

CERTIFICATE OF CONFORMITY

N° 18.0154/A

1. Applicant

Applicant: Mr Erturk Ergenekon
Manufacturer: KAYA YAPI İÇ MİM. TAS. İNŞ. TAAH. SAN. ve TİC. A.Ş. - G.O.S.B 1000. Sokak No:1015
41480 ÇAYIROVA – KOCAELİ – Turkey

2. Equipment

Type of equipment: anchor device Type C EN 795:2012 and CEN/TS 16415:2013
Manufacturer and Trademark: **KAYA SAFETY**
Model: **K-2010 A**

3. Description

Main characteristics

- Span: single and multi, min. 5 m and max. 25 m
- User: 8 people
- Cable tension: 100 daN
- Direction of use: ceiling, wall and floor
- Turn: 90° internal and external
- Angle of use: max. 15°
- Energy absorber: at each end
- This device has no : joint, entry/exit line fitting, flexible support fixed on anchor, no metallic material without evidence of durability
- This device can be used with following EN 360: IKAR HPS-12 and IKAR H-18
- This device cannot be used with EN 353-2

Components

- Flexible anchor: wire rope in stainless steel AISI 316, 7x19 Ø 8mm
- Energy absorber
- Terminal anchor
- Intermediate anchor
- Mobile anchor with 1 connector:
Direction use: wall and floor
Direction use: ceiling
- Tensioner block
- Tensionner indicator
- Turn
- Turn for ceiling use

References

LL-200 A

Kit EA-200 AT
ANB-100 A
ARB-100 A

SRY-50 + K-14
SRY-200 + K-14
Kit EA-200 AT
IND-100
ARB-100C1
ARB-100C2

4. Technical referential

The Anchor device Type C was assessed taking into account the provisions of technical specification TS 16415:2013 on anchor device type conforms to EN 795 of July 2012 to the exclusion of any other standard.

5. Conclusion

The Anchor device Type C, of trademark "**KAYA SAFETY**" and model "**K-2010 A**", presented by KAYA, conforms to the requirements of the EN 795:2012 and CEN/TS 16415:2013.

26/04/2018
The PPE Technical Manager



Validation électronique

This certificate includes one page. No duplicate will be issued.

This type of equipment is not a Personal Protective Equipment against falls from height, the present certificate of conformity is not an EC type examination certificate delivered by a notified body.

**KAYA YAPI İÇ MİM. TAS. İNŞ. TAAH.
SAN. ve TİC. A.Ş.**

**G.O.S.B 1000. Sokak No:1015 41480
Çayırova**

KOCAELİ

Türkiye

**ASSESSMENT REPORT OF CONFORMITY IN
REFERENCE OF THE EUROPEAN STANDARD
EN795 OF JULY 2012**

P.P.E. against falls from a height

Report n°	17.0186
Technical referential	EN 795:2012, CEN/TS 16415:2013
Type of Equipment	Anchor device - Type C
Trade Mark	KAYA SAFETY
Reference	K-2010 A

Fontaine, 27/02/2018

Report sent for the attention of Mr Erturk Ergenekon to the email address

erturkergenekon@kayagrubu.com.tr

This report includes: 29 pages

PPE Technical Manager

Document original immatériel



Summary

1. Introduction - Description of the service
2. Use of the report
3. Identification of the equipment
4. Conditions for use of the equipment
5. Reference specifications
6. Description of the equipment
7. Examination report
8. Conclusion

1. Introduction - Description of the service

This report concerns an anchor device type C, as defined in § 3.2.3 of European standard "Anchor devices" EN 795:2012 and in § 3.2.3 of Technical Specification "Anchor devices - Recommendations for anchor devices for use by more than one person simultaneously" CEN/TS 16415:2013.

The examination was conducted in accordance with purchase order placed by: KAYA YAPI İÇ MİM. TAS. İNŞ. TAAH. SAN. ve TİC. A.Ş.
Company: KAYA YAPI İÇ MİM. TAS. İNŞ. TAAH. SAN. ve TİC. A.Ş. - G.O.S.B 1000. Sokak No:1015 41480 Çayırova – KOCAELİ - Turkey

2. Use of the report

This report only concerns the equipment identified in clause 3 and described in clause 6.

Only an integral reproduction of this report is authorized.

The manufacturer, or his representative, commits himself not to use this report for equipment that is not strictly identical to the equipment covered by this report.

3. Identification of the equipment

3.1 Manufacturer – Manufacturing place – Place on the market

KAYA YAPI İÇ MİM. TAS. İNŞ. TAAH. SAN. ve TİC. A.Ş. - G.O.S.B 1000. Sokak No:1015 41480 Çayırova – KOCAELİ – Turkey

3.2 Tested equipment

Following equipment has been tested:

Trade mark: **KAYA SAFETY**

Reference: **K-2010 A**

A conformity certificate is awarded for this reference

3.3 Equivalences

No equivalence

3.4 Other trade name

No other trade mark

4. Conditions for use of the equipment

This anchor device –type C- is intended for use as part of a personal fall protection system, is intended to be removable from the structure and to be part of the anchor system.

5. Reference specification

The assessment of conformity with the provisions of European standard "Personal protective equipment against falls from a height — Anchor devices" EN 795:2012 and according to the technical specification "Anchor devices - Recommendations for anchor devices for use by more than one person simultaneously" CEN/TS 16415:2013.

6. Description of the equipment

6.1 Drawing



6.2 Type of anchor device

Main characteristics

- Span: single and multi, min. 5 m and max. 25 m
- User: 8 people
- Cable tension: 100 daN
- Direction of use: ceiling, wall and floor
- Turn: 90° internal and external
- Angle of use: max. 15°
- Energy absorber: at each end
- This device has no : joint, entry/exit line fitting, flexible support fixed on anchor, no metallic material without evidence of durability
- This device cannot be used with EN 353-2 and EN 360

Components

- Flexible anchor: wire rope in stainless steel AISI 316, 7x19 Ø 8mm
- Energy absorber
- Terminal anchor
- Intermediate anchor
- Mobile anchor with 1 connector:
Direction use: wall and floor
Direction use: ceiling
- Tensioner block
- Turn
- Turn for ceiling use

References

- LL-200 A
- Kit EA-200 AT
- ANB-100 A
- ARB-100 A
- SRY-50 + K-14
SRY-200
- Kit EA-200 AT
- ARB-100C1
- ARB-100C2

6.3 Description of components

Detailed description of the equipment model **K-2010 A**, in the manufacturing technical file received on 21/12/2017, updated on 15/02/2018, and edited by KAYA

6.4 Location of the marking

- ✱ Marking clear and permanent: **Conform**
- ✱ Location of the marking: **On each component**

