

Instruction manual for safety harnesses type C4, V4, C5, V5, V53, V55, V56, V6 certified according to EN 361 and EN 358

Dear customer,

thank you for choosing a harness from VERTIQUAL®!

Hereby you have purchased a high quality product that will reliably protect you and will be your companion for a long time when working at highs and lows. For your safety, please refer to the operating instructions below.

We wish you all the best with your new harness!

Product overview

C4 / C41



* C4 - Without positioning lanyard
C41 - With integrated positioning lanyard

V4 / V41



* V4 - Without positioning lanyard
V41 - With integrated positioning lanyard

C5



V5



V53



V55



V56



V6



ATTENTION!

This manual must be read and understood before using the product!

For work with a risk of falling: in heights and depths, a hazard assessment must be made on the basis of the DIN/EN, the respective valid regulations and the resulting stipulations of protective measures.

A safety harness may only be used by persons with special instructions when working at heights. Before the initial use, users of the PPEaF (Personal Protective Equipment against Fall) must be instructed in the correct and safe use! The performer of the work must be aware of the dangers and risks and be in a position to align his actions and decisions accordingly. The user must know the properties and limitations of this product, he must know and accept the risks associated with the use of this product. These operating instructions must be available to all users of this PPEaF. Beginners must be under the constant observation of experienced users of this PPE! Each user is responsible for the execution of his tasks as well as for his security. If he is unable to do so, if he does not have the appropriate knowledge, skills and powers, he can not use this PPEaF!

Before use, the integrity and compatibility of the equipment must be checked. If there is any uncertainty, the belt must be removed from circulation and the advice of the dealer or manufacturer must be obtained. We recommend using harnesses together with other components of the VERTIQUAL® series, thus guaranteeing a 100% compatibility of the parts!

Application area

Safety harnesses are parts of PPEaF systems and are used to protect persons in areas with risk of falling. Together with other tested and approved components, safety harnesses form a fall arrest system. The safety catches of these harnesses may only be used in conjunction with the following elements and devices:

- High altitude safety devices according to EN 360
- Revolving fall arresters on moving guide according to EN 353-2
- Abseiling and rescue equipment according to EN 341 and EN 1496
- Connecting means with belt damping device according to EN 354 + EN 355

The lateral positioning rings from the waist belt are allowed to be used only for positioning! It is strictly forbidden to use them as fall arrest rings! Use of the product is forbidden in environments which presents risk of explosion, where the equipment can have prolonged contact with fire or hot objects, where it can have contact with acids, concentrated alkalis, solvents, splash of incandescent metal or places where it can be subjected to electric arcs or severe mechanical shocks. The product is suitable to be used in the temperature range of -30°C and +50°C.

For the use of the fall arrest systems, ensure that the structures which are to be used for holding, striking or securing have a sufficiently high strength and no sharp edges. They must meet the requirements of EN 795. For your safety, we recommend to choose structures which can bear a minimum load of 12 KN.

The anchor point should be located above the user, so be positioned to avoid pendulum accidents and be able to withstand at least 12 KN.

Description and application

VERTIQUAL® safety harnesses consist of special, 45 mm wide, high-strength, textile belt straps.

The fittings are made of steel or a high-strength aluminum alloy. There are two main type of buckles: classic buckles (2 pair elements) and the automatic buckles (click mechanism). A full body harness consists of shoulder straps, chest, legs and waist straps.

At the intersection of the rear straps, in the shoulder area, is the dorsal fall arrest ring (marked with "A").

The fall arrest point in the chest area can be a central metal ring (for the V53, V55 and V56 harnesses) marked with "A", two textile loops (for the V5 and C5) marked with "A/2", or two metal rings, marked also with "A/2" for V6 harness. The "A/2" connection point can be used as a fall arrest point only when connected simultaneously! The combined full body harness. The thigh straps and shoulder straps can have paddings to increase comfort. The positioning rings, integrated in the waist belt, are to be used only for work positioning or for restraint purposes (preventing the user to reach areas with fall hazard).

