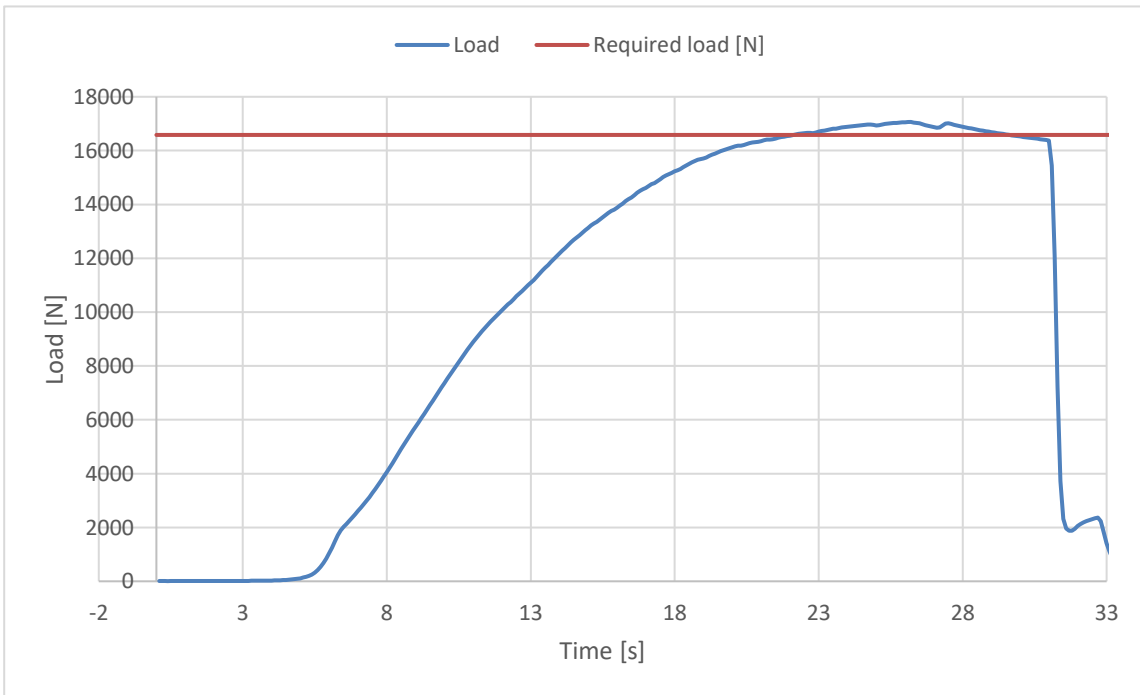
Inspection certificate number: **PH_274.2019**

model: **Harmony Passenger Air**

Harness Structural test

Test ID 1

Standard	EN 1651:2018	
Reference in standard	5.5.1.1b	
Test setup	Positive symmetric load	
Attachment points	Both main riser attachment (3,4)	
Anchor points	Dummy (B1, B2)	
Required load [g]	15	
Required load [N]	16500	
Minimum test duration [s]	5	
Result		
Test duration [s]	7.5	
Any signs of structural failure	No	
Slippery test OK	n/a	
Test results	POSITIVE	