7. Examination report

Article of the standard EN 795	Content	Conformity			Comments
		Yes	No	N.A	
Art 1	Scope This European Standard is not applicable to: * anchor devices intended to allow more than one user to be attached at any one time; * anchor devices used in any sports or recreational activity; * equipment designed to conform to EN 516 or EN 517; * elements or parts of structures which were installed for use other than as anchor points or anchor devices, e.g. beams, girders; * structural anchors	✓		✓	Use by 8 people
Art. 4.1	Requirements- General				
4.1.1	* When checked in accordance with 5.1.7, anchor devices shall be designed in such a way that they can be removed from the structure, without damaging the structure or the anchor device, thus allowing its reuse e.g. for periodic examination.	✓			
4.1.2	* When checked in accordance with 5.1.7, U-bolt clamps shall not be used to form terminations in any part of an anchor device..	✓			
4.1.3	* When checked in accordance with 5.1.7, it shall not be possible for elements with an anchor point to become detached unintentionally. If the element or mobile anchor point can be removed, it shall be designed such that it can only be detached after executing two separate, consecutive and deliberate manual actions.	✓			
4.1.4	* When checked in accordance with 5.1.7, anchor devices shall be of such a design and size to allow connectors to rotate freely and sit in the anchor point in the preferred load-bearing position.	✓			
4.1.5	* When checked in accordance with 5.1.7, for anchor devices comprising more than one element and for anchor devices with elements that can be adjusted, the design shall be such that those elements cannot appear to be positively locked together when incorrectly assembled or adjusted.	✓			Date of tests : 22/08/2017
4.1.6	* When checked in accordance with 5.1.7, the mass of any element of an anchor device that is intended to be transported by a single person shall not exceed 25 kg.	✓			m _{max} = >25kg 100m cable
4.1.7	* If the anchor device is equipped with a fall indicator, the indicator shall clearly indicate a fall has occurred after the dynamic strength and integrity test(s).			✓	

Article of the standard EN 795	Content	Conformity			Comments
		Yes	No	N.A	
4.1.8	✖ When an anchor device consists of a combination of several types, it shall be tested for each relevant type and for the combination, e.g. a combination of type C and type E anchor devices.			✓	Ceilling, wall and floor
4.1.9	✖ Where the information provided by the manufacturer permits loading in more than one direction (e.g. in tension and in shear) (see 7 c)), anchor devices shall be tested in each safety critical direction.	✓			
Art. 4.2	Requirements - Materials				
4.2.1	Metal parts				
4.2.1.1	✖ After testing in accordance with 5.8, there shall be no corrosion of the base material. The presence of tarnishing and white scaling is acceptable. Metal parts of anchor devices shall show no evidence of corrosion that would affect their functional operation, e.g. the correct operation of moving elements. NOTE Conformity to this requirement does not imply suitability for use in a marine environment.			✓	
4.2.1.2	✖ If steel wire ropes are galvanised, the galvanisation shall be in accordance with ISO 2232.			✓	
4.2.2	Rope and webbing				
4.2.2.1	✖ Fibre ropes, webbing and sewing threads shall be made from virgin filament or multi-filament synthetic fibres. NOTE Examples of suitable materials for use in rope and webbing are polyamide, polyester and mixtures of polyamide and polyester.			✓	
4.2.2.2	✖ Threads used for sewing shall be of a contrasting shade or colour when compared to the rope or webbing to facilitate visual inspection.			✓	
4.2.3	Connectors Connectors shall conform to EN 362.	✓			
Art 4.3	Requirements - Design and ergonomics When checked in accordance with 5.1.7, anchor devices shall not have sharp edges or burrs that may cause injury to the user or that may cut, abrade or otherwise damage itself or any part of the personal fall protection equipment that may come into contact with it. NOTE It is recommended that exposed edges or corners of elements are relieved either with a radius of at least 0,5 mm or a chamfer of at least 0,5 mm x 45°.	✓			

Article of the standard EN 795	Content	Conformity			Comments
		Yes	No	N.A	
Art. 4.4	* Requirements – Specific requirements				
4.4.1	Type A anchor devices			✓	TYPE C
4.4.2	Type B anchor devices			✓	TYPE C
4.4.3	Type C anchor devices				
4.4.3.1	When tested in accordance with 5.5.2 (deformation test), no part of the extremity anchors, intermediate anchors or mobile anchor point which is intended to deform, e.g. to absorb energy, shall demonstrate permanent deformation of more than 10 mm in the direction of loading. <i>Articles of EN795:2012 taking into account for Deformation test: Articles 5.1, 5.5.1 and 5.5.2</i>	✓			Date of tests: from 22nd to 24/08/2017 See appendix 2
4.4.3.2	Performance predictions based on calculations or test results shall be available for configurations of the anchor device agreed in 5.5.1.2, including information on: a) the maximum deflection of the mobile anchor point(s); b) the maximum load applied to the extremity anchor and those intermediate or corner units that are considered to be in-line fittings. Alternatively, for devices that do not incorporate an extremity anchor, e.g. a circular device, the maximum load in the anchor line.	✓ ✓ ✓			See appendix 1
4.4.3.3	When tested in accordance with 5.5.3.1 (single-span dynamic strength and integrity test) and 5.5.3.2 (multi-span dynamic strength and integrity test), the values at the extremities and the maximum dynamic deflection of the flexible anchor line shall not vary by more than ± 20 % from those predicted. <i>Articles taking into account for dynamic strength and integrity test: Articles 5.1, 5.5.1, 5.2.1.4, 5.2.2, 5.5.3.1, 5.5.3.2</i>	✓			See appendix 3
Art 5.2.1.4	Determination of free fall distance - Determine DCL_{9kN} for F = 9kN Using a rigid test mass of (100 $\pm$ 1) kg in accordance with EN 364:1992, 4.5, determine the free fall distance of the rigid test mass required to generate a fall arrest load of (9 $\pm$ 0,5/0) kN in the dynamic strength and integrity tests by carrying out a test using an anchor point fixed to the structure. When testing over pulleys, the free fall distance may need to be adjusted to achieve the load of (9 $\pm$ 0,5/0) kN.	✓			DCL_{9kN} = 2.2 m
4.4.3.4	When tested in accordance with 5.5.3, (dynamic strength and integrity tests), the anchor device shall not release the rigid test mass and the rigid test mass shall be held clear of the ground. No part of the anchor device shall break.	✓			See appendix 3

Article of the standard EN 795	Content	Conformity			Comments
		Yes	No	N.A	
4.4.3.5	When tested in accordance with 5.5.4 (static strength tests) with the mobile anchor point immediately adjacent to an extremity anchor; on an intermediate anchor; on a corner anchor; on an entry/exit line fitting and on a joint in the flexible anchor line, where these are part of the anchor device, the anchor device including all load-bearing elements, flexible anchor lines, line fittings and terminations (e.g. swaged connections, sewn loops, spliced terminations) shall hold a load of (12 +1,0/0) kN. For non-metallic elements, if evidence of durability is not provided, the static load shall be 18 kN.	✓			See appendix 5
4.4.3.6	When tested in accordance with 5.5.3 and 5.5.4, the mobile anchor point shall not become detached from the flexible anchor line.	✓			
4.4.3.7	Where the flexible anchor line is fixed in the intermediate or corner anchor (i.e. the intermediate and corner anchors effectively become extremity anchors), multi-span anchor devices shall be tested as single-span anchor devices.	✓			
4.4.4	Type D anchor devices			✓	TYPE C
4.4.5	Type E anchor devices			✓	TYPE C

