



CERTIFICATION

PED 2014/68/EU

The **Pressure Equipment Directive 2014/68/EU**, known as **PED** (Pressure Equipment Directive), is a product directive issued by the European Union, which regulates the design, manufacture and conformity assessment of pressure equipment and assemblies.

APPLICATION

The **PED 2014/68/UE** applies to vessel, piping, safety accessories, pressure accessories and assemblies subjected to a maximum allowable pressure **PS greater than 0.5 bar**.

Pressure equipments, with a pressure equal to or less than 0.5 bar, are excluded from the application of the Directive.

Pressure equipment, which fall within the scope, must meet the **Essential Safety Requirements** defined in **Annex I** of the PED.

When placing on the market, manufacturers shall affix the **CE marking** and issue the **EU declaration of conformity**.

The PED identifies manufacturers as responsible for the construction, with the intervention of the Notified Body for the conformity assessment in the foreseen cases.

The PED only concerns the placing on the EU market of pressure equipment, but it does not give indications about the **requirements** related to the **operation and maintenance** of the same, which are defined by **National Regulations**.

PRESSURE EQUIPMENTS AND ