Testing of Protective Equipments Against Falls from a Height

Test items	**Vertical Profile B and Climbing Carriage no. 932**
Type	**Guided type fall arrester including a rigid anchorage line**
Customer	**Eltel Networks Oy** **Komentajankatu 5** **FI-02610 ESPOO**
Applied methods	**Min Distance, Max Distance, Fall Back and Sideway Fall tests according to CNB/11.073 2010-10-13 which includes EN 353-1:2002, and prEN 353-1: 2008**
Results	**The products pass the tests** (For the other tests of the CNB/11.073 2010-10-13, see the FIOH Test Report 173347T01)

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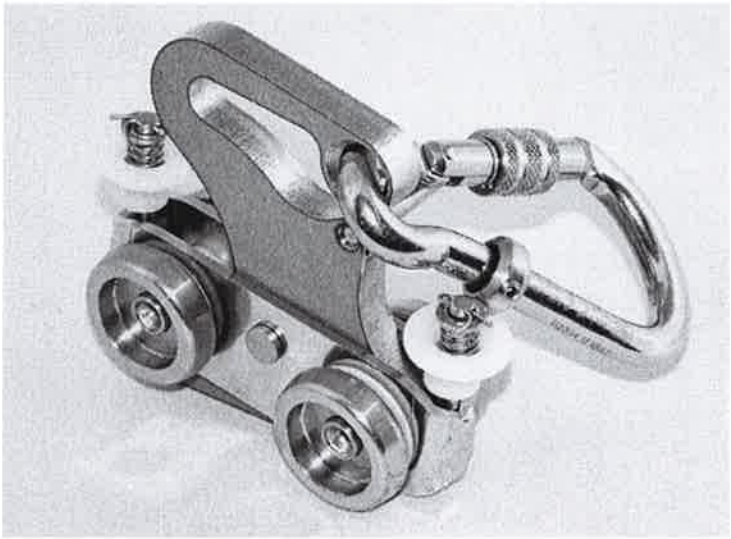
1. Description and identification of the test item

The test items were guided type fall arrester, and a rigid steel anchorage line. Photo about the fall arrester is above.



1.1 Components, materials and dimensions

Component	Material	Dimensions
Anchorage line	Steel	3 m, wall thickness 2,6 mm, hot dip galvanized
Fall arrester	Steel	Welded body, plate thickness 3 mm, 2 axes, four wheels, nylon bearing, size (l*w*h) 114*41*106 mm, weight 940 g, acid-resistant steel
Energy absorber	Steel	"U"-shaped energy absorber, plate thickness 10 mm, acid-resistant steel

2. Scope of testing

The customer supplied six samples at 2012-09-10. The samples were intact. The tests were made in accordance with CNB/11.073 2010-10-13, including EN 353-1:2002, and prEN 353-1:2008 (shortened as CNB, EN and prEN). The tests were performed at the FIOH between 2012-09-17 ... 2012-10-01.

3. Results

3.1 Locking (According to EN 353-1:2002, clause 5.1)

See the FIOH Test Report 173347T01.

3.2 Static strength

3.2.1 Energy absorber preloading (According to prEN clause 5.2.2)

See the FIOH Test Report 173347T01.

3.2.2 General (According to EN, clause 5.2, and prEN clause 5.2.2)

See the FIOH Test Report 173347T01.

3.2.3 Non metallic materials

Not applicable.

3.2.4 Wire rope systems

Not applicable.

3.2.5 Lateral strength (According to prEN clause 5.2.5)

See the FIOH Test Report 173347T01.

3.2.6 End stop A (According to prEN clause 5.2.6.1)

See the FIOH Test Report 173347T01.

3.2.7 End stop B (According to prEN clause 5.2.6.2)

See the FIOH Test Report 173347T01.

3.3 Dynamic performance

3.3.1 Performance test (According to EN clause 5.3)

See the FIOH Test Report 173347T01.

3.3.2 Cold conditions test (According to EN clause 5.3 and prEN clause 5.3.2)

See the FIOH Test Report 173347T01.

3.3.3 Orientation of the rigid anchorage line

Not applicable.

3.4 Dynamic strength

3.4.1 End stop B (According to prEN clause 5.4.2)

See the FIOH Test Report 173347T01.

3.4.2 Min distance (1-Dmin) (WG 2 N446 Report, CNB/P/11.073)

At the test the vertical displacement H_1 was 0,43 m and H_2 was 0,11 m, with 120 kg test mass. (Requirement: H_1 less than 1 m.)

3.4.3 Max distance (2-Dmax) (WG 2 N446 Report, CNB/P/11.073)

At the test the vertical displacement H was 0,66 m, with 100 kg test mass. (Requirement: H shall not exceed $2L_1 + L_2 + 1$ m, where $2L_1$ was 0,17 m and L_2 was 0,21 m. Maximum H in this case was 1,38 m.)

3.4.4 Fall back (3-FB) (WG 2 N446 Report, CNB/P/11.073)

At the test the maximum arrest distance H1 was 0,26 m, and H2 was 0,11 m, with 100 kg test mass. (Requirement: H1 shall not exceed 1 m.)

3.4.5 Sideway fall (4-SW) (WG 2 N446 Report, CNB/P/11.073)

At the test the vertical displacement H was 0,48 m with 100 kg test mass. (Requirement: H shall not exceed $2L_1 + L_2 + 1$ m. Maximum H in this case was 1,49 m.)

3.5 Corrosion resistance

Not applicable.

End of test report