Article of the standard EN 795	Content	Conformity			Comments
		Yes	No	N.A	
5.6	Type D anchor devices			✓	TYPE C
5.7	Type E anchor devices			✓	TYPE C
5.8	Corrosion resistance* <i>Expose representative samples of the metal parts of the anchor device to the neutral salt spray test in accordance with EN ISO 9227 for a period of (24 +0,5/0) h. Dry for (60 +5/0) min at (20 ± 2) °C. Then repeat the procedure, so that the anchor device is subjected in total to (24 +0,5/0) h exposure and (60 +5/0) min drying plus another (24 +0,5/0) h exposure and (60 +5/0) min drying. Examine the anchor device and verify that it meets the requirements of 4.2.1. Where necessary to gain visual access to the internal elements, dismantle the anchor device.</i> *Tests carried out by our subsidiary	✓			Date of tests: from 15th to 17/05/2017 validated by Apave file 17.6.0132
Art 4.5	Requirements – Marking and information				
4.5.1	Marking shall be in accordance with Clause 6.	✓			
4.5.2	Information shall be supplied with the anchor device in accordance with Clause 7.	✓			

Article of the standard EN 795	Content	Conformity			Comments
		Yes	No	N.A	
ART 6 4.8.1 EN 365:2004	Marking Marking of the anchor device shall conform to EN 365 and, in addition, shall include that the anchor device shall be for the use of one user only. <i>Article 4.8 de la norme EN 365:2004</i> Each item of PPE or other equipment shall be clearly, indelibly and permanently marked by the manufacturer in the official language of the country of destination, by any suitable method not having a harmful effect on the materials so marked, and shall include at least: a/ a means of identification, e.g. manufacturer's name, supplier's name, or trademark; Note : When PPE is marked with the supplier's name this should be with the approval of the Notified body. b/ the manufacturer's production batch or serial number or other means of traceability; c/ the model and type/identification; d/ the number and year of the European Standard to which the equipment conforms; e/ a pictogram or other method to indicate the necessity for users to read the instruction for use; f/ any additional marking required in the relevant European Standard The characters in the markings shall be legible and unambiguous.				
	4.8.2 EN 365:2004	✓			

Article of the standard EN 795	Content	Conformity			Comments
		Yes	No	N.A	
Art 7	Information supplied by the manufacturer The information supplied by the manufacturer shall be provided in at least the language(s) of the country of destination. It shall conform to EN 365:				
Only the English version has been checked. It is the responsibility of the manufacturer to supply the instruction for use in the official languages of the country of destination.					
4.2.1 EN 365:2004	Instruction for use				
	The manufacturer shall prepare instructions for use, for maintenance and for periodic examination for each item of PPE or other equipment, in the official languages of the country of destination. Note : The instructions for use, for maintenance and for periodic examination may be supplied in separate documents. The instruction for use shall be in written format, shall be clear, legible and unambiguous, and shall contain appropriate detail, supplemented by diagrams if necessary, to enable the PPE or other equipment to be used correctly and safely. The instruction for use shall include: a) the name and contact details of the manufacturer or authorised representative as appropriate; b) statements describing the equipment, its intended purpose, application and limitations; c) a warning about medical conditions that could affect the safety of the equipment user in normal and emergency use; d/ a warning that the equipment shall only be used by a person trained and competent in its safe use; e/ a warning that a rescue plan shall be in place to deal with any emergencies that could arise during the work; f/ a warning against making any alterations or additions to the equipment without the manufacturer's prior written consent, and that any repair shall only be carried out in accordance with manufacturer's procedures; g/ a warning that the equipment shall not be used outside its limitations, or for any purpose other than that for which it is intended; h/ advice as to whether the equipment should be a personal issue item; i/ sufficient information to ensure the compatibility of items of equipment when assembled into a system; j/ a warning of any dangers that may arise be the use of combinations of items of equipment in which the safe function of any one item is affected by or interferes with the safe function or another; k/ an instruction for the user to carry out a pre-use check of the equipment, to ensure that it is in a serviceable condition and operates correctly before it is used; <i>Note : a pre-use check by the user of certain parts of equipment for emergency use which have been pre-packed or sealed by a competent person may not be applicable.</i> l/ the features of the equipment that require the pre-use check, the method of checking, and the criteria against which the user can decide whether or not the equipment is defective;	✓			

***Extract of OJEU of December 2015**

Warning: This publication does not concern the equipment described in:

- type A (anchor devices with one or more stationary anchor points and with the need for structural anchors or fixing elements to fix to the structure) referred to in clauses 3.2.1, 4.4.1, 5.3;
- type C (anchor devices employing horizontal flexible anchor lines) referred to in clauses 3.2.3, 4.4.3 and 5.5;
- type D (anchor devices employing horizontal rigid anchor lines) referred to in clauses 3.2.4, 4.4.4 and 5.6;
- any combination of the above.

In respect of types A, C and D, this publication does not concern either clauses: 4.5, 5.2.2, 6, 7; Annex A or Annex ZA. Accordingly, in respect of the equipment mentioned above, there shall be no presumption of conformity with the provisions of Directive 89/686/EEC because they are not considered to be PPE.

File 17.0186

File 17.0186

File 17.0186

Article of the TS 16415	Content	Conformity			Comments
		Yes	No	N.A	
Art 1	Scope This Technical Specification is not applicable to: ✗ anchor devices intended to allow only one user to be attached at any one time, which are covered by EN 795:2012; ✗ anchor devices used in any sports or recreational activity; ✗ equipment designed to conform to EN 516 or EN 517; ✗ elements or parts of structures which were installed for use other than as anchor points or anchor devices, e.g. beams, girders; ✗ structural anchors	✓			
Art. 4.1	Requirements- General ✗ Anchor devices intended for use by more than one person simultaneously shall conform to EN 795:2012.	✓			
Art 4.2	Requirements - Specific				
4.2.1	Type A anchor device			✓	TYPE C
4.2.2	Type B anchor device			✓	TYPE C
4.2.3	Type C anchor device – Single span			✓	
4.2.3.1	✗ When tested in accordance with 5.4.2 (dynamic strength and integrity test), the anchor device shall not release the rigid test mass and the rigid test mass shall be held clear of the ground. No part of the anchor device shall break.				
4.2.3.2	✗ When tested in accordance with 5.4.2 (dynamic strength and integrity test), the maximum load measured at the extremity anchor should not exceed 50 % of the minimum breaking strength of the flexible anchor line as specified in the information supplied by the manufacturer (see Clause 7).				
4.2.3.3	✗ When tested in accordance with 5.4.2 (dynamic strength and integrity test) the values at the extremities and the maximum dynamic deflection of the flexible anchor line shall not vary by more than ± 20 % from those predicted.				
4.2.3.4	✗ When tested in accordance with 5.4.3 (static strength test), the anchor device shall hold the load.				
4.2.4	Type C anchor device – Multi span				
4.2.4.1	✗ When tested in accordance with 5.4.4 (dynamic strength and integrity test), the anchor device shall not release the rigid test mass and the rigid test mass shall be held clear of the ground. No part of the anchor device shall break.	✓			See results in appendix 4
4.2.4.2	✗ When tested in accordance with 5.4.4 (dynamic strength and integrity test), the maximum load measured at the extremity anchor shall not exceed 50 % of the minimum breaking strength of the flexible anchor line as specified in the information supplied by the manufacturer (see Clause 7).	✓			See results in appendix 4

