



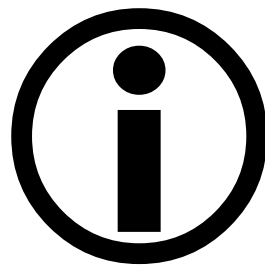
**CROATIAN INSTITUTE FOR HEALTH
PROTECTION AND SAFETY AT WORK**



PERSONAL PROTECTIVE EQUIPMENT AGAINST FALL FROM HEIGHT

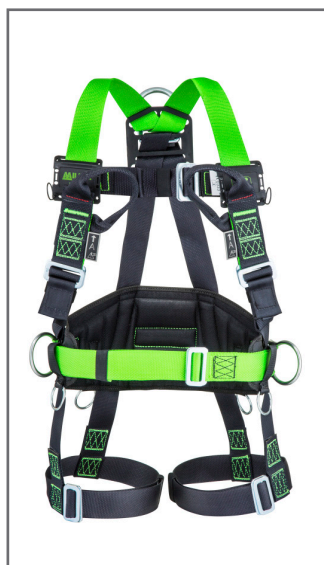
**Series of Flyers
Education for Better Health Protection
and Safety at Work**

USE OF PERSONAL PROTECTIVE EQUIPMENT AGAINST FALL FROM HEIGHT



- at risk of fall from height or in depth
- when no other protective measures are applicable

MAIN PARTS



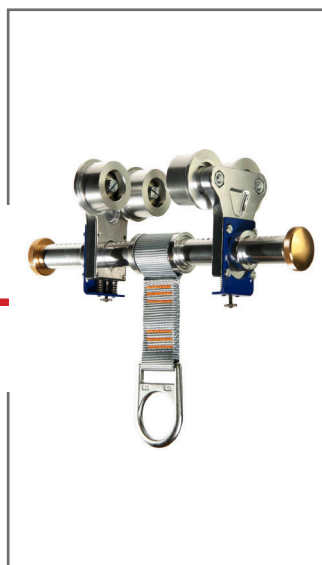
**SAFETY
HARNESS**

+



**CONNECTING
ELEMENTS**

+



**ANCHOR
DEVICE**

Selection of equipment depends on

- place of work
- assessed risk

SAFETY HARNESSES

- fastens worker to other parts of the equipment

Waist belt



Full body harness



Combined body harness



©2016 Photo courtesy of CMC Rescue

Sit harness



Connection points:

A front **B1 B2** side **C** chest **D** back

Inspecting correctness



Fall indicator



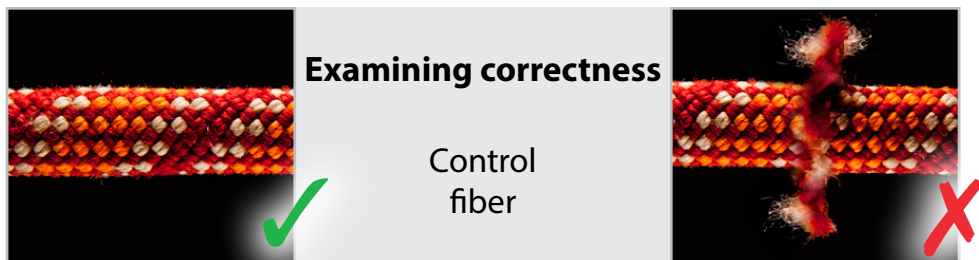
©2016 Photo courtesy of CMC Rescue

CONNECTING SAFETY



ROPE OR LANYARD

- interconnects harness and connecting



CONNECTORS AND HOOKS

- Connect parts of the equipment

Marking example



30
kN

10
kN

11
kN



The highest load

FALL ARRESTING SYSTEM – ENERGY ABSORBER

- absorbs kinetic energy during fall
- restrains maximum arresting force to 6 kN
- maximum absorber length, including connectors, up to 2 m