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

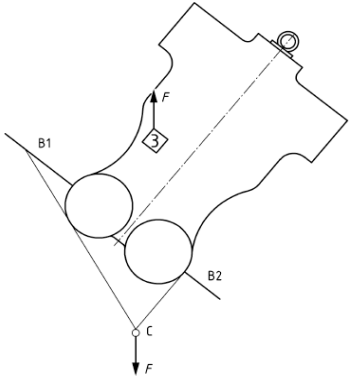
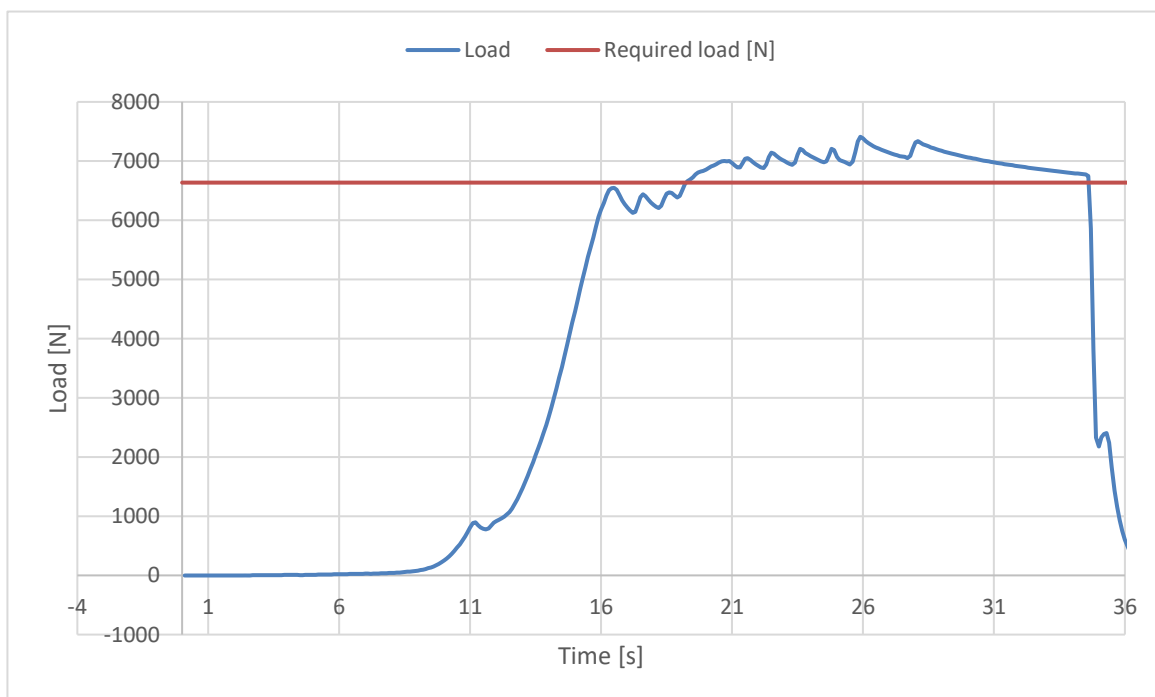
Inspection certificate number: **PH_274.2019**

model: **Harmony Passenger Air**

Harness Structural test

Test ID 2

Standard	EN 1651:2018
Reference in standard	5.5.1.2
Test setup	Positive asymmetric load
Attachment points	One riser attachment (3 or 4)
Anchor points	Dummy (C)
Required load [g]	6
Required load [N]	6600
Minimum test duration [s]	5
Result	
Test duration [s]	15.4
Any signs of structural failure	No
Test results	POSITIVE

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

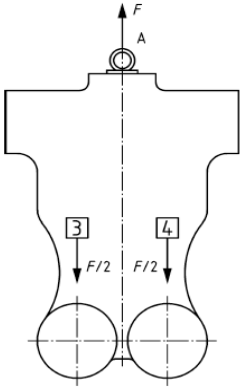
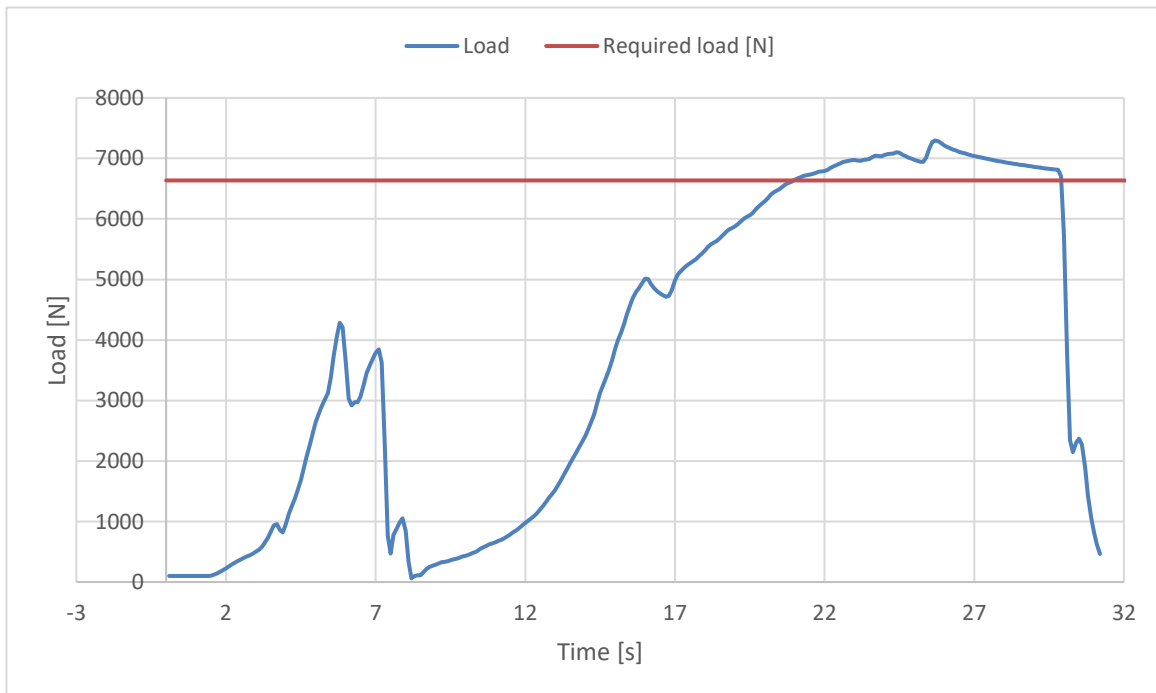
Inspection certificate number: **PH_274.2019**

model: **Harmony Passenger Air**

Harness Structural test

Test ID 6

Standard	EN 1651:2018
Reference in standard	5.5.1.6
Test setup	Negative symmetric load
Attachment points	Both main riser attachment (3,4)
Anchor points	Dummy (A)
Required load [g]	6
Required load [N]	6600
Minimum test duration [s]	5
Result	
Test duration [s]	9
Any signs of structural failure	No
Test results	POSITIVE

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

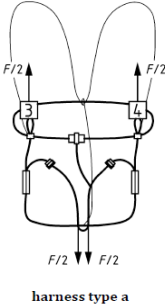
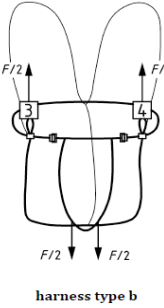
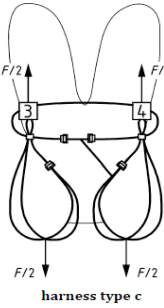
Inspection certificate number: **PH_274.2019**

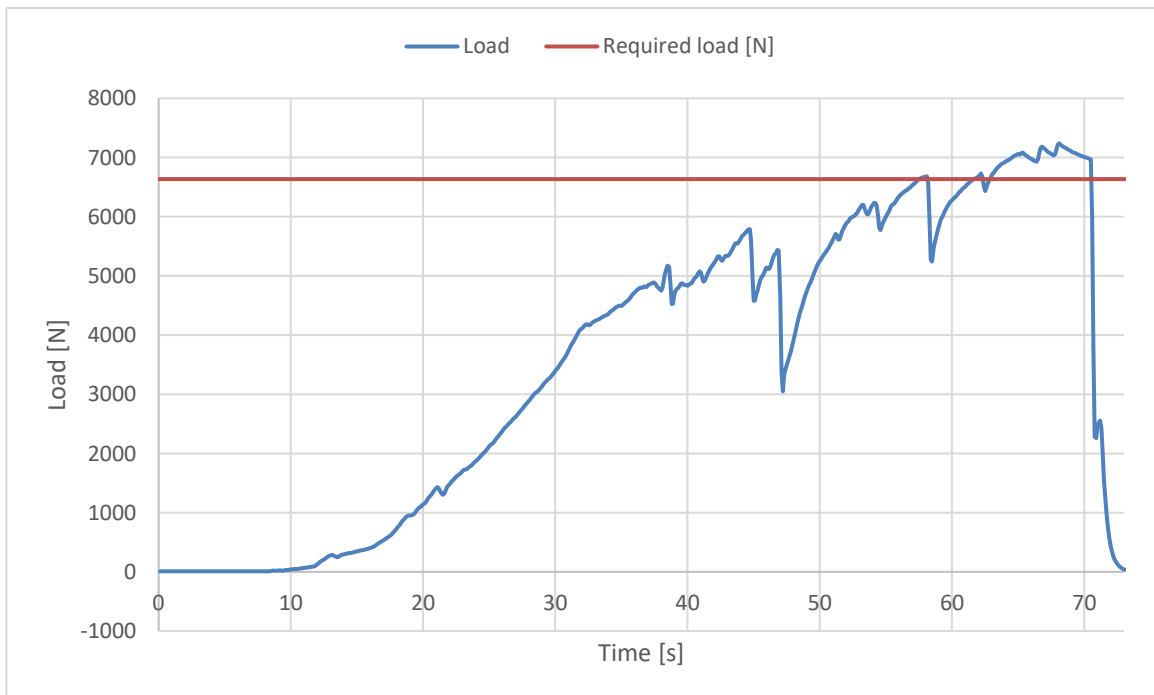
model: **Harmony Passenger Air**

Harness Structural test

Test ID 7

Standard	EN 1651:2018
Reference in standard	5.5.1.7
Test setup	Upright (landing) position load
Attachment points	Both main riser attachment (3, 4)