Article of the TS 16415	Content	Conformity			Comments
		Yes	No	N.A	
4.2.4.3	✖ When tested in accordance with 5.4.4 (dynamic strength and integrity test), the values at the extremities and the maximum dynamic deflection of the flexible anchor line shall not vary by more than $\pm 20\%$ from those predicted.	✓			See results in appendix 4
4.2.4.4	✖ When tested in accordance with 5.4.5 (static strength test), the anchor device shall hold the load.	✓			See results in appendix 5
4.2.4.5	✖ When tested in accordance with 5.4.5 (static strength test) with the mobile anchor point(s) immediately adjacent to an extremity anchor, on an intermediate anchor, on a corner anchor, on an entry/exit line fitting, and on a joint in the flexible anchor line, where these are part of the anchor device, the anchor device including all load-bearing elements, flexible anchor lines, line fittings and terminations (e.g. swaged connections, sewn loops, spliced terminations) shall hold the load.	✓			
4.2.4.6	✖ Where the flexible anchor line is fixed in the intermediate or corner anchor (i.e. the intermediate and corner anchors effectively become extremity anchors), multi-span anchor devices shall be tested as single span anchor devices.			✓	
4.2.5	Type D anchor device			✓	TYPE C
4.2.6	Type E anchor device			✓	TYPE C

Article of the standard EN 795	Content	Conformity			Comments
		Yes	No	N.A	
Art. 4.3	Requirements - Marking and information				
4.3.1	✗ Marking shall be in accordance with Clause 6.	✓			
4.3.2	✗ Information shall be supplied with the anchor device in accordance with Clause 7.	✓			
Art 5.1	Test Method - Test apparatus				
	✗ The test apparatus shall be in accordance with EN 795:2012, 5.2.	✓			
	For the first two simultaneous users, increase the rigid test mass to (200 ± 1) kg and determine the free fall distance required to generate a fall arrest load of (12 +0,5/- 0) kN by using a test lanyard with sewn terminations and the overall lanyard length reduced to (1 +0,1/-0) m.				
Art 5.2	Test Method – Type A anchor device			✓	TYPE C
Art 5.3	Test Method – Type B anchor device			✓	TYPE C
Art 5.4	Test Method – Type C anchor device				
5.4.1	Test Method – General				
5.4.1.1	✗ Performance predictions based on calculations or test results shall be available for configurations of the anchor device applied in 5.4.1.3, including information on: a) the maximum deflection of the mobile anchor point(s); b) the maximum load applied to the extremity anchor and those intermediate or corner units that are considered to be in-line fittings. Alternatively, for devices that do not incorporate an extremity anchor, e.g. a circular device, the maximum load in the anchor line; c) the number of users permitted by the manufacturer.	✓			
5.4.1.2	✗ Install the extremity and intermediate anchor(s) in or on the test apparatus, as appropriate, in accordance with the information supplied by the manufacturer, horizontally at an angle of ±3°, where relevant using a construction fixing as recommended in the information supplied by the manufacturer, into or onto a sample of construction material(s) also recommended in the information supplied by the manufacturer.				
5.4.1.3	✗ Arrange the test configuration(s) taking into account the following: a) the loading directions in use (e.g. intermediate and extremity anchors mounted on a wall, ceiling, roof or ground); b) the span length; NOTE A span equals the distance between flexible anchor line fixings, e.g. extremity anchor and intermediate anchor. c) corners (internal and external corners, maximum deviation); d) types and combinations of components, e.g. energy absorber(s), terminations, intermediate anchors, mobile anchor points, flexible anchor line(s).				
5.4.1.4	✗ If the anchor device does not have a mobile anchor point use a connection as specified in the information supplied by the manufacturer.				
5.4.1.5	✗ Where the intermediate anchor and corner anchor of the flexible anchor line do not permit articulation of the mobile anchor point with the direction of loading that could be applied in service, carry out the static strength test described in 5.4.3 or 5.4.5 in directions both in line and perpendicular to the intermediate anchor and corner anchor mounting bolts.				

Article of the standard EN 795	Content	Conformity			Comments
		Yes	No	N.A	
5.4.2	Test Method – Single span	✓			
5.4.2.1	Dynamic strength and integrity test				
5.4.2.1.1	✗ Prior to testing, take into account the predictions of maximum dynamic load at the extremity anchor and maximum deflection of the flexible anchor line submitted by the manufacturer in accordance with 5.4.1.1.				
5.4.2.1.2	✗ Install the manufacturer's longest permissible single-span anchor device in accordance with the information supplied by the manufacturer.				
5.4.2.1.3	✗ Attach a load cell to each end of the flexible anchor line so that the tension at the extremities can be measured.				
5.4.2.1.4	✗ Carry out one test using a test lanyard as described in 5.1, connected to a 200 kg rigid test mass.				
5.4.2.1.5	✗ Attach a load cell to a mobile anchor point. Attach one end of the test lanyard to the load cell by means of a connector and the other end of the test lanyard, also by means of a connector, to the rigid test mass. Position the mobile anchor point at the centre of the span.				
5.4.2.1.6	✗ Attach a quick release device to the rigid test mass. Move the rigid test mass downwards until the test lanyard holds the mass. Remove the load until the flexible anchor line returns to its natural position. From this point, raise the rigid test mass to the free fall distance determined in 5.1 and hold it at a maximum of 300 mm horizontally.				
5.4.2.1.7	✗ Release the rigid test mass and observe and record whether the rigid test mass is arrested. Measure and record the maximum load at each end of the flexible anchor line and at the mobile anchor point. Also, measure and record the maximum dynamic deflection at the mobile anchor point (e.g. by high speed video, displacement transducer).				
5.4.2.1.8	✗ Check that the mobile anchor point does not become detached from the flexible anchor line and/or does not release the rigid test mass and the rigid test mass is held clear of the ground. Record the result.				
5.4.2.1.9	✗ Leaving the 200 kg rigid test mass suspended from the flexible anchor line or with an equivalent static load applied, repeat the dynamic test for each additional user using a rigid test mass of 100 kg, a test lanyard as described in EN 795:2012, 5.2.1, another mobile anchor point and a free fall distance to generate a fall arrest load of (9 +0,5/- 0) kN. For each test, leave the mass(es) from the previous test(s) suspended from the flexible anchor line or apply the load statically. NOTE To prevent collision of the test mass(es) the position of the suspended test mass(es) may be lowered or raised.				
5.4.2.1.10	✗ After the dynamic test, for two users increase the mass to 600 kg or an equivalent load on the anchor device and hold it for (3 +0,25/-0) min. For more than two users, increase the mass by 150 kg per user or an equivalent load (e.g. for 4 users the mass would be 900 kg), and hold this or the equivalent load for (3 +0,25/-0) min. Check whether the rigid test mass is held clear of the ground.				
5.4.2.1.11	✗ Install the manufacturer's shortest permissible single-span anchor device in accordance with the information supplied by the manufacturer and carry out the test described in 5.4.2.1.3 to 5.4.2.1.10.				
5.4.3	Static strength test Using the same test configurations and test positions as those used for the dynamic strength and integrity tests described in 5.4.2.1, apply a static test load of (12 +1/-0) kN + (1 +0,1/-0) kN for each additional user (e.g. 4 users = 15 kN) or, where any load bearing element or component is made from non-metallic material(s) and where evidence of durability is not provided by the manufacturer, (18 +1/-0) kN + (1 +0,1/-0) kN for each additional user. Observe whether the anchor device holds the load for a period of (3 +0,25/-0) min.	✓			

