



# USER INSTRUCTION MANUAL FULL BODY HARNESSES

THESE INSTRUCTIONS APPLY TO THE FOLLOWING MODELS:

AFH300101, AFH301101, AFH301102, AFH300103, AFH300121, AFH300122, AFH300250, AFH300251, AFH300402, AFH300403, AFH300405, AFH300102, AFH300104, AFH300201, AFH300202, AFH300203, AFH300401, AFH300204, AFH300051, AFH300053, AFH300054, AFH300055, AFH300056, AFH300057, AFH300058

C E 0598 EN 361:2002 EN 358:2018



Please read and understand the manufacturer's instructions for each component or part of the complete system. Manufacturer's instructions must be followed for proper use, care, and maintenance of this product. These instructions must be retained and be kept available for the user's reference at all times. Alterations or misuse of this product, or failure to follow instructions, may result in serious injury or death.

Note: The user is advised to keep this user instructions document for the life of the product.

- INTRODUCTION: These full body harnesses (as mentioned below) are classed as Personal Protective Equipments (PPE's) by the European PPE Regulation (EU) 2016/425 and have been shown to comply with this Regulation through the Harmonized European Standard EN 361:2002, EN 358:2018, EN 358:2018, EN 354:2010 & EN 355:2002.
- INSTRUCTIONS: These full body harnesses are designed to minimize the risk of/provide protection against the danger of falling from heights. However, always remember that no item of PPE can provide full protection and care must always be taken while carrying out the risk related activity.
- 3. **PERFORMANCE AND LIMITATIONS OF USE:** This product has been tested in accordance with EN 361:2002, EN 358:2018, EN 354:2010 & EN 355:2002. and has achieved the following performance levels :

EN 361:2002 test	Result/Comment
Clause 4.1 Design and Ergonomics	Achieves required performance requirement
Clause 4.2 Material & Construction	Achieves required performance requirement
Clause 4.3 Static strength	Achieves required performance requirement
Clause 4.4 Dynamic Performance	Achieves required performance requirement

EN 358:2018 test	Result/Comment		
Clause 4.1 Design, Construction and Ergonomics	Achieves required performance requirement		
Clause 4.2 Materials	Achieves required performance requirement		
Clause 4.4 Static Strength	Achieves required performance requirement		
Clause 4.5 Dynamic Strength	Achieves required performance requirement		
Clause 4.6 Corrosion Resistance	Achieves required performance requirement		

EN 354:2010 test	Result/Comment		
Clause 4.1 Design and Ergonomics	Achieves required performance requirement		
Clause 4.2 Material & Construction	Achieves required performance requirement		
Clause 4.5 Static strength	Achieves required performance requirement		

EN 355:2002 test	Result/Comment
Clause 4.1 Design and Ergonomics	Achieves required performance requirement
Clause 4.2 Materials & Construction	Achieves required performance requirement
Clause 4.3 Static preloading	Achieves required performance requirement
Clause 4.4 Dynamic performance	Achieves required performance requirement
Clause 4.5 Static strength	Achieves required performance requirement

**Note:** Maximum Rated Load for the Harnesses is 140 Kg. including all tools (the corresponding models bear marked labels) and it is essential to use only 140 Kg compatible energy absorbing lanyards with these harnesses.



# 4. PRODUCT DESCRIPTION:-

CODE	CATEGORY	DESCRIPTION	STANDARDS
AFH300101	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH300102	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH301101	KAPTURE ESSENTIAL	FULL BODY HARNESS WITH TWISTED ROPE LANYARD ATTACHED	EN 361:2002 (HARNESS) and EN 354:2010 (Lanyard)
AFH301102	KAPTURE ESSENTIAL	FULL BODY HARNESS WITH SHOCK ABSORBING LANYARD STITCHED	EN 361:2002 (HARNESS) and EN 355:2002 (Lanyard)
AFH300103	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH300104	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH300121	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002, EN 358:2018
AFH300122	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002, EN 358:2018
AFH300201	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH300202	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH300203	KAPTURE ELITE	FULL BODY HARNESS WITH RESCUE LOOPS	EN 361:2002
AFH300204	KAPTURE ELITE	FULL BODY HARNESS	EN 361:2002
AFH300250	KAPTURE ELITE	FULL BODY HARNESS WITH WORK POSITIONING BELT	EN 361:2002, EN 358:2018
AFH300251	KAPTURE ELITE	FULL BODY HARNESS WITH WORK POSITIONING BELT	EN 361:2002, EN 358:2018
AFH300401	KAPTURE EPIC	FULL BODY HARNESS	EN 361:2002
AFH300402	KAPTURE EPIC	FULL BODY HARNESS WITH WORK POSITIONING BELT	EN 361:2002, EN 358:2018
AFH300403	KAPTURE EPIC	FULL BODY HARNESS WITH WORK POSITIONING BELT	EN 361:2002, EN 358:2018
AFH300405	KAPTURE EPIC	FULL BODY TOWER HARNESS	EN 361:2002, EN 358:2018



CODE	CATEGORY	DESCRIPTION	STANDARDS
AFH300051	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH300053	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH300054	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH300055	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH300056	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH300057	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002
AFH300058	KAPTURE ESSENTIAL	FULL BODY HARNESS	EN 361:2002 & EN 358:2018

5. MATERIAL USED: Material of webbing used in these harnesses is High Tenacity Polyester.



# 6. FREE FALL:

Personal fall arrest systems used with this equipment must be rigged to limit the free fall to 4.0 M as per EN 361:2002. Restraint systems must be rigged as per EN 354:2010 so that no vertical free fall is possible. Work positioning systems as per EN 358:2018 must be rigged so that free fall is limited to 1m or less. Personnel riding systems must be rigged so that no vertical free fall is possible. Climbing systems must be rigged so that free fall is limited to 2L+1 or less. Rescue systems must be rigged so that no vertical free fall is possible. Climbing systems must be rigged so that free fall is limited to 2L+1 or less. Rescue systems must be rigged so that no vertical free fall is possible. See subsystem manufacturer's instructions for more information. Below figure illustrates fall clearance requirements. There must be sufficient clearance below the user to allow the system to arrest a fall before the user strikes the ground or other obstruction. Clearance required is dependent on the following factors:

> Connecting Subsystem (Energy Absorbing Lanyard Shown)

Lower Level or Obstruction

Free Fall 4 mts max as per

Total Fall Distance Free Fall (D) +

B Working Level

EN 361:2002

E Deceleration Distance

Deceleration (E)

С

D

F

- Elevation of Anchorage
- Connecting Subsystem Length
- Deceleration Distance
- Free Fall Distance
- Worker Height
- Movement of Harness Attachment
   Element

# 7. SWING FALLS:

Swing falls occur when the anchorage point is

not directly above the point where a fall occurs. The force of striking an object in a swing fall may cause serious injury or death. Minimize swing falls by working as close to the anchorage point as possible. Do not permit a swing fall if injury could occur. Swing falls will significantly increase the clearance required when a self retracting lifeline or other variable length connecting subsystem is used.



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## 8. EXTENDED SUSPENSION:

A full body harness is not intended for use in extended suspension applications. If the user is going to be suspended for an extended length of time it is recommended that some form of seat support be used. KStrong recommends an Easy seat. Contact KStrong for more information on this item.

## 9. ENVIRONMENTAL HAZARDS:

Use of this equipment in areas with environmental hazards may require additional precautions to prevent injury to the user or damage to the equipment. Hazards may include, but are not limited to; heat, chemicals, corrosive environments, high voltage power lines, gases, moving machinery, and sharp edges.