There are two main categories of harnesses manufactured by Vertiquel Engineering: CHANTIER series, the name of the harness always contain the "C" marking (ex: C4 Dinamic, C5 Universal, ...) and the VERTIQUAL® series, which always contain the "V" marking at the beginning of the name (ex: V5 Endeavour, V53 Orbiter, ...). All VERTIQUAL® safety harnesses have a static minimum breaking load of 15 KN. For the VERTIQUAL® series of safety harnesses, in addition to the EN standard requirements (100 Kg test dummy), the "V" harnesses are voluntarily tested with a special test dummy of 150 kg. Therefore, the safety harnesses included in the "V" series can be used by persons with a body weight (including tools and equipment) of up to 140 kg. In this case, care must be taken to ensure that the connecting lanyard has a damping element which reduces the impact even under the current weight of the user below 6 KN! (ex: Vertiquel MAGNUM lanyards).

ATTENTION!

Before each use, an accurate check of the PPEaF and a functional test of all components must be carried out! In the case of recognizable damage, torn or worn seams, abrasion, incisions, discolorations, fire damage, hardening, rusted and/or deformed metal parts, incorrectly closing buckles and other abnormal modifications, the harness shall be discarded. Before the first use, the user should try and adapt the equipment. Care must be taken to ensure that the harness is adjusted to the body size of the user, but not too tight so as not to cause any constriction.

Proper placement of the safety harness follows the following steps:

- a. Hold the harness by the back eye and loosen the straps by gently rocking it up and down;
- b. Open all buckles, tighten the shoulder straps over the shoulders like a vest;
- c. Check all straps for correct fit, close and tighten the chest strap;
- d. On the V53, V55, V56 the one half (left side) of the chest strap is guided through the breast eyelet (right side) and closed with the matching counterpart;
- e. The thigh straps are pulled through the crotch, closed at the front and adjusted their appropriate length;
- f. Check chest strap, shoulder straps, straps for correct fit, adjust if necessary;
- g. The buckles must be correctly fastened and locked, the straps must not be twisted, all straps should be secured with the plastic or rubber sliders;
- h. The harness has the proper fit when the rear retention eye between the shoulder blades and the front attachment point are located in the lower-middle area of the sternum. The straps are so tight that two fingers fit between them and the body. In order to check the correct fit and the correct setting, a hanging test may be carried out on the ground, before starting work.

In case of a combined full body harness which includes an 85mm waist belt (ex: V55 Sequoia), next steps need to be followed:

1. Insert the end of the webbing through both rectangle rings of the buckle according to Fig. 1
2. Turn back the end of the webbing between the 2 rectangle rings, acc. Fig. 2A and 2B and tighten it until the proper adjustment is acquired, after that you just need to fit the end of the webbing through the double pin buckle, and fix it in place.

Avoid contact of the equipment with sharp objects, greases and oils, corrosive and corrosive chemicals, with heat and metal sprayers.

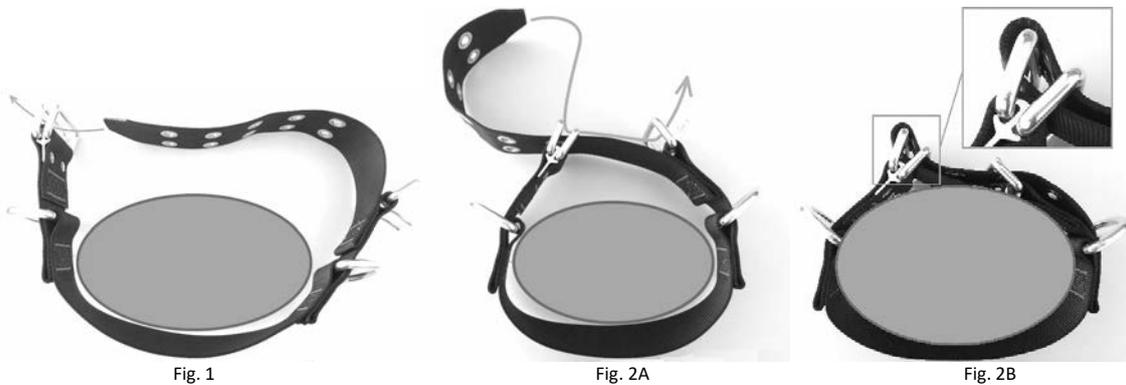


Fig. 1

Fig. 2A

Fig. 2B

Rescue!