Article of the standard EN 795	Content	Conformity			Comments
		Yes	No	N.A	
5.4.4	Test Method – Multi span	✓			
5.4.4.1	Dynamic strength and integrity test	✓			
5.4.4.1.1	✗ Prior to testing, take into account the predictions of maximum dynamic load at the extremity anchor and maximum deflection of the flexible anchor line submitted by the manufacturer in accordance with 5.4.1.1.				
5.4.4.1.2	✗ Install a flexible anchor line, which includes 3 spans, with the longest length permitted at one end of the installed flexible anchor line and where the other two spans are of the shortest length permitted by the manufacturer in accordance with the information supplied by the manufacturer.				
5.4.4.1.3	✗ Attach a load cell to each end of the flexible anchor line so that the tension at the extremities can be measured.				
5.4.4.1.4	✗ Carry out one test using a test lanyard as described 5.1, connected to a 200 kg rigid test mass.				
5.4.4.1.5	✗ Attach a load cell to a mobile anchor point. Attach one end of the test lanyard to the load cell by means of a connector and the other end of the test lanyard, also by means of a connector, to the rigid test mass. Position the mobile anchor point at the centre of the longest span.				
5.4.4.1.6	✗ Attach a quick release device to the rigid test mass. Move the rigid test mass downwards until the test lanyard holds the mass. Remove the load until the flexible anchor line returns to its natural position. From this point, raise the rigid test mass to the free fall distance determined in 5.1 and hold it at a maximum of 300 mm horizontally from the mobile anchor point.				
5.4.4.1.7	✗ Release the rigid test mass and observe and record whether the rigid test mass is arrested. Measure and record the maximum load at each end of the flexible anchor line and at the mobile anchor point. Also, measure and record the maximum dynamic deflection at the mobile anchor point (e.g. by high speed video, displacement transducer).				
5.4.4.1.8	✗ Check that the mobile anchor point does not become detached from the flexible anchor line and/or does not release the rigid test mass and the rigid test mass is held clear of the ground. Record the result.				
5.4.4.1.9	✗ Leaving the 200 kg rigid test mass suspended from the flexible anchor line or with an equivalent static load applied, repeat the dynamic test for each additional user using a rigid test mass of 100 kg, a test lanyard as described in EN 795:2012, 5.2.1, another mobile anchor point and a free fall distance to generate a fall arrest load of (9 +0,5/-0) kN. For each test, leave the mass(es) from the previous test(s) suspended from the flexible anchor line or apply the load statically. NOTE To prevent collision of the test masses the position of the suspended test mass(es) may be lowered or raised.				
5.4.4.1.10	✗ After the dynamic tests, for two users increase the mass to 600 kg or an equivalent load on the anchor device and hold it for (3 +0,25/-0) min. For more than two users, increase the mass by 150 kg per user or an equivalent load (e.g. for 4 users the mass would be 900 kg), and hold this or the equivalent load for (3 +0,25/-0) min. Check that the rigid test mass is held clear of the ground.				
5.4.4.1.11	✗ Where there is a corner anchor fitted in the flexible anchor line, carry out the dynamic strength and integrity test with the mobile anchor point positioned at the corner anchor.				
5.4.4.1.12	✗ Where there are entry/exit line fittings or a joint in the line, carry out the dynamic strength and integrity test with the mobile anchor point positioned at these positions.				
5.4.4.1.13	✗ Repeat the tests described in 5.4.4.1.3 to 5.4.4.1.12 for the shortest span permitted by the manufacturer at the middle of the shortest span between the intermediate anchors.				

Article of the standard EN 795	Content	Conformity			Comments
		Yes	No	N.A	
5.4.5	Static strength test <i>Using the same test configurations as those used in the test described in 5.4.4.1, apply to the mobile anchor point, or a suitable connector attached to the flexible anchor line, a static load of (12 +1/-0) kN + (1 +0,1/-0) kN for each additional user (e.g. 4 users = 15 kN) or, where any load bearing element or component is made from non-metallic material(s) and where evidence of durability is not provided by the manufacturer, (18 +1/-0) kN + (1 +0,1/-0) kN for each additional user. Observe whether the anchor device holds the load for a period of (3 +0,25/-0) min.</i>	✓			
Art 5.5	Test Method – Type D anchor device			✓	TYPE C
Art 5.6	Test Method – Type E anchor device			✓	TYPE C
ART 6	Marking Marking of the anchor device shall conform to Clause 6 of EN 795:2012, except for 6 a), and, in addition, shall include the maximum number of users permitted simultaneously.	✓			
ART 7	Information to be supplied by the manufacturer Information supplied by the manufacturer shall conform to Clause 7 of EN 795:2012, except for 7 a), and, in addition, shall include the maximum number of users permitted simultaneously and for Type C anchor devices the minimum breaking strength of the flexible anchor line.	✓			

8. Conclusion

The type C anchor device trade mark "KAYA SAFETY" and model "K-2010 A" conforms the applicable requirements of European standard EN 795:2012, the CEN/TS 16415:2013 and with the conformity of manufacturer's technical file.

Consequently, a certificate of conformity is issued for this equipment.

Number of certificate of conformity: 17.0186/A

Appendix 1

Configuration of test

Configuration		Configuration of test for dynamic and static tests									
N°	Zone sollicité	Type of support	Span Single/M ulti	Span Min/max	Direction of use	Mobile anchor	Energy absorbeur	Tensionning system	Intermediate anchor	terminal anchor	Turn
GP1	Middle of biggest span	Wire rope 8mm Stainless steel ref LL 200 A	Single span	25m	Wall/floor	SRY-50 GLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	NO
GP2	Middle of biggest span	Wire rope 8mm Stainless steel ref LL 200 A	Single span	25m	Ceiling (overhead position)	SRY-200 SLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	NO
GP3	Middle of biggest span	Wire rope 8mm Stainless steel ref LL 200 A	Mulispans	25/5m	floor/wall	SRY-50 SLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	YES ARB-100-C1
GP4	Middle of biggest span	Wire rope 8mm Stainless steel ref LL 200 A	Mulispans	25/5m	Ceiling (overhead position)	SRY-200 SLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	YES ARB-100-C2
PP1	Middle of shortest span	Wire rope 8mm Stainless steel ref LL 200 A	Single span	5m	Wall/floor	SRY-50 GLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	NO
PP2	Middle of shortest span	Wire rope 8mm Stainless steel ref LL 200 A	Single span	5m	Ceiling (overhead position)	SRY-200 SLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	NO
PP3	Middle of biggest span	Wire rope 8mm Stainless steel ref LL 200 A	Mulispans	25/5m	floor/wall	SRY-50 SLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	YES ARB-100-C1
PP4	Middle of biggest span	Wire rope 8mm Stainless steel ref LL 200 A	Mulispans	25/5m	Ceiling (overhead position)	SRY-200 SLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	YES ARB-100-C2
INT1	On Intermediate anchor	Wire rope 8mm Stainless steel ref LL 200 A	Mulispans	25/5m	Wall/floor	SRY-50 GLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	YES ARB-100-C1
INT2	On Intermediate anchor	Wire rope 8mm Stainless steel ref LL 200 A	Mulispans	25/5m	Ceiling (overhead position)	SRY-200 SLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	YES ARB-100-C2
VIRINT1	On internal turn	Wire rope 8mm Stainless steel ref LL 200 A	Mulispans	25/5m	Wall/floor	SRY-50 GLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	YES ARB-100-C1
VIREXT	On external turn	Wire rope 8mm Stainless steel ref LL 200 A	Mulispans	25/5m	Wall/floor	SRY-50 GLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	YES ARB-100-C1
VIROVERHEAD1	On internal turn	Wire rope 8mm Stainless steel ref LL 200 A	Single span	25/5m	Wall/floor	SRY-200 SLIDER	Energy absorbeur at each extremity ref EA-200 A	with screw on main anchor ANB-100A	intermediaite anchor ARB-100 A	main anchor ANB-100 A	YES ARB-100-C2

