



ZERO FATALITY STANDARD – ZFS No.5 WORK WITH PORTABLE EQUIPMENT AND TOOLS

2nd Version – December 2021

PURPOSE OF THE STANDARD

The purpose of this standard is to establish the requirements for works with portable equipment and tools, as well as indicating the minimum contents that should be considered in Colbún's and Collaborating Companies' procedures.

It applies to all electrical, pneumatic, mechanical and other portable equipment.

Portable equipment includes: drills, angle grinders, welders, blowtorches, riveting machines, electric boards, portable generators, among others.

Tools are considered to be: saws, hammers, pliers, wrenches, screwdrivers, etc.

GUIDELINES

1. PERSONNEL REQUIREMENTS

Personnel using portable equipment and tools must have the competencies and certifications required for the activity.

2. EQUIPMENT AND FACILITIES REQUIREMENTS

2.1. WORK AREA REQUIREMENTS

To perform tasks involving the use of portable equipment and tools, the work area shall comply with the following requirements:

- a. Be kept clean and orderly.
- b. Installation of systems or elements to prevent the projection of incandescent particles, shrapnel, or other materials of other nature.
- c. Have the necessary lighting and ventilation to perform the task (in accordance with the provisions of DS 594).
- d. Take the necessary measures in case the work is performed near an area with presence of combustible or flammable materials and/or gases.
- e. Ensure a place in good condition, clean and free of any hazardous waste for the storage of equipment and portable tools.
- f. Verify that power connection sources are in good condition and that the voltage or pressure of the power supply corresponds to the equipment to be connected.
- g. Proper precautions should be taken in the arrangement of cables and extension cords.

2.2. EQUIPMENT AND WORKING TOOLS REQUIREMENTS

Check that the equipment and tools used are in good working order and condition and comply with the following requirements:

- a. When using portable equipment or tools with detachable parts, it should be verified that there are no elements, including workers' clothing, that can be trapped.
- b. Operation manual, in Spanish, when applicable.
- c. The equipment must be labeled indicating its characteristics and maximum capacities, when applicable
- d. Use portable equipment and tools exclusively for what they were designed for.
- e. Use intrinsically safe electrical equipment in areas with flammable atmospheres.
- f. Use watertight electrical equipment in the presence of water.
- g. Maintain electrical extensions in good condition, without additions or cuts.
- h. Tools for electrical work must be insulated for the required voltage or be dielectric.
- i. Connect only to electrical panels or networks that have differential protection and the corresponding grounding.
- j. Regular inspection of equipment and tools must consider the identification of their condition, such as a color code that allows the worker to recognize that they are suitable for use.
- k. Equipment that is used on an annual or semi-annual basis (e.g., for major maintenance) should be inspected well in advance.
- l. It is the user's obligation to replace all equipment and portable tools that show excessive wear, failures or general deterioration.
- m. Prohibit use of hand-made tools (handmade). If it is necessary to make a tool, it must have an engineering design and/or be approved by the person in charge of the activity before being used.
- n. Only use equipment and lighting powered by 12 V or wireless if it is not possible to have networks or panels with differential protection.

3. RECORDS

[Use Checklist No. 5 to verify compliance Zero Fatalities Standards-Colbun S.A.](#)

4. REFERENCES

[Zero Fatality Standard No. 0 – General Terms](#)

EXCEPTIONS

Previous to the start of work, Colbun's Facility Manager (Project, Power Plant, Transmission Zone) may authorize exceptions to this Standard in writing. Should there be a discrepancy where there is more than one Facility Manager, it must be escalated to a higher hierarchical level for definition.