# 10. COMPATIBILITY OF COMPONENTS:

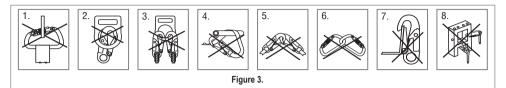
Unless otherwise noted, KStrong equipment is designed for use with KStrong approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may affect safety and reliability of the complete system.

## 11. COMPATIBILITY OF CONNECTORS:

Connectors are considered to be compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Connectors (hooks, karabiners, and D-rings) must be capable of supporting at least 23 kN. Connectors must be compatible with the anchorage or other system components. Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage (see Figure 3). Connectors must be compatible in size, shape, and strength. double locking snap hooks and karabiners are required by EN 362:2004.



NOTE: Large throat opening snap hooks should not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates. Large throat snap hooks are designed for use on fixed structural elements such as rebar or cross members that are not shaped in a way that can capture the gate of the hook. (Refer 7 & 8)

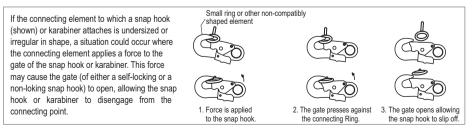


#### 12. MAKING CONNECTIONS:

- Use only double locking snap hooks and arabiners (as per EN362:2004) with this equipment. Only use connectors
  that are suitable to each application. Ensure all connections are compatible in size, shape and strength. Do not use
  equipment that is not compatible. Ensure all connectors are fully closed and locked.
- KStrong connectors (snap hooks and karabiners) are designed to be used only as specified in each product's user's
  instructions. See Figure 3 for illustration of the inappropriate connections stated below. KStrong snap hooks and
  karabiners should not be connected:
  - In a manner that would result in a load on the gate.
  - In a false engagement, where features that protrude from the snap hook or karabiners catch on the anchor and without visual confirmation seems to be fully engaged to the anchor point.
  - To a D-ring to which another connector is attached.
  - To any object which is shaped or dimensioned such that the snap hook or karabiners will not close and lock, or that roll-out could occur.
  - Directly to webbing or rope lanyard (as per EN355:2002) or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allow such a connection) to each other.

#### 13. OTHER RESTRICTIONS:

- Do not make connections where the hook locking mechanism can come into contact with a structural member or other equipment and potentially release the hook.
- Do not connect a snap hook into a loop or thimble of a wire rope or attach in any way to a slack wire rope.
- The snap hook must be free to align with the applied load as intended (regardless of the size or shape of the mating connector)
- A karabiner may be used to connect to a single or pair of soft loops on a body support such as a body belt or full body
  harness, provided the karabiner can fully close and lock. This type of connection is not allowed for snap hooks.
- A karabiner may be connected to a loop or ring connector that is already occupied by a choker style connector. This
  type of connection is not allowed for snap hooks.





#### 14. CONNECTING SUB-SYSTEMS:

Connecting subsystems (self-retracting lifeline, lanyard, Rope Grab and lifeline, cable sleeve) must be suitable for your application. See subsystem manufacturer's instructions for more information. Some harness models have textile loops connection points. Use a snap hook or double locking karabiners (as per EN362:2004) to connect to a textile loop. Ensure the karabiners cannot cross-gate load (load against the gate rather than along the backbone of the karabiners). Some lanyards are designed to choke onto a textile loop to provide a compatible connection. Lanyards (as per EN355:2002), may be sewn directly to the web loop forming a permanent connection. Do not make multiple connections onto one textile loop, unless choking two lanyards onto a properly sized web loop and is permitted by manufacturer.

#### 15. RESCUE PLAN:

Rescue operation must be performed by the trained and competent personal. The rescue operation must be performed under the supervision of the rescue expert team or personal. It is advised that while working on site work in pairs. Before going for the work the user must have the rescue plan according to the work.

#### 16. IF EQUIPMENT IS SUBJECTED TO A FALL:

Remove the equipment from service immediately if it has been subjected to the forces of a fall arrest. Contact your distributor or KStrong about policies regarding replacement of KStrong components involved in a fall.