Working on jobs that are at risk of dying requires good health, good physical fitness, good training in the use of work equipment and rescue equipment, as well as the correct assessment of the risks. A rescue plan has to be prepared for the respective site (risk assessment) before each use. A necessary rescue must be ensured and a rescue team should be ready for use in a very short time.

Attention!

1. This equipment may not be modified or supplemented with manufacturer-independent parts!
2. This equipment is designed and manufactured only for use as personal protective equipment, all other operations are prohibited!
3. For safety reasons, each user shall use his own personal protective equipment against falls as well as his own equipment for holding and saving.
4. The user must be familiar with the function of the equipment. If in doubt, ask the manufacturer for advice.

The equipment must be taken out of use if:

1. The marking/label is missing or unreadable.
2. A strong wear and tear is present, damage is visible (cracks, incisions, worn seams, discoloration, hardening, rusted or deformed metal parts, defective buckles, other malfunctions).
3. Contact with paints or other, unknown chemicals has occurred or there are strong, irreversible impurities.
4. A fall or other heavy load of the equipment came about.
5. The integrity of the equipment is questioned, the use and application history has gaps.
6. The equipment was longer than 10 years in use.

In general, in the case of uncertainties and doubts, please sort the equipment and send it together with the test book to the manufacturer for inspection.

Period of use! The period of deployment of the safety harness is reached under normal conditions after 6-8 years, but maximum after 10 years * from the date of the first use. The storage of new, unused products under optimal conditions (darkness, dryness, constant temperature) should not exceed 2 years. The first use must be noted in the test book!

* Harnesses belonging to a single user, subjected to periodic inspections by experts and recorded in the test book, carefully handled and maintained, properly stored, not in contact with oils, greases or aggressive chemicals, not overly much in use, can be used up to 10 years. Intense use, severe and stressful working conditions, incorrect application, faulty maintenance and care can greatly shorten the service life of the equipment. Some events, such as case exposure, severe heat, contact with corrosive chemicals, may limit the use of your equipment to a single time. The duration of the equipment is terminated when one of the cases referred to in the previous chapter arrives, or if the assessor decides on the basis of other facts.

Storage, care and transport!

The equipment should be stored in a dry, well-ventilated and cool place, if possible in the original packaging or in a special textile bag/box. The PPEaF is to protect against UV radiation, heat, solar radiation, sparks, metal drops, chemicals, sharp objects, heat sources, dust, cement, oils and greases and any kind of contaminants. Metal parts can be blown clean with compressed air. If necessary, the textile parts can be washed with lukewarm water at 30 ° C. and then rinsed thoroughly with clean water. The drying of wet equipment should be done in a closed, well-ventilated room, far from any direct heat source and suspended. The equipment is then loosely laid, packed in its storage bag. The transport of the equipment is best done in a transport bag or transport box.

Inspection!

The user must carefully check his equipment before each use. The equipment must also be observed during operation and checked after use! The equipment must be inspected at least once every 12 months, by a competent person, in accordance with the manufacturer's instructions, and this operation must be documented. The frequency of the checks depends on the intensity and duration of the missions. Difficult working conditions and intensive use require more frequent checks. In addition, manufacturer-specific specifications may apply.

For your safety, we recommend checking every 6 months. It is also recommended to have this equipment checked in the VERTIQUAL® service center or a VERTIQUAL® partner. Your equipment is thus included in our database and you will get a detailed checklist after each test of your equipment. The test result is also entered in your test book.

Marking! All equipment of VERTIQUAL® PPEaF is marked with a label. The label includes the name of the manufacturer, the model of the product, the month and year of manufacture, the standard after which the product has been certified, the certification body code, the CE marking, the requirement to read and observe the operating instructions and the individual serial number of the product. The label must be present and always readable!

Checkbook! Each equipment has its own test book, which must always be kept together with it and sent to the inspection department. The test book contains important data from the PPEaF and has to be filled in and signed by the examiner. The user must complete the test book before the first use and document the date of the first assignment.

Repair! Repairs, modifications, additions to the equipment may only be carried out by the manufacturer!

