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ROPE ACCESS EQUIPMENT ESSENTIALS & BEST PRACTICES

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ASSOCIATION OF INDUSTRIAL ROPE ACCESS OF NIGERIA (AIRAN)



EQUIPMENT SELECTION

Planning for a task should include the selection of appropriate equipment. Equipment should be selected based on its suitability for purpose, with reference to appropriate standards (some countries may have specific requirements) and manufacturer's recommendations.

See ICOP [TC-102] Part 2, 2.7.

ASSOCIATION OF INDUSTRIAL ROPE ACCESS OF NIGERIA (AIRAN)

CARE AND MAINTENANCE OF EQUIPMENT

Over its lifetime, rope access equipment is subject to conditions that may cause deterioration in strength or performance. Such factors include wear and tear, abrasion, extremes of temperature, ultra-violet light and certain chemicals. Therefore, all equipment should be subjected to regular inspections, which fall into three types: pre-use checks, detailed inspections and interim inspections. Items have to be identifiable so that they can be traced back to relevant inspection records and certificates.

See ICOP [TC-102] Part 2, 2.8, 2.10 and Part 3, Annexes H, I and J. and TACS 6.3.2.1



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ROPE ACCESS EQUIPMENT:HARNESS



❖ DESCRIPTION

It securely attaches the worker to the rope.

❖ EUROPEAN NORMS

EN 361, EN353 or EN 355

❖ CARE

1. Inspect harness condition after taking it off.
2. Check the threads, stitching, rings and buckles for any distortion, cracks, cuts frays that may have been generated over the course of the day; starting from the top working down.

ROPE ACCESS EQUIPMENT:ROPE

❖ DESCRIPTION

Rope is designed for strength and durability for abseiling.

❖ EUROPEAN NORMS

EN 1891

❖ CARE

1. Inspect rope before use.
2. Avoid contact sharp objects.
3. Avoid prolonged exposure to sunlight.
4. Avoid twisting of ropes. Store in a cool dry room.

ROPE ACCESS EQUIPMENT:DESCENDER



❖ DESCRIPTION

A device used to descend on the rope in a controlled manner. It can also be manipulated to ascend on a rope.

❖ EUROPEAN NORMS

EN 341, EN 12841

❖ CARE

1. Check for cracks on edges and deformation on both the metallic and plastic parts. Inspect the levers and springs

ROPE ACCESS EQUIPMENT:ASCENDER





❖ DESCRIPTION

A device used to ascend. It can also be manipulated to descend on a rope.

❖ EUROPEAN NORMS

EN 567, EN 12841

❖ CARE

1. Check for cracks on edges and deformation on both the metallic and plastic parts. Inspect the levers and springs.

ROPE ACCESS EQUIPMENT:CARABINERS



❖ DESCRIPTION

It’s a spring loaded metal loop for quickly and reversibly connect components.

❖ EUROPEAN NORMS

EN 362

❖ CARE

1. Check the gate, screw or lock features.
2. Check for deformation, corrosion, wear, chemical , load on major axis etc.

ROPE ACCESS EQUIPMENT:ROPE PROTECTOR



❖ DESCRIPTION

Protects rope for abrasion against sharp object.

❖ CARE

1. Check for tear, cut etc

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ROPE ACCESS EQUIPMENT:HARD HAT OR HELMET



❖ DESCRIPTION

For providing safety to the head.

❖ EUROPEAN NORMS

EN 397, EN 12492

❖ CARE

1. Inspect before and after use for cracks, chemical, deformation, straps etc.
2. Do not store in direct sunlight.

ROPE ACCESS EQUIPMENT:LANYARD



❖ DESCRIPTION

Secondary attachment for added safety

❖ EUROPEAN NORMS

EN 892

❖ CARE

1. Check for compatibility with anchor line device.
2. Test for damage, UV AND harsh chemical avoidance.
3. Storage in a cool and dry room with ventilation. Ease to tie knot.

ROPE ACCESS EQUIPMENT:PULLEY





❖ DESCRIPTION

Device use to lift heaving object. It reduces friction on the rope.

❖ EUROPEAN NORMS

EN 12278

❖ CARE

1. Inspect before use for cracks, loosed parts, chemical etc.

ROPE ACCESS EQUIPMENT:FALL ARRESTERS



❖ DESCRIPTION

It is used to stop (arrest) a fall from height.

❖ EUROPEAN NORMS

N 12841-A

❖ CARE

1. Inspect before use.

ROPE ACCESS EQUIPMENT:BACK UP DEVICES





❖ DESCRIPTION

Devices connected on the safety line for more protection.

❖ EUROPEAN NORMS

EN 12841-A, EN 353-2, EN 358-99

❖ CARE

1. Inspect before use.

ROPE ACCESS EQUIPMENT:WORK SIT



❖ DESCRIPTION

Provides extra comfort when staying long on the rope.

❖ CARE

1. Inspect before use.

ROPE ACCESS EQUIPMENT:SLINGS





❖ DESCRIPTION

Slings for rigging, work restraint, and positioning like aiding.

❖ EUROPEAN NORMS

EN 354, EN 358, EN 795B

❖ CARE

1. Inspect before use.

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GENERAL CARE OF ROPE ACCESS EQUIPMENTS

- **Regular inspection:** Before each use, inspect all equipment thoroughly. Look for signs of wears, damage, or deformity. If you notice any issues, do not use the equipment and replace it if necessary.

- **Cleaning:** keep your equipment clean and free of dirt, grit, and contaminant. Use a damp cloth or a mild soap solution to clean harnesses and other textile components. Avoid harsh chemicals that could weaken the material.

- **Storage:** store your equipment in a cool, dry place. Avoid from direct sunlight and extreme temperatures. Hanging harnesses and rope is a good practice to prevent kinks and damage

- **Avoid chemicals:** do not expose your gears to chemical, solvent or corrosive substances, as this can weaken the materials.

GENERAL CARE OF ROPE ACCESS EQUIPMENTS

- **Lubrication:** lubricate moving parts of descenders, ascenders, and carabiners as recommended by the manufacturer. Use the appropriate lubricant to prevent rust and ensure smooth operation.

- **Retire old equipment:** gear has a limited life span. Follow the manufacturer's recommendations for the retirement of equipment, especially ropes and harnesses, which can be degrade over time.

- **Keep records:** Maintain records of inspections, maintenance, and retirement dates for your equipment. This helps ensure that you're using gear within its safe lifespan

GENERAL CARE OF ROPE ACCESS EQUIPMENTS

- **Follow manufacturer's guidelines:** Always adhere to the manufacturer's care and maintenance instructions, which can be found in the product manual or on their website.

- **Training:** Ensure that individuals using the equipment are properly trained in its care, use, and inspection.

- **Replace when necessary:** Don't hesitate to replace any equipment that shows signs of excessive wear, damage or degradation. Safety should always be the top priority.


Thank
You!