#### 17. SPECIFIC INSTRUCTIONS:

KStrong harness is designed to arrest the victim of fall and hold the user till the rescue process has been performed, till then the harness needs to be attached to the anchorage through a proper attachment system. So this is important that the whole system must have all the essential components before going for the use. The whole fall arrest system must be used by the trained/competent person. It is advisable to make a checklist of the essential components according to one's use before going for work.

## 18. USE OF FALL ARREST SYSTEM:

The fall arrest system MUST ONLY be connected to the back attaching element on the harness provided for the purpose ("D" ring or webbing attachment extension) or to the chest anchorage points (webbing link or "D" link). The chest anchorage points must imperatively be used together. The D-rings on the belt and the ventral anchorage point must only be used for the attachment of a work

positioning or retaining system and never with a fall arrest system. During use, check regularly the adjustment and/or attachment points.

## 19. INSTRUCTIONS FOR USE :

- This class of products consist of Full Body Harnesses of various types incorporating Work Positioning Belts within the system. Thus the user gets the option of using the equipment both for fall arrest as well as for work positioning.
- For Work Positioning, it is essential for safety of a user to use an anchor point positioned at or above waist level. The lanyard should be kept taut as shown in figure.
- Ensure that the anchor point is always above the head of the user.
- Ensure that the medical conditions of the user is fit for using the equipment.
- Equipment shall be used by a person trained and competent in its safe use.
- A rescue plan needs to be established to deal with any emergencies that could arise during the work.
- Do not make 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.
- The equipment shall not be used, outside its limitations, or for any purpose other than for which it is intended.





- The equipment needs to be a personnel issue item.
- Ensure compatibility of all other products used with the equipment when assembled into a system.
- Ensure while choosing the combination of items that safe function of one item is not affected by or interferes with the safe function of another.
- The user should 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.
- Check that metal components are not rusted or mechanically distorted, the webbing should not have cuts or frays & that the stitching is not damaged anywhere.
- Withdraw the equipment from use if there is any doubt about it's condition for safe use or if it has already arrested a
  fall and do not use it again until confirmed in writing by a competent person.
- Ensure that the anchor point is strong enough & has a minimum strength for Metal 12kN & for Textile 18kN.
- Connect to the reliable anchor point using lanyards (as per EN355:2002), Hooks (as per EN362:2004) etc.
- The harnesses essentially have two types of attachment elements. All fall arrest attachment elements are marked 'A', these can be connected to fall arrest lanyards, retractable fall arresters etc. Where attachment elements are marked 'A/2', two of these have to be used together connected by a Karabiner to fall arrest systems. The other attachment elements provided at the sides of the waist are to be essentially used for only work positioning & not fall arrest. They need to be connected to Work Positioning Lanyards only.
- Ensure that the anchor point is always above the head of the user.
- A full body harness is the only acceptable body holding device that can be used in a fall arrest system.
- It is essential to verify the free space required beneath the user at work place before each occasion of use, so
  that in the case of a fall, there will be no collision with the ground while using with a sub-system e.g. energy
  absorber or fall arrester.
- Avoid using the product in extreme temperature, trailing or looping of lanyards or lifelines over sharp edges, chemical reagents, cutting, abrasion, climatic exposure & pendulum falls.
- Ensure that during transportation, the product is preferably packed in manufacturer's, original packing or in a sealed polybag.
- The life span of the product is 10 years but annual inspection is important to check if any damages have occurred during usage.
- If the product is re-sold outside the original country of destination, the reseller shall provide instructions for use, for maintenance for periodic examinations & for repair in the language of country of sale.
   Note: Work positioning belt attached with harness is approved for a user, including tools and equipment, with a weight of up to 150kg.