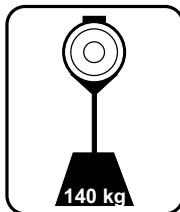
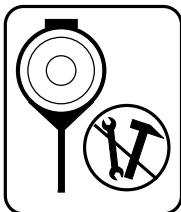
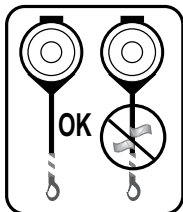
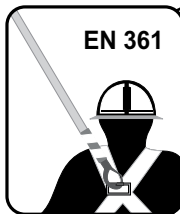
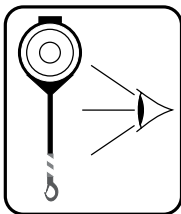
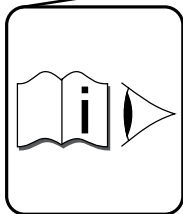
**Inspecting
correctness**



FALL ARRESTING DEVICE

- blocks fall and arrests worker in hanging position

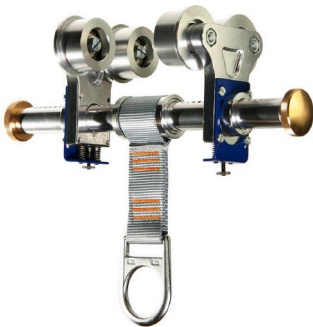
Post the device above worker's head



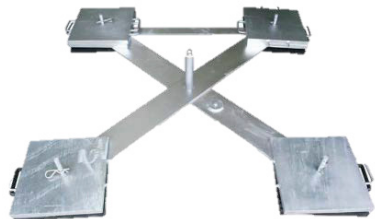
ANCHOR DEVICE

- Connects equipment parts with bearing structure

Portable anchoring device fastened to solid structure (class B)



Portable anchoring device fastened to horizontal surface (class E)



NORMS

- prescribe characteristics related to applicability and safety of equipment

HRN EN 361	PPE against falls from a height - Full body harnesses
HRN EN 813	Personal fall protection equipment – Sit harnesses
HRN EN 358	PPE for work positioning and prevention of falls from a height – Belts for work positioning and restraint and work positioning lanyards
HRN EN 354	Personal fall protection equipment - Lanyards
HRN EN 1891	PPE for the prevention of falls from a height - Low stretch kernmantel ropes
HRN EN 362	PPE against falls from a height - Connectors
HRN EN 355	PPE against falls from a height – Energy absorbers
HRN EN 360	PPE against falls from a height – Retractable type fall arresters
HRN EN 795	Personal fall protection equipment – Anchor devices *
HRN EN 365	PPE against falls from a height - General requirements for instruction for use, maintenance, periodic examination, repair, marking and packaging

*restricted by comission implementing decision EU 2015/2181

EQUIPMENT MAINTENANCE

EXAMINING FUNCTIONALITY, DAMAGES, CLEANNESS AND READABILITY OF MARKS

- **before use**

visual



tactile



- **periodically**

at least
once
a year



documented



CLEANING

- warm water
- no use of chemical agents

STORAGE

- in dry and airy place
- away from direct sun light
- freely hanged

TRANSPORTATION

- in special cases or bags



EFFICIENT PROTECTION AGAINST FALL FROM HEIGHT



CORRECT EQUIPMENT



EDUCATED AND TRAINED WORKER

Image sources:

www.honeywellsafety.com/MEI/News_and_Events/Press_Releases/HONEYWELL_LAUNCHES_NEW_FALL_PROTECTION_HARNESSES_FOR_UTILITIES_SECTOR.aspx www.petzl.com/LU/en/Professional/Connectors/GO#.V9jqUmXV-No www.kong.it/en/2-products/items/f1-carabiners/p525-queedy www.rescuedirect.com/Merchant2/merchant.mvc?Screen=PROD&Product_Code=202822 www.climbingtechnology.com/en/professional-work/connectors/large-en1/large-sg-karam.in/india/fall_protection/lanyards/energy_absorbing_fall_arrest_lanyards/pn_400.htm superanchor.com/energyAbsorbers.php superanchor.com/selfRetractingLifeline.php guardianfall.com/performance-safety-products/anchor-points/product/beamer-trolley-anchor www.ashireland.ie/mobile-anchor.htm www.cresto.se/en/Products/ResQ_Raddningsutr.html

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