Appendix 2

Deformation test

<i>Deformation</i>			<i>Results</i>	
<i>N°</i>	<i>TEST</i>	<i>Direction of use</i>	<i>Permanant deformation measured</i>	<i>Conformity (Def ≤10mm)</i>
DEF1	Main anchor bracket ANB-100	Wall/floor	0 mm	Yes
DEF2	Main anchor bracket ANB-100	roof	0 mm	Yes
DEF3	Inter anchor ARB-100A	Wall/floor	0 mm	Yes
DEF4	Inter anchor ARB-100A	roof	0 mm	Yes
DEF6	Energy absorbeur EA 200 A	Wall/floor	0 mm	Yes
DEF7	Energy absorbeur EA 200 A	roof	0 mm	Yes
DEF8	SLIDER SRY 50	/	0 mm	Yes
DEF9	SLIDER SRY 200	/	0 mm	Yes

Appendix 3

Dynamic and integrity test EN 795:2012

Dynamic-Integrity		Results																
Configuration	Hdrop	Fmax anchor	Maximum force on extremity				Maximum force on other extremity or after turn				Maximum dynamic deflection				Mass retained and kept	fall indicator activated	Mass increase to 300kg	Conformity of test
	D _{CLIM}	measured	measured	predicted	gap	conformity	measured	predicted	gap	conformity	measured	predicted	gap	conformity				
GP1	2,2	4,55	14,41	15	-3,9	yes	13,88	14,5	-4,27586	yes	2010	2000	0,5	yes	yes	yes	yes	yes
GP2	2	4,05	13,75	14,5	-5,2	yes	13,4	14	-4,28571	yes	1935	1925	0,519481	yes	yes	yes	yes	yes
GP3	2,2	5,59	12,88	14	-8,0	yes	2,95	NOT APPLICABLE			2540	2300	10,43478	yes	yes	yes	yes	yes
GP4	2	4,67	13,73	14,5	-5,3	yes	3,98	4,7	-15,3191	yes	1930	1950	-1,02564	yes	yes	yes	yes	yes
PP1	2,2	6,29	13,11	14	-6,4	yes	12,77	13,5	-5,40741	yes	600	550	9,090909	yes	yes	yes	yes	yes
PP2	2	6,82	14,21	15	-5,3	yes	13,84	14	-1,14286	yes	515	500	3	yes	yes	yes	yes	yes
PP3	2,2	5,78	7,19	8,5	-15,4	yes	1,12	NOT APPLICABLE			1075	1100	-2,27273	yes	yes	yes	yes	yes
PP4	2	6,46	9,1	10	-9,0	yes	2,25	2,75	-18,1818	yes	590	600	-1,66667	yes	yes	yes	yes	yes
INT1	2,2	6,14	0	NOT APPLICABLE			0	NOT APPLICABLE			NOT APPLICABLE				yes	yes	yes	yes
INT2	2	8,68	0	NOT APPLICABLE			0	NOT APPLICABLE			NOT APPLICABLE				yes	yes	yes	yes
VIRINT1	2,2	8,62	0,8	NOT APPLICABLE			0,5	NOT APPLICABLE			not applicable				yes	yes	yes	yes
VIREXT1	2,2	8,97	4,28	NOT APPLICABLE			3,83	NOT APPLICABLE			not applicable				yes	yes	yes	yes
VIROVERHEAD1	2	8,97	1,68	NOT APPLICABLE			1,73	NOT APPLICABLE			not applicable				yes	yes	yes	yes

Appendix 4

Dynamic and integrity test TS 16415:2013

Dynamic-Integrity-MULTIUSERS				Results																					
Configuration	Users tested	Hdrop		Fmax anchor		Maximum force on extremity n°1						Maximum force on extremity n°2 or after turn						Maximum dynamic deflection				Mass retained and kept	Mass increase to Mmax	Conformity	
		DCLIM1	DCLIM2	measured	measured	predicted	gap	conformity	Fbreaking cable	gap	conformity	measured	predicted	gap	conformity	Fbreaking cable	gap	conformity	measured	predicted	gap				conformity
GP1	2ème	S.O	1,70	6,43	14,07	14,00	-0,50	yes	39,80	35,35	yes	13,80	13,50	-2,17	yes	39,80	34,67	yes	2990	3000	0,33	yes	YES	YES	YES
	3ème	2,20	NA	7,51	15,12	14,70	-2,78	yes	39,80	37,99	yes	14,93	14,50	-2,88	yes	39,80	37,51	yes	3070	3050	-0,65	yes	YES	YES	YES
	4ème	2,20	NA	7,93	15,85	15,30	-3,47	yes	39,80	39,82	yes	15,64	15,00	-4,09	yes	39,80	39,39	yes	3095	3075	-0,65	yes	YES	YES	YES
	5ème	2,20	NA	8,24	16,64	16,50	-0,84	yes	39,80	41,81	yes	16,37	16,00	-2,26	yes	39,80	41,13	yes	3225	3150	-2,33	yes	YES	YES	YES
	6ème	2,20	NA	7,51	14,45	15,00	3,81	yes	39,80	36,31	yes	13,61	14,00	2,87	yes	39,80	34,20	yes	3490	3250	-6,88	yes	YES	YES	YES
	7ème	2,20	NA	9,18	16,57	17,00	2,60	yes	39,80	41,83	yes	15,04	15,50	3,06	yes	39,80	37,79	yes	3600	3400	-5,56	yes	YES	YES	YES
	8ème	2,20	NA	10,20	18,15	18,00	-0,83	yes	39,80	45,60	yes	16,52	16,50	-0,12	yes	39,80	41,51	yes	3630	3450	-4,96	yes	YES	YES	YES
GP2	2ème	S.O	1,50	6,22	13,75	15,00	9,09	yes	39,80	34,55	yes	13,34	14,00	4,95	yes	39,80	33,52	yes	3000	3000	0,00	yes	YES	YES	YES
	3ème	2,00	NA	6,47	13,45	14,50	7,81	yes	39,80	33,79	yes	13,20	13,50	2,27	yes	39,80	33,17	yes	3110	3010	-3,22	yes	YES	YES	YES
	4ème	2,00	NA	7,03	13,66	15,00	9,81	yes	39,80	34,32	yes	13,49	14,00	3,78	yes	39,80	33,89	yes	3180	3150	-0,94	yes	YES	YES	YES
	5ème	2,00	NA	7,53	13,95	16,00	14,70	yes	39,80	35,05	yes	13,58	15,00	10,46	yes	39,80	34,12	yes	3410	3400	-0,29	yes	YES	YES	YES
	6ème	2,00	NA	8,89	16,20	17,00	4,94	yes	39,80	40,70	yes	15,35	16,00	4,23	yes	39,80	38,57	yes	3460	3450	-0,29	yes	YES	YES	YES
	7ème	2,00	NA	9,67	17,41	18,00	3,39	yes	39,80	43,74	yes	16,45	17,00	3,34	yes	39,80	41,33	yes	3480	3500	0,57	yes	YES	YES	YES
	8ème	2,00	NA	10,17	18,21	19,00	4,34	yes	39,80	45,75	yes	17,23	18,00	4,47	yes	39,80	43,29	yes	3505	3525	0,57	yes	YES	YES	YES
GP3	2ème	S.O	1,70	7,62	15,46	15,00	-2,98	yes	39,80	38,84	yes	4,93	4,80	-2,64	yes	39,80	12,39	yes	3145	3200	1,75	yes	YES	YES	YES
	3ème	2,20	NA	6,87	13,21	14,00	5,98	yes	39,80	33,19	yes	4,53	4,60	1,55	yes	39,80	11,38	yes	3280	3300	0,61	yes	YES	YES	YES
	4ème	2,20	NA	8,03	13,72	14,50	5,69	yes	39,80	34,47	yes	5,28	5,50	4,17	yes	39,80	13,27	yes	3340	3375	1,05	yes	YES	YES	YES
	5ème	2,20	NA	8,27	13,87	15,00	8,15	yes	39,80	34,85	yes	5,34	5,70	6,74	yes	39,80	13,42	yes	3350	3400	1,49	yes	YES	YES	YES
	6ème	2,20	NA	8,64	14,86	15,75	5,99	yes	39,80	37,34	yes	5,41	5,90	9,06	yes	39,80	13,59	yes	3360	3420	1,79	yes	YES	YES	YES
	7ème	2,20	NA	9,26	15,63	16,50	5,57	yes	39,80	39,27	yes	5,14	5,60	8,95	yes	39,80	12,91	yes	3370	3430	1,78	yes	YES	YES	YES
	8ème	2,20	NA	9,59	16,38	17,00	3,79	yes	39,80	41,16	yes	5,73	6,00	4,71	yes	39,80	14,40	yes	3380	3450	2,07	yes	YES	YES	YES
GP4	2ème	S.O	1,50	5,99	15,02	16,00	6,52	yes	39,80	37,74	yes	3,54	4,00	12,99	yes	39,80	8,89	yes	2715	2600	-4,24	yes	YES	YES	YES
	3ème	2,00	NA	6,90	12,54	14,00	11,64	yes	39,80	31,51	yes	2,71	3,00	10,70	yes	39,80	6,81	yes	2820	2700	-4,26	yes	YES	YES	YES
	4ème	2,00	NA	7,27	13,64	14,50	6,30	yes	39,80	34,27	yes	2,57	2,70	5,06	yes	39,80	6,45	yes	2850	2750	-3,51	yes	YES	YES	YES
	5ème	2,00	NA	7,87	14,63	15,00	2,53	yes	39,80	36,76	yes	4,22	4,50	6,64	yes	39,80	10,60	yes	2970	2850	-4,04	yes	YES	YES	YES
	6ème	2,00	NA	9,11	15,14	15,50	2,38	yes	39,80	38,04	yes	3,82	4,00	4,71	yes	39,80	9,60	yes	3065	2925	-4,57	yes	YES	YES	YES
	7ème	2,00	NA	9,63	15,92	16,00	0,50	yes	39,80	40,00	yes	3,88	4,25	9,54	yes	39,80	9,75	yes	3085	2950	-4,38	yes	YES	YES	YES
	8ème	2,00	NA	10,75	17,91	17,00	-5,08	yes	39,80	45,00	yes	4,58	4,50	-1,75	yes	39,80	11,51	yes	3145	3125	-0,64	yes	YES	YES	YES

