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For the attention of: Valerie De Macedo

Technical Report

Subject: TESTING OF WINCH REFERENCE "FA 60 003 00" IN ACCORDANCE WITH
EN 1496: 2006

Your ref: SATRA/048/2008-09

Our ref: SPC0170486/0850/NW

Date: 9th September 2011

This is an extension from the original report SPC0170486/0850/NW dated 23rd December 2008

Conditions of Issue:

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Except where stated, an uncertainty has been applied to the results within this report, based on a standard uncertainty multiplied by a coverage factor $k = 2$, providing for a confidence level of approximately 95%

Report signed by: D Harrison
Position: PPE Technologist
Department: Safety Product Centre

INTRODUCTION

Samples of rescue winch device, reference “FA 60 003 00”, were received by SATRA on 8 December 2008, for testing in accordance with EN 1496: 2006 as a class A (lifting only) device. Testing was carried out between 18 & 23 December 2008.

CONCLUSIONS

The samples of rescue winch device, reference “FA 60 003 00”, as received by SATRA on 8 December 2008, have been tested in accordance with EN 1496: 2006, and found to achieve the following requirements:

SAMPLE REFERENCE	STANDARD	CLAUSE / PROPERTY	PASS / FAIL
FA 60 003 00	EN 1496: 2006	4.2 Ergonomics	PASS See note 1
		4.3 Materials and construction	Not fully assessed
		4.4 Function for class A rescue lifting devices	PASS See note 1
		4.5 Dynamic performance and function for class B rescue lifting devices	N/A
		4.6 Static strength	PASS
		4.7 Corrosion resistance	PASS

Note 1 – Testing carried out & originally reported under SATRA reference SPC0165484/0827/NW

TEST RESULTS



Figure 1 – Rescue winch device reference “FA 60 003 00”

EN 1496: 2006 CLAUSE / TEST	EN 1496: 2006 REQUIREMENT	RESULT / COMMENT	PASS / FAIL
4.2 Ergonomics	When tested in accordance with 5.5 (operating force test) with a mass equivalent to the maximum rated load, the operating force for lifting the test mass shall not exceed 250 N	Force required to lift 135 kg mass = 160 N	PASS See note 1
4.3.1 Materials and construction – General	Materials used in the rescue lifting device that may come into contact with the skin of a user shall not be known to cause irritating or sensitization effects during intended use The rescue lifting device shall have no sharp edges and burrs that may cause injury to the user	Not assessed No sharp edges or burrs on any exposed surface of device	Not fully assessed
4.3.2 Materials and construction – Lines	Lines shall be made from textile rope or webbing or from steel wire	Lines made from steel wire	PASS
4.3.3 Material and construction – Ropes and webbings	Fibre ropes of a non-sheathed core construction shall conform to EN ISO 1140 or EN ISO 1141 Fibre ropes of kernmantel construction shall conform to EN 1891: 1998, type A Wire ropes shall conform to ISO 2232 Webbings and yarns shall be made of filament or multifilament synthetic fibres, suitable for the use intended. The breaking tenacity of the synthetic fibre shall be known to be at least 0.6 N/tex	Not applicable	N/A

EN 1496: 2006 CLAUSE / TEST	EN 1496: 2006 REQUIREMENT	RESULT / COMMENT	PASS / FAIL
4.3.3 Material and construction – Ropes and webbings cont'd	Threads used for sewing shall be physically compatible with the rope or webbing and their quality shall be comparable to those of the rope or webbing. They shall, however, be of a contrasting shade in order to facilitate visual inspection	Not applicable	N/A
4.3.4 Materials and construction – Connectors	Connectors shall conform to EN 362	Attached karabiner is CE marked	PASS
4.4 Function for class A rescue lifting devices	The test mass shall be arrested within a vertical distance of 100 mm	203 kg test mass can be raised by device without failure following dry and wet conditioning 30 kg test mass can be raised by device without failure following dry and wet conditioning Vertical distance of fall on release of device handle = 0 m	PASS See note 1
4.5 Dynamic performance and function for class B rescue lifting devices	When tested in accordance with 5.6 (Dynamic performance test for class B rescue lifting devices) with a test mass equivalent to the maximum rated load, the test mass shall be held and the braking force F_{max} shall not exceed 6 kN When tested in accordance with 5.9.2 (Test procedure for rescue lifting devices class B), the lifting and lowering feature shall still function without failure and the test mass shall be arrested within a vertical distance of 100 mm	135 kg test mass arrested by rescue winch device Peak arrest force = 11.1 kN 203 kg test mass can be raised by device without failure following dry and wet conditioning. Some noticeable hindrance to lowering function 30 kg test mass can be raised and lowered by device without failure following dry and wet conditioning Vertical distance of fall on release of device handle = 0 m	N/A
4.6 Static strength	When tested with a test force equivalent to 10 times the maximum rated load, the rescue lifting device shall withstand the force applied for 3 min without tearing or rupture	13.5 kN sustained for 3 minutes without tear or rupture of any element of device	PASS

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EN 1496: 2006 CLAUSE / TEST	EN 1496: 2006 REQUIREMENT	RESULT / COMMENT	PASS / FAIL
4.7 Corrosion resistance	Metal parts shall show no evidence of corrosion that would affect the function of the rescue lifting device (white scaling or tarnishing is acceptable if the function is not impaired)	<p>Corrosion test in accordance with ISO 9227: 1990 - 24 hours Neutral Salt Spray, followed by 1 hour drying, then a further 24 hours exposure</p> <p>Temperature: 35 °C Fall out rate: 1.0 ml/hr pH of test solution: 7.3</p> <p>Evidence of heavy white scaling present on all surfaces. No visual evidence of rusting present. Device function retained</p>	PASS

***** END OF REPORT *****

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