



Poseidon Rescue Baby Bag PRBB1203
Test Report No: TR2018-011
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QSI Static Pull Test

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QSI laboratory tested the PRBB1203 Rescue Baby Bag to a ten times safety factor of 250kg for 3 minutes and to an ultimate load of 870kg's

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EXECUTIVE SUMMARY

Objectives

A static test is performed in the static pull test rig to determine the static capacity of the Poseidon PRBB1203 Rescue Baby Bag. Two static tests were adopted to determine the suitability and durability of the webbing and PVC constructed baby bag to be used in winching situations under a helicopter. The Rescue Baby Bag has a rated work load limit of 25kgs, at a ten times safety factor it would require a static load of 250kg's for 3 minutes. A second test to see at what point the bag would start to rip will be performed with a target weight of 12kN being set.

Specimen

- **PRBB1203 Rescue Baby Bag**

Product:	PRBB1203 Rescue Baby Bag
Specifications:	FR PVC Lime Bag with rated webbing handles
Supplied Safe Work Load Limit:	25kg
Distributor:	Static Load test requested by Poseidon



Method

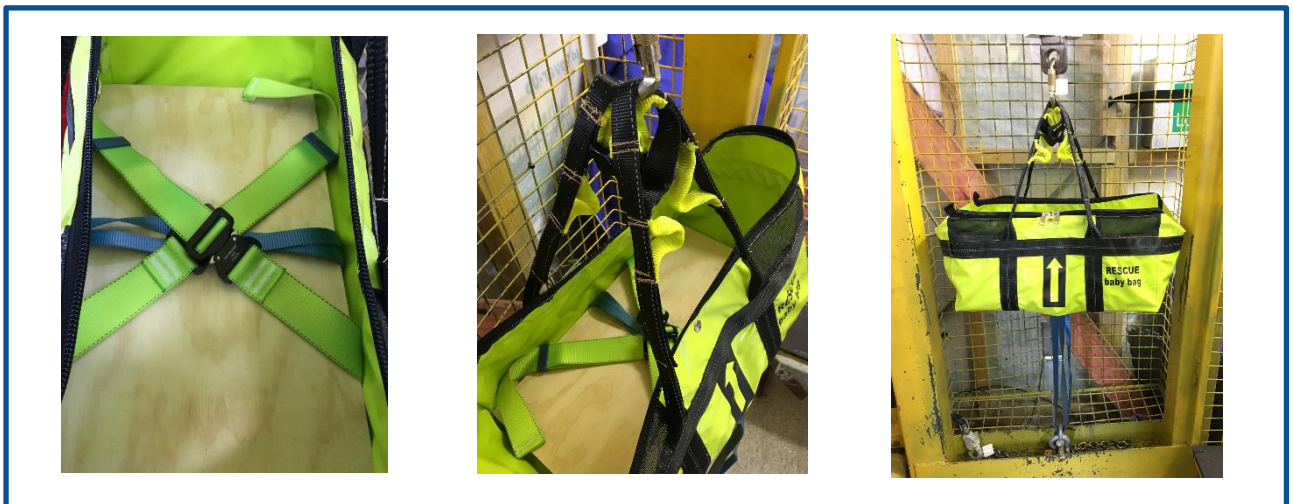
1. Insert a 21mm Laminated Ply-board in the base of the bag (Cut Board Slightly smaller than inside of the bag).
2. Cut through the base of the PVC on either side of the bag to allow you to put a 1.5-ton sling around the board.
3. Connect the rated bag lifting handles to the load cell at the top of the pull test rig, and the 1.5-ton sling to the anchor at the base of the test rig.
4. There is no requirement for conditioning of the bag.

Test 1

5. Apply the force using the hydraulic pull tester, at 250kgs hold the weight constant, using a stopwatch record the force for 3 minutes.

Test 2

6. Apply the force using the hydraulic pull tester to 12kN, hold the weight constant, using a stopwatch record the force for 1 minutes.
7. Record the maximum force registered by the machine.



TEST PROGRAM TABLE

Designation / Attachment Points	Test	Description
The bag is statically loaded between a top hydraulic arm and a bottom anchor in the static pull test rig	Static pull	Test 1 Static pull to 10 x times SWL – Required load 250kg for 3 minutes TEST 2 Static pull to 12kN for 1 minute

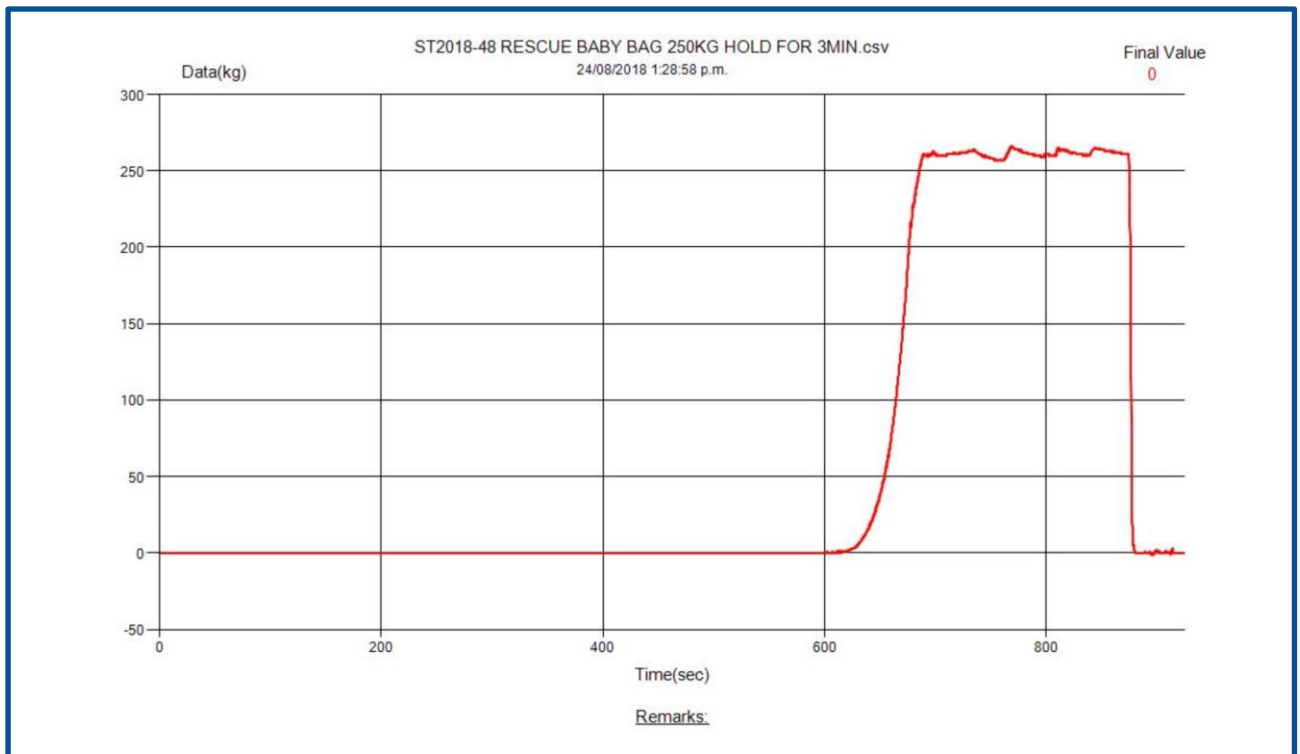
Table 1

Assessment

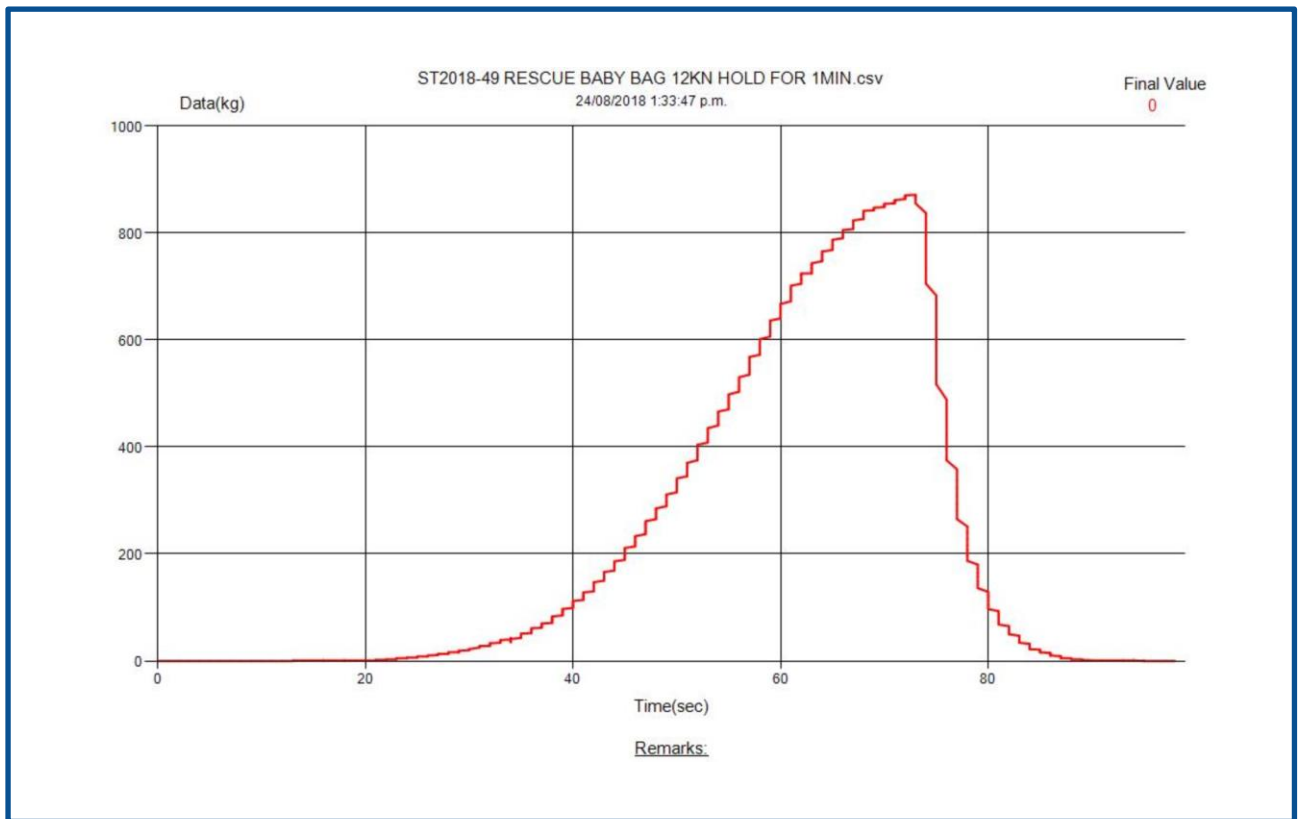
Test number 1:- ST2018-48 (Static Load 250kg on Rescue Baby Bag)

Test number 2:- ST2018-49 (Static Load 12kN on Rescue Baby Bag)

Result



Test number 1:- ST2018-48 (Static Load 250kg on Rescue Baby Bag)



Test number 2:- ST2018-49 (Static Load 12kN on Rescue Baby Bag)

RESULTS TABLE

Test Number	Specimen Number	Supplied Safe Working Load	Conditioned/ Unconditioned	Static Load (kg)	Static Load (kN)	Assessment
ST2018-48	2018/08/24-1	25kg	NA	260	2.55	Pass
ST2018-27	2018/08/24-1	25kg	NA	870	8.53	Pass

Table 2

Performance requirements:

When subjected to the static load of ten times the safe workload limit, the load must be maintained for 3 minutes and there must be no signs of any major structural stitch failure.

Desired Outcome:

250kg = >2.45 kN

Result: Passed

Above the desired outcome

The second test was to push the Rescue Baby Bag beyond its ten times safety factor. Although it did not reach the pre-determined target of 12kN before some seams started separating under the force, the testing team were comfortable with the 8.53kN load obtained. As 870kg's is still a lot of additional carrying capacity when only 25kg's is required.

Conclusion

- The test specimen Poseidon PRBB1203 Rescue Baby Bag was able to operate at ten times the safe working load limit of 25kgs.
- At 870kgs of force, the rescue baby bag was still intact, just the PVC portion started to show signs of stress, the webbing portion was still holding well.

Conditions of report

The results contained in this report are only applicable to the test specimen(s) supplied and tested. The tests as indicated in Table 1 were conducted as instructed by **QSI** representatives.

The author of this report may not necessarily be the testing officer.

The checking officer is independent of the author and has only performed checks for the transfer, correctness and completeness of data and the comprehension of this report.