

**The safe use of the protective equipment depends on:**

- ▶ The correct operation of each components of the protective equipment
- ▶ The user's ability to correctly select the specific protective equipment according to the work conditions and type of labour performed
- ▶ The abilities to use the selected equipment kit
- ▶ The accumulation of knowledge on the use of equipment by practical training
- ▶ Careful reading and understanding of the user's manual for each component
- ▶ Performance of regular inspections of the equipment
- ▶ Appropriate maintenance and storage of the equipment

Regular inspections of protective equipment are divided in two categories:

- a) **Visual inspections performed by the user** in order to notice any potential damage of the equipment used, inspections recommended to be performed prior to each use of the equipment.
- b) **Periodical inspections of the protective equipment performed with trained and authorised personnel** intended to acknowledge the maintenance of physical characteristics and properties of such equipment to provide their safe use. Periodical inspections are generally non-destructive tests performed on test stands, with appropriate measurement equipment. There are circumstances where periodical inspections also include visual inspections of the equipment, inspections intended to identify traces of wear or ageing of materials that compose the equipment, traces of corrosion as a result of environment factors or the absence of components of some devices.

Periodical inspections are performed in accordance with the periodical inspection instructions given in the technical manual of the equipment, as well as in accordance with the periodical inspection instructions regulated by Romanian / European standards in force.

Periodical inspections can be performed both upon the commissioning of equipment (if the national or internal regulations of the users require so), and periodically on regular time periods, regulated by product standards or instructions of equipment manufacturers.

Periodical inspections of protective equipment must be performed by trained and qualified personnel to perform such services, in testing laboratories certified by Accreditation bodies of test laboratories (if any) or in spaces intended for the performance of such services, provided with appropriate equipment and tools.

Periodical inspection services for insulating personal protective equipment and insulating protective means

ROMIND T&G owns a **High Voltage testing laboratory**, which is in accordance with the requirements of SR EN ISO/CEI 17025:2005 regarding electrical testing laboratories and is certified by accreditation by RENAR - the National Accreditation Body, to perform electrical tests on products intended for the protection of workers against electrical risks:

- a) Measurement of the threshold voltage on capacitive voltage detectors (1 - 400 kV);
- b) Dielectric testing with alternating voltage of industrial frequency (0 - 100 kV, 50 Hz) for the insulating equipment for protection against electric risk (gloves, boots, shutters, platforms, sleeves, ropes, end caps, knives, etc.), insulating sticks and capacitive voltage detectors.



Protective equipment to be subject to periodical inspection must be identified clearly with a manufacturing serial number (batch and serial number, year of manufacture), with records in the identity manual, the technical manual or the quality document accompanying the product, records to indicate both the date when they have been commissioned and the date of the last periodical inspection performed.

Electrical periodical inspections are intended to certify the maintenance of insulating properties of protective equipment (insulating gloves and boots, insulating sticks, insulating carpets, insulating platforms, insulating sleeves, insulating foils and end caps, insulating plates, insulating tools, etc.) and must be performed in strict laboratory conditions, in full observance of electric test regulations specified by standards in force and the manufacturer's instructions.



PERIODICAL INSPECTION SERVICES

Electrical tests for insulating equipment are performed to detect any material defects or damages occurred following the use of such material, defects that decrease or eliminate the insulating properties of equipment and which lead implicitly to the recommendation to decommission them and replace them with new equipment.

In case of medium and high voltage detectors, electrical inspections are intended to check the maintenance of tripping thresholds of optical and acoustic signalling with the detection of the presence of voltage, as well as the maintenance of dielectric properties of the housing and inspection of the correct operation of signalling (inspection of the self-testing function).

Following the performance of electrical periodical inspections, a test report is issued and in case that the inspection result is not satisfactory, a recommendation is made for the decommissioning and substitution of inadequate equipment or - if possible - a proposal to remedy the malfunctions and a repair cost estimate.

Periodical inspection of short-circuiting devices is performed in order to check their technical condition. Periodical inspections include both mechanical inspections and electrical inspections. With regard to the mechanical part, a visual inspection is performed upon the phase and earthing clamps, upon their operation, they are cleaned and lubricated (if necessary), a visual inspection is performed on the condition of conductors (their insulation, marking (if necessary, the marking is restored)) and with regard to connections (terminals). On the electrical side, an inspection is performed to check the electrical resistance of the assembly, checking both the connections between the phase clamps and between each phase clamp and earthing clamp. Depending on the detected issues, a recommendation is issued to remedy the malfunctions accompanied by a repair estimate. The completion of the periodical inspection is materialised by issuing an inspection report.

Inspections of protective equipment against falling from height are intended to inspect the physical condition of the equipment and to provide the user with clear information on the possibility to use the respective equipment in maximum safety conditions. The purpose of using the personal protective equipment against falling from height is to protect the user against falling from height and/or to provide an incremental arrest of a person's fall until the complete stop, therefore all equipment and lanyards that contribute to these purposes must be checked periodically to ensure their appropriate operation in case of occurrence of an unwanted incident.

In case of protective equipment against falling from height, three types of inspections are recommended:

a) Inspection prior each use:

Prior to each use of the personal protective equipment against falling from height (even when the equipment is new and it had never been used), each component of the system to be used must be subject to a thorough visual inspection. If any mechanical or chemical failure or defect is found, the equipment must not be used. Also, if it is found that some of the components are missing (e.g., one buckle or one strap of the safety harness), that equipment must be decommissioned. If there are any doubts related to the appropriate condition or operation of the equipment, it must not be used. Visual inspection prior to each use must be performed by the equipment user.

b) Periodical annual inspections:

Periodically, but not later than 12 months, the equipment in operation must be inspected. If the equipment is used very often or in adverse conditions, such as those that involve high loads or a wet and greasy environment, the equipment must be inspected more often, even every at 2 or 3 months of use. Periodical annual inspections must be performed by the equipment manufacturer or by its authorised representative. This person must have the knowledge and the expertise required for a correct use of the equipment against falling from height.

c) Manufacturer's inspections:

After 5 years of use, the personal protective equipment against falling from height should be sent back to the manufacturer to be subject to detailed inspection, and such inspection shall also establish the maximum time of the next inspection. The manufacturer's inspection must be performed by the manufacturer or by one of its authorised representatives.

The personal protective equipment against falling from height can be used for a period of maximum 5 years following the commissioning date. When this period expires, the equipment must be decommissioned to be inspected by the manufacturer or scrapped automatically (according to the equipment manufacturer instructions).

Thus, after 5 years of use, some components of the equipment for work at height, such as lanyards, energy absorbers and other elements that include textile lanyards shall be decommissioned and destroyed physically so that the remaining scraps cannot be used accidentally.

The performance of annual periodic inspections for the personal protective equipment against falling from height shall materialise in an inspection report, and if the inspection results are inadequate, a recommendation is made to decommission and substitute inadequate equipment or - if possible - a proposal to remedy malfunctions and an estimate for repairs.