## 20. PROPER HARNESS FIT:

It is extremely important that your harness fits and is properly adjusted. Failure to do so can result in Serious injury or death, and proper connection of both types of straps is essential to fall safety. After donning a harness, make sure to check:

- Chest Strap: Should be positioned in the middle of your chest [6" (152mm) to 8" (203mm) below the trachea but not below the sternum]. If the chest strap is positioned too high, the strap may move upwards during a fall arrest causing you to run the risk of strangulation. If the chest strap is too low or not connected at all, you could fall out of your harness during a fall.
- Leg Straps: Proper adjustment of the leg straps is critical for safety. Leg straps should be snug, but not snug to the
  point that they obstruct normal blood circulation in the legs. Failure to wear leg straps will not secure your body
  within the harness during a fall and could lead to serious injury or death.
- Sub-Pelvic Strap: Provides support in the event of a fall, and also provides support when used for positioning. In a
  seated position, the sub pelvic strap should comfortably provide a "seat" for the buttocks. In the event of a fall, simply
  lift up your legs to transfer weight to the sub-pelvic strap.



- Suspension Test: User is advised to proper fit the harness & carry out a suspension test on safe place to check the
  harness is suitably sized, properly donned, has sufficient adjustment, every strap is positioned on its intended area, is
  of an acceptable comfort level for the intended use.
- Size: The full body harness is of S-M, L-XL, XXL+ size.
   Size of the Waist Belt of AFH300250, AFH300251, AFH300402, AFH300403 ranges from 70 cm to 120 cm.

#### How to wear a full body harness:



Untangle the harness by holding it from the dorsal D-ring.



Close the buckles of the leg straps & tighten them by pulling the free ends of the straps until the harness fits perfectly to the body.



Insert your arms into the shoulder straps



Close the buckle on the chest strap.



close the buckle on the waist belt.





Pull the leg straps one by one around your thighs outwards to your front.



Step 7



Close the buckles of the leg. To check & adjust all the straps of the harness to your body adjustment, refer to Step 7 to Step 10.

Note: To locate the anchor points on the harness, check for the "A" marking near them. The harness with front anchor point can be used in specific situations along with a fall arrester that needs a front attachment point. While in use, it is important to regularly check fastening and adjustment elements of the harness.

## 21. INSTRUCTIONS FOR PERIODIC EXAMINATION:

- The product should be necessarily examined as the safety of the user depends upon the continued efficiency and durability of the equipment.
- It needs to be inspected at least once a year.
- Periodic examination are to be conducted by a competent person and strictly in accordance with manufacturer's procedures.
- It is important to check the legibility of the markings during inspection.
- 22. INSTRUCTIONS FOR REPAIR: The product has no repairable features hence the manufacturer does not allow any repair that can be carried out on the product whatsoever.



#### 23. INSTRUCTIONS FOR MAINTENANCE :

- In case of minor soiling, wipe the harness with cotton cloth or soft brush. Do not use abrasive material. For intensive cleaning, wash the harness in water at temperature not more than 40°C using a neutral detergent (pH7).
- If the equipment become wet either from being in use or when due to cleaning, it should be allowed to dry naturally
  and should be kept away from heat.
- Preferably store in a cool dry place packed in sealed polybags, and away from damp environment, sharp edges, vibrations, ultra violet rays.

# 24. HOW TO DISPOSE A HARNESS:

When the harness becomes unfit or in case of any wear and tear, dispose the harness immediately. Follow the steps for Disposal:

- Segregate the equipment in three different crates for placing components in them respectively as-Textile, Metal and Plastic.
- Hold the Harness from Dorsal D-ring.
- Inspect the wear & tear present on the Harness.
- Now, using a sharp pair of scissors first cut the Textile and dismantle the harness.
- Now remove the metal & plastic components separately from the harness.
- Put the Textile, Plastic & Metal components in their respective plastic crates.

