

Harness Impact Pad Report

Inspection certificate number: **MISC_138.2019**

Manufacturer data:

Manufacturer name: **Fly-market Flugsport-Zubehör GmbH & Co. KG**
 Representative: **Stefan Kurrle**
 Street: **Am Schönebach 3**
 Post code place: **87637 Eisenberg**
 Country: **Germany**

Harness model: **Not related to specific model**

Sample data:

Name impact pad: **Connect Airbag RS**
 Emergency parachute integrated: **yes**
 Impact pad type: **Airbag**
 Serial number: **0012019**
 Weight of sample [kg]: **0.68**
 Date of test: **26.09.2019**

Atmosphere AGL:

| | |
|--------|--------------|
| [C°] | 22.5 |
| RH [%] | 54 |
| [hPa] | 968.9 |

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 | ✓ | Test sample attached to dummy in flying position, without emergency parachute | 20.86 | 0.00 | 0.00 | -3.00 | POSITIVE |
| PR | ✓ | Test sample attached to dummy in flying position, Include emergency parachute | 22.14 | 0.00 | 6.67 | 2.08 | POSITIVE |

Rescue deployment test

| Test id | NfL II 91/09 | Setup | Min load [N] | Max. load [N] | Measured [N] | Result |
|---------|--------------|-------------------------|--------------|---------------|--------------|----------|
| RRDT | 6.1.5 | Default flying position | 20 | 70 | 38.46 | POSITIVE |

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 | 929.87 | POSITIVE |

Issue data

Place of declaration: **Villeneuve**
 Date of issue: **11.10.2019**
 Managing director: **Alain Zoller**

Signature:



| 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 | 22 | 08.05.2020 |

This signature approve the validity of the test reports if available. **Air Turquoise SA**, having thoroughly assessed the sample mentioned above, declare it was found conform with all requirements defined by the following norms:

European Standard **EN1651 :2018**, and **EN12491:2015 chapter 5.3.2 - Airworthiness Requirements LTF NfL II 91/09 chapter 5, and 6.1.5**

⁽¹⁾ 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%.

⁽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.

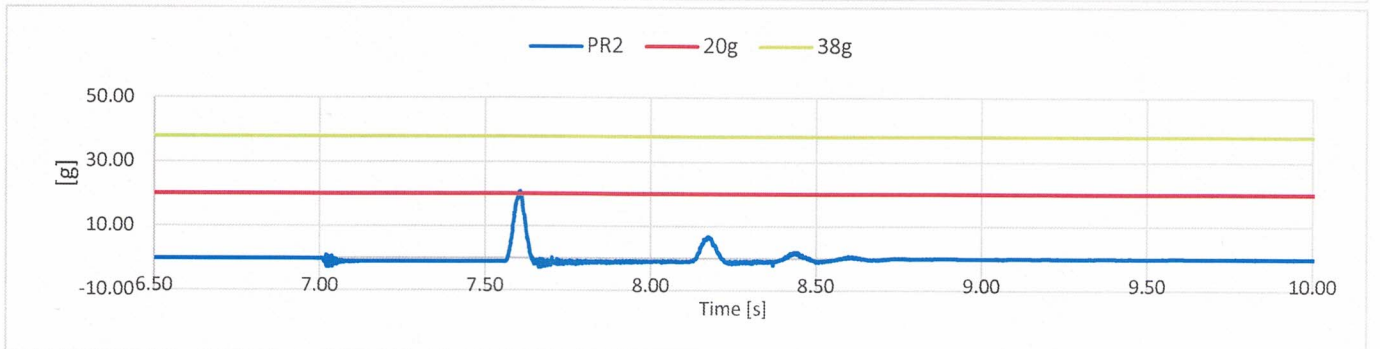
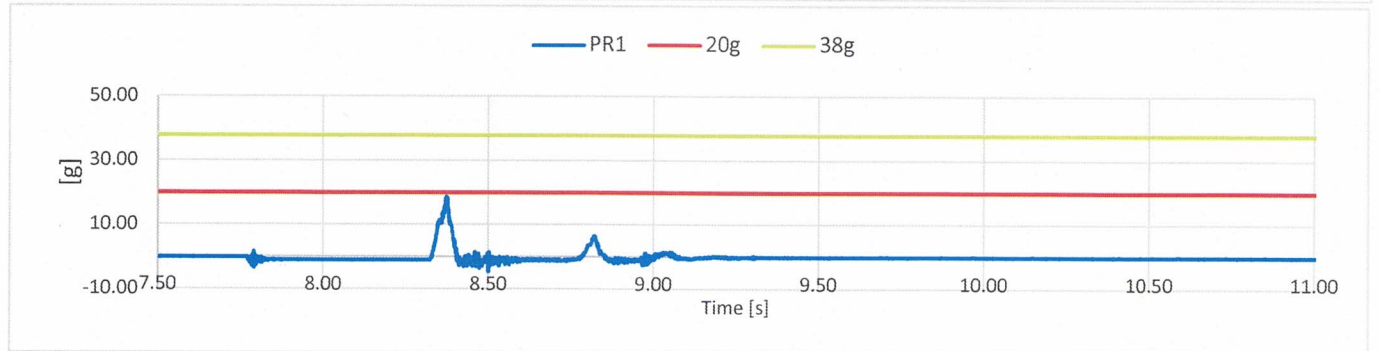
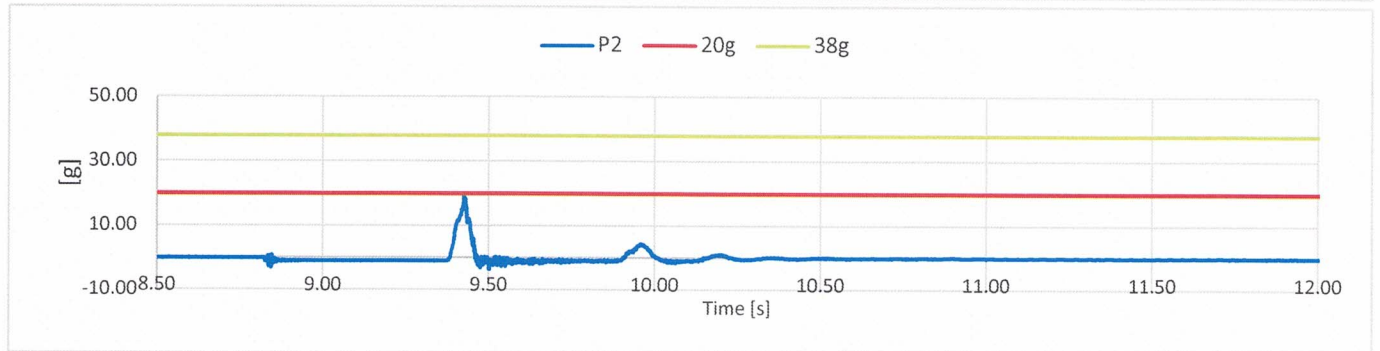
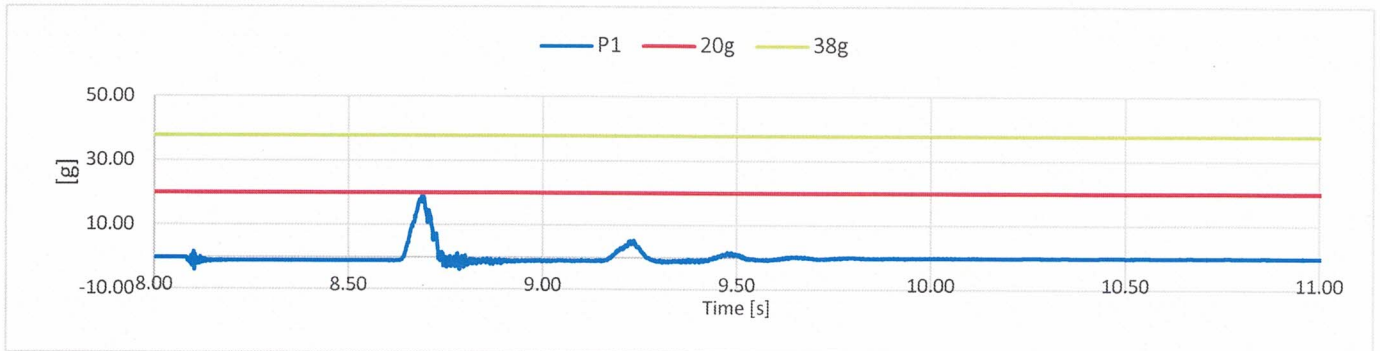
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Name impact pad: **Connect Airbag RS**

