

Harness Impact Pad Report

Inspection certificate number: **PH_402.2023**

Manufacturer data:

Manufacturer name: **Advance Thun AG**
 Representative: **Rolf Zeltner**
 Street: **Uttigenstrasse 87**
 Post code place: **3600 Thun**
 Country: **Switzerland**

Harness model: **BOUNDLESS**

Sample data:

Name impact pad: **Backpack**
 Impact pad integrated: **No**
 Impact pad type: **Hybrid**
 Weight of sample [kg]: **1.20**
 Serial number: **1173572**
 Date of test: **13.04.2023**

Atmosphere AGL:

Temp. [C°]	20
R.H. [%]	39
Press. [hPa]	998

Summary of Impact pad test ⁽¹⁾

Test id	–	Test configuration ⁽²⁾	Max Peak of Impact [g] ⁽³⁾	Duration at 38 [g] in [ms] ⁽⁴⁾	Duration at 20 [g] in [ms] ⁽⁵⁾	Diff. of test 1 and 2 [%] ⁽⁶⁾	Result
P	V	Test sample attached to dummy in flying position, without emergency parachute	35.75	0.00	17.50	9.38	POSITIVE
PR	V	Test sample attached to dummy in flying position, Including emergency parachute	35.39	0.00	16.67	8.77	POSITIVE

Manufacturer	Instrument	Type no	S/N	Validity Calibration
Burster/MTS	Accelerometer 100 g	89010-100	1263567	23.01.2024
JDC elec	Geos n°11 Skywatch	Geos n°11	Unit11	18.06.2025

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

Air Turquoise SA, has thoroughly tested the sample mentioned above and certifies its conformity with the following standards:

NfL 2-565-20 and EN1651:2018+A1:2020⁽⁷⁾

⁽¹⁾ 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%

⁽²⁾ The dummy is lifted minimum up to 1.65 m, and impact pad is mounted on. Where the impact occurs, measure distance from bottom of impact pad to ground

⁽³⁾ Maximum peak of impact should be less or equal to 50 [g], ⁽⁴⁾ If any, the maximum duration in at 38 [g] should be less or equal to 7 [ms], ⁽⁵⁾ If any, the maximum duration in at 20 [g] should be less or equal to 25 [ms], ⁽⁶⁾ The test should be done twice, and the 2nd test the maximum peak should not differ more than 20% from the first test, maximum peak.

⁽⁷⁾ This standard is NOT covered by accreditation D-IS-19457-01

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Name impact pad: **Backpack**

Test results of Impact pad test

	without emergency parachute		including emergency parachute	
	P1	P2	PR1	PR2
Maximum peak of impact [g]	32.68	35.75	32.53	35.39
Impact duration at +38 [g] in [ms]	0.00	0.00	0.00	0.00
Impact duration at +20 [g] in [ms]	17.50	17.50	16.67	16.67
Uncertainty k=2 [g]	1.88	2.06	1.87	2.04
Diff. between test 1 and 2 [%]	100.00	109.38	100.00	108.77