#### 25. WARNINGS:

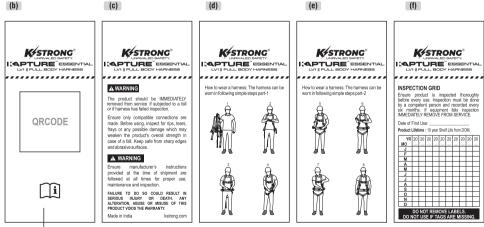
- Ensure the Medical condition of the user does not affect his safety in normal and emergency use.
- A rescue plan shall be in place to deal with any emergencies that could arise during the work.
- It is essential for the safety of the user that if a product is re-sold outside the original country of destination the reseller shall provide instructions for use for maintenance, for periodic examination and for repair in the language of the country in which the product is sold.
- The equipment shall not be used outside its limitation, or for any purpose other than that for which it is intended.
- The device should be used with appropriate combinations only. The user should not make any combination which compromises safe function of any other devices used in combination or entire fall protection system or rescue system.
- In the event of fall, the system must have a shock absorbing unit intact, which shall limit the maximum fall arrest load upto 6kN. After the fall, the victim must be rescued within 15 min of the fall to avoid jamming of blood vessels caused by stress. This is referred as state of Suspension Trauma, which can lead to serious injury or death.
- While using a work positioning system, the user normally relies on the equipment for support, therefore it is essential to consider the need of using a back-up e.g. fall arrest system.

Note: The Rescue Harness Attachment shall not be used in a fall arrest system.

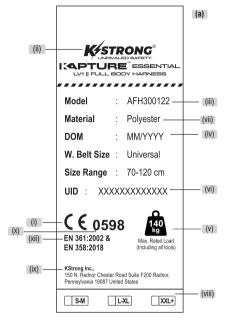


- 26 MARKING ON PRODUCT: The Full Body Harnesses are marked with the following information:
  - Main Product Label (a)
    - The CE mark showing that the product meets the (i) requirements of the European PPE Regulation (EU) 2016/425
    - Trademark of the manufacturer (ii)
    - Type or product code (iii)
    - Month and Year of Manufacture (iv)
    - Pictogram showing max. rated load (v)
    - UID for Traceability (vi)
    - (vii) Material
    - (viii) Size
    - Identification of the manufacturer and address (ix)
    - Number of the ongoing assessment body (x)
    - Pictogram that indicates to read the instructions (xi)
    - (xii) Number of the standard
  - (b) **OR** codes
  - (c) Warning for Harness
  - (d) How to wear a harness Part-1
  - How to wear a harness Part-2 (e)
  - Inspection Grid Label (f)





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**LIFESPAN:** The estimated product Lifespan is 10 years from the date of manufacture. The following factors can reduce the Lifespan of the product: intense use, contact with chemical substances, specially aggressive environments, extreme temperature exposure, UV exposure, abrasions, cuts, violent impacts, bad use or maintenance.

**DISCLAIMER:** Prior to use, the end user must read and understand the manufacturer's instructions supplied with this product at the time of shipment and seek training from their employer's trained personnel on the proper usage of the product. Manufacturer is not liable or responsible for any loss, damage or injury caused or incurred by any person on grounds of improper usage or installation of this product.

EQUIPMENT RECORD						
Product						
Model & type/Identification		Trade Name		Identification number		
Manufacturer		Address		Tel, email into use		
Year of manufacture	Year of manufacture Purchase Date		f manufacture Purchase Date Date first pu		put into use	
Other relevant infor	Other relevant information (eg. document number)					
PERIODIC EXAMINATION AND REPAIR HISTORY						
Date	Reason for entry (periodic examination or repair)	Defects noted, repairs carried out and other relevant information	Name and signature of competent person		Periodic examination next due date	

# Certification Body :

SATRA Technology Europe Ltd, Bracetown Business Park, Clonee, Dublin D15 YN2P Ireland (Notified Body 2777)

#### Ongoing Assessment Body:

SGS Fimko Oy, Takomotie 8, FI-00380 Helsinki, Finland (Notified Body 0598)

For EU Declaration, please visit https://kstrong.com/asia/eu-declaration-form/



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