Anchor points	Both legstrap of harness (no dummy)
Required load [g]	6
Required load [N]	6600
Minimum test duration [s]	5
Harness type	type a
Result	
Test duration [s]	7.7
Any signs of structural failure	No
Slippery test OK	n/a
Test results	POSITIVE



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



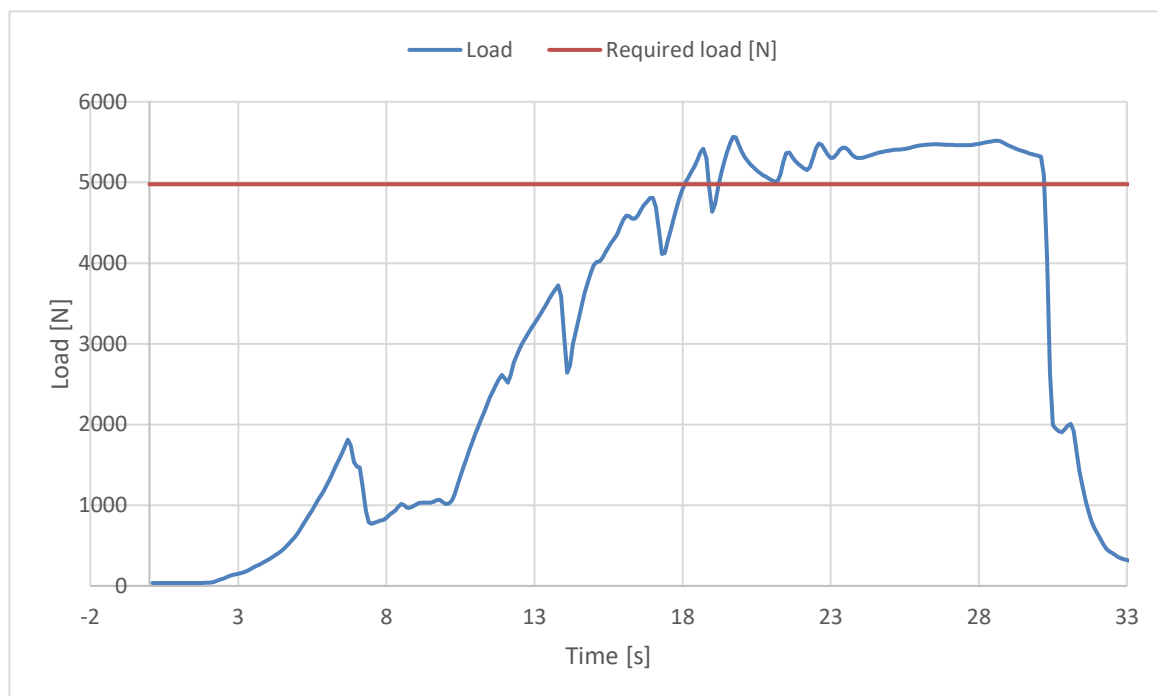
Inspection certificate number: **PH_274.2019**

model: **Harmony Passenger Air**

Harness Structural test

Test ID 9

Standard	EN 1651:2018
Reference in standard	5.5.1.9
Test setup	Anti falling-out system
Attachment points	Around anti falling-out system
Anchor points	Both main riser attachment (no dummy)
Required load [g]	4.5
Required load [N]	4950
Minimum test duration [s]	5
Result	
Test duration [s]	11
Any signs of structural failure	No
Test results	POSITIVE



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