Test results of Impact pad test

| | without emergency parachute | | include emergency parachute | |
|------------------------------------|-----------------------------|--------------|-----------------------------|---------------|
| | P1 | P2 | PR1 | PR2 |
| Maximum Peak of impact [g] | 20.86 | 20.23 | 20.06 | 22.14 |
| Impact duration at +38 [g] in [ms] | 0.00 | 0.00 | 0.00 | 0.00 |
| Impact duration at +20 [g] in [ms] | 0.00 | 0.00 | 0.00 | 6.67 |
| Uncertainty k=2[g] | 1.20 | 1.16 | 1.15 | 1.27 |
| Difference of test 1 and 2 [%] | 100.00 | 97.00 | 100.00 | 110.36 |





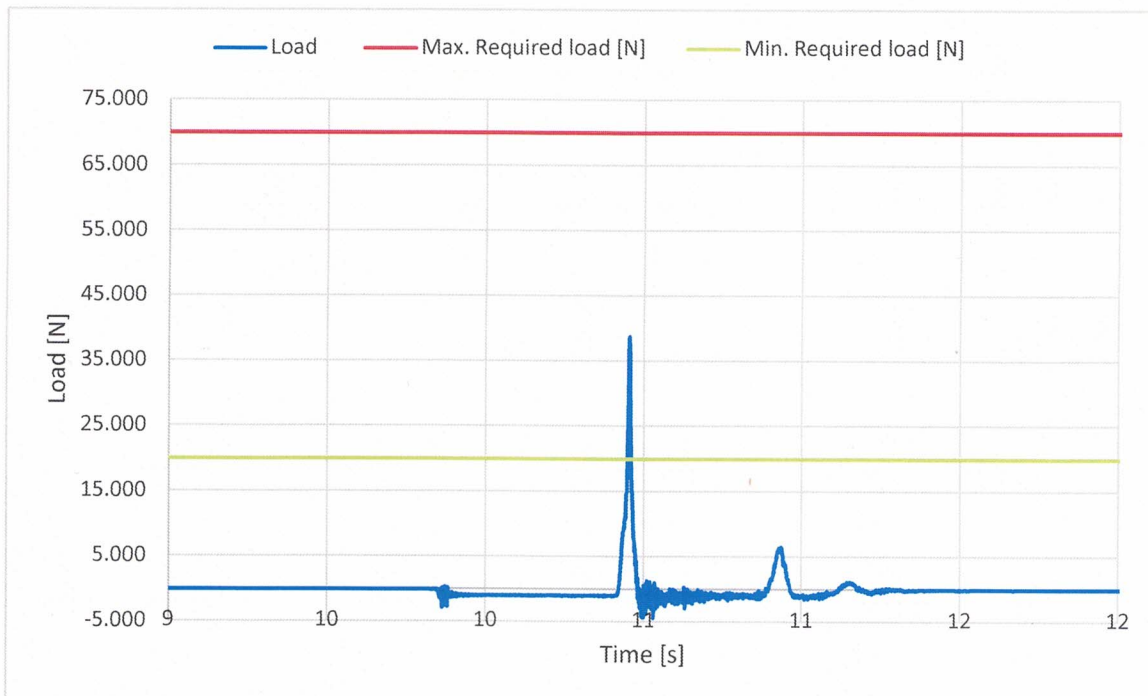
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Name Impact Pad: **Connect Airbag RS**

Rescue Deployment Test

Test ID RRDT

| | |
|---------------------------|--|
| Standard | LTF nFL II 91/09 |
| Reference in standard | 6.1.5 |
| Test setup | Default flying position |
| Attachment points | Sensor connect to handle, and pull in opening direction |
| | The test is to simulate the load required to open the emergency parachute(1st action). |
| Min. Required load [N] | 20 |
| Max. Required load [N] | 70 |
| Result | |
| Load for first action [N] | 38.46 |
| 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

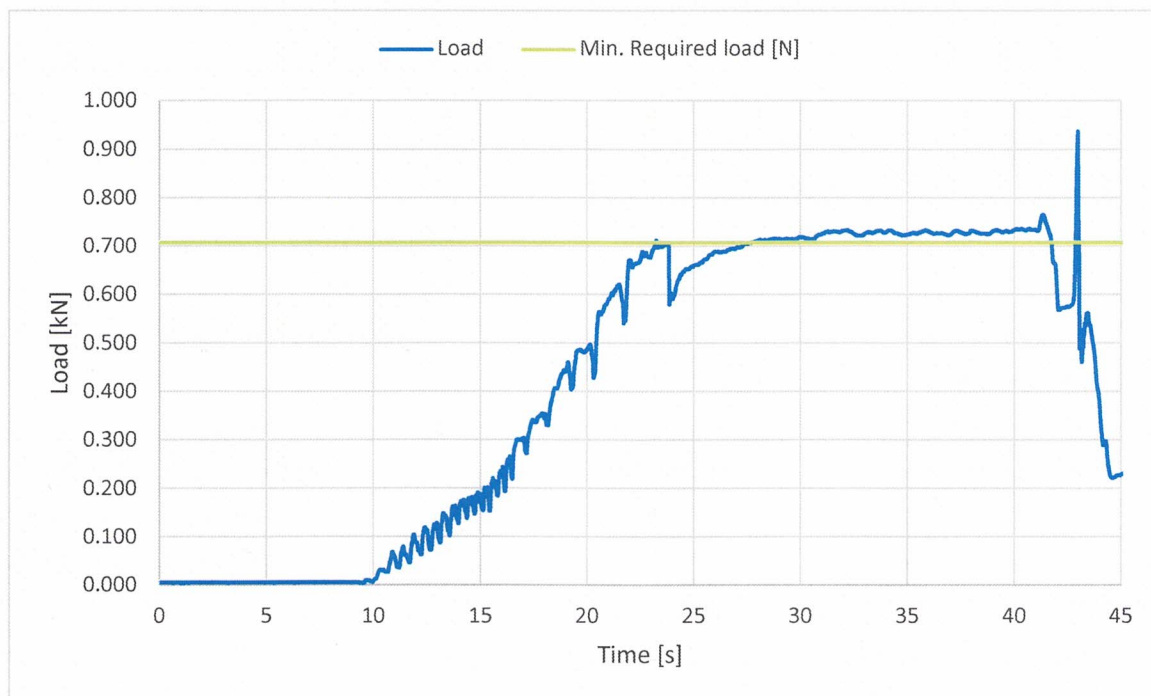
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Name Impact Pad: **Connect Airbag RS**

Rescue Deployment Handle strength test

Test ID RRST

| | |
|---------------------------|---|
| Standard | EN12491:2015 |
| Reference in standard | 5.3.2 |
| Test setup | Two end points of handle |
| Attachment points | Sensor connect to end of handle, pull on the other side The handle must support min 700 N for 10 s, after measure breaking strength |
| Min. Required load [N] | 700 |
| Minimum test duration [s] | 10 |
| Result | |
| Test duration [s]: | 14.0 |
| Breaking strength [N] | 929.87 |
| Test results | POSITIVE |



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