Dynamic-Integrity-MULTIUSERS				Results																						
Configuration	Users tested	Hdrop		Fmax anchor	Maximum force on extremity n°1							Maximum force on extremity n°2 or after turn							Maximum dynamic deflection				Mass retained and kept	Mass increase to Mmax	Conformity	
		DCLBNI	DCLDNI	measured	measured	predicted	gap	conformity	Breaking cable	gap	conformity	measured	predicted	gap	conformity	Breaking cable	gap	conformity	measured	predicted	gap	conformity				
PP1	2ème	S.O	1,70	9,28	15,44	16,50	6,87	yes	39,80	38,79	yes	14,89	16,00	7,45	yes	39,80	37,41	yes	855	900	5,26	yes	YES	YES	YES	
	3ème	2,20	NA	7,91	13,84	15,00	8,38	yes	39,80	34,77	yes	13,33	14,00	5,03	yes	39,80	33,49	yes	855	900	5,26	yes	YES	YES	YES	
	4ème	2,20	NA	8,01	14,22	15,50	9,00	yes	39,80	35,73	yes	13,67	14,30	4,61	yes	39,80	34,35	yes	855	900	5,26	yes	YES	YES	YES	
	5ème	2,20	NA	6,50	14,87	16,20	8,94	yes	39,80	37,36	yes	14,31	15,00	4,82	yes	39,80	35,95	yes	865	910	5,20	yes	YES	YES	YES	
	6ème	2,20	NA	6,96	15,85	17,20	8,52	yes	39,80	39,82	yes	15,24	15,25	0,07	yes	39,80	38,29	yes	875	930	6,29	yes	YES	YES	YES	
	7ème	2,20	NA	6,95	15,86	17,50	10,34	yes	39,80	39,85	yes	15,24	15,50	1,71	yes	39,80	38,29	yes	875	940	7,43	yes	YES	YES	YES	
	8ème	2,20	NA	7,55	17,00	18,00	5,88	yes	39,80	42,71	yes	16,35	17,00	3,98	yes	39,80	41,08	yes	895	950	6,15	yes	YES	YES	YES	
PP2	2ème	S.O	1,50	8,08	14,64	14,00	-4,37	yes	39,80	35,78	yes	14,21	15,00	5,56	yes	39,80	35,70	yes	785	750	-4,46	yes	YES	YES	YES	
	3ème	2,00	NA	9,42	14,12	13,50	-4,39	yes	39,80	35,48	yes	13,59	14,50	6,70	yes	39,80	34,15	yes	820	800	-2,44	yes	YES	YES	YES	
	4ème	2,00	NA	9,97	14,79	14,00	-5,34	yes	39,80	37,16	yes	14,23	15,00	5,41	yes	39,80	35,75	yes	820	810	-1,22	yes	YES	YES	YES	
	5ème	2,00	NA	10,37	15,28	14,50	-5,10	yes	39,80	38,39	yes	14,68	15,50	5,59	yes	39,80	36,88	yes	840	850	1,19	yes	YES	YES	YES	
	6ème	2,00	NA	10,90	15,48	14,80	-4,39	yes	39,80	38,89	yes	14,94	16,00	7,10	yes	39,80	37,54	yes	885	870	-1,69	yes	YES	YES	YES	
	7ème	2,00	NA	10,31	13,94	14,00	0,43	yes	39,80	35,03	yes	13,71	14,50	5,76	yes	39,80	34,45	yes	980	950	-3,06	yes	YES	YES	YES	
	8ème	2,00	NA	10,97	13,66	13,50	-1,17	yes	39,80	34,32	yes	13,55	14,00	3,32	yes	39,80	34,95	yes	1100	1000	-9,09	yes	YES	YES	YES	
PP3	2ème	S.O	1,70	8,31	8,41	10,00	18,91	yes	39,80	24,13	yes	1,62	NOT APLICABLE							1170	1150	-1,71	yes	YES	YES	YES
	3ème	2,20	NA	8,70	7,77	9,00	15,83	yes	39,80	19,52	yes	1,02								1170	1160	-0,85	yes	YES	YES	YES
	4ème	2,20	NA	7,92	8,92	10,50	17,71	yes	39,80	22,41	yes	1,09								1180	1170	-0,85	yes	YES	YES	YES
	5ème	2,20	NA	7,85	9,11	10,70	17,45	yes	39,80	22,89	yes	1,06								1190	1180	-0,84	yes	YES	YES	YES
	6ème	2,20	NA	8,36	9,25	10,90	17,84	yes	39,80	23,24	yes	1,02								1200	1190	-0,83	yes	YES	YES	YES
	7ème	2,20	NA	9,23	9,70	11,10	14,43	yes	39,80	24,37	yes	1,02								1210	1200	-0,83	yes	YES	YES	YES
	8ème	2,20	NA	9,51	10,07	11,30	12,21	yes	39,80	25,30	yes	1,01								1220	1210	-0,82	yes	YES	YES	YES
PP4	2ème	S.O	1,50	10,16	12,26	11,00	-10,28	yes	39,80	30,80	yes	3,95	4,00	1,27	yes	39,80	9,92	yes	745	750	0,67	yes	YES	YES	YES	
	3ème	2,00	NA	8,50	10,46	9,50	-9,18	yes	39,80	25,28	yes	2,62	3,00	14,50	yes	39,80	6,58	yes	745	750	0,67	yes	YES	YES	YES	
	4ème	2,00	NA	8,86	10,64	9,80	-7,89	yes	39,80	25,73	yes	3,17	3,50	10,41	yes	39,80	7,96	yes	745	750	0,67	yes	YES	YES	YES	
	5ème	2,00	NA	9,47	11,50	10,50	-8,70	yes	39,80	25,89	yes	3,06	3,25	6,21	yes	39,80	7,69	yes	755	760	0,66	yes	YES	YES	YES	
	6ème	2,00	NA	10,23	11,52	10,90	-5,38	yes	39,80	25,94	yes	3,04	3,20	5,26	yes	39,80	7,54	yes	765	770	0,65	yes	YES	YES	YES	
	7ème	2,00	NA	10,88	12,53	11,30	-9,82	yes	39,80	31,48	yes	3,73	3,80	1,88	yes	39,80	9,37	yes	775	780	0,65	yes	YES	YES	YES	
	8ème	2,00	NA	11,88	12,54	11,50	-8,29	yes	39,80	31,51	yes	3,50	3,60	2,86	yes	39,80	8,79	yes	785	790	0,64	yes	YES	YES	YES	

Dynamic-Integrity-MULTIUSERS				Results																							
Configuration	Users tested	Hdrop		Fmax anchor	Maximum force on extremity n°1							Maximum force on extremity n°2 or after turn							Maximum dynamic deflection				Mass retained and kept	Mass increase to Mmax	Conformity		
		D _{CL9N}	D _{CL12N}	measured	measured	predicted	gap	conformity	F _{breaking cable}	gap	conformity	measured	predicted	gap	conformity	F _{breaking cable}	gap	conformity	measured	predicted	gap	conformity					
VIRINT1	2ème	S.O	1,70	7,67	0,80	NOT APLICABLE							0,50	NOT APLICABLE							NOT APLICABLE				YES	YES	YES
	3ème	2,20	NA	6,01	0,00								0,00												YES	YES	YES
	4ème	2,20	NA	9,47	0,00								0,00												YES	YES	YES
	5ème	2,20	NA	10,31	0,00								0,00												YES	YES	YES
	6ème	2,20	NA	11,06	0,00								0,00												YES	YES	YES
	7ème	2,20	NA	11,51	0,00								0,00												YES	YES	YES
	8ème	2,20	NA	12,03	0,00								0,00												YES	YES	YES
VIREXT2	2ème	S.O	1,70	11,17	5,50	NOT APLICABLE							5,69	NOT APLICABLE							NOT APLICABLE				YES	YES	YES
	3ème	2,20	NA	9,90	4,66								4,66												YES	YES	YES
	4ème	2,20	NA	10,27	4,72								4,77												YES	YES	YES
	5ème	2,20	NA	10,19	4,72								4,75												YES	YES	YES
	6ème	2,20	NA	11,15	4,99								5,09												YES	YES	YES
	7ème	2,20	NA	11,76	5,19								5,34												YES	YES	YES
	8ème	2,20	NA	12,39	5,39								5,69												YES	YES	YES
VIOVERHEAD1	2ème	S.O	1,50	12,05	1,87	NOT APLICABLE							2,43	NOT APLICABLE							NOT APLICABLE				YES	YES	YES
	3ème	2,00	NA	10,19	1,41								2,12												YES	YES	YES
	4ème	2,00	NA	10,30	1,53								2,15												YES	YES	YES
	5ème	2,00	NA	9,90	1,48								2,67												YES	YES	YES
	6ème	2,00	NA	12,03	1,62								3,03												YES	YES	YES
	7ème	2,00	NA	12,79	1,69								3,20												YES	YES	YES
	8ème	2,00	NA	13,38	1,70								3,23												YES	YES	YES

Appendix 5

Static strength test EN 795:2012 and TS 16415:2013

STATIC	Particularity		Force	Résultats
Configuration	Articulation of mobile anchor on turn	Articulation of mobile anchor on intermediate anchor	F= 12 or 18kN 3 minutes	Conformity
GP1	YES	YES	19 kN for 8 people	YES
GP2	YES	YES	19 kN for 8 people	YES
GP3	YES	YES	19 kN for 8 people	YES
GP4	YES	YES	19 kN for 8 people	YES
PP1	YES	YES	19 kN for 8 people	YES
PP2	YES	YES	19 kN for 8 people	YES
PP3	YES	YES	19 kN for 8 people	YES
PP4	YES	YES	19 kN for 8 people	YES
TURNINT1	YES	YES	19 kN for 8 people	YES
TURNEXTT1	YES	YES	19 kN for 8 people	YES
TURNOVERHEAD1	YES	YES	19 kN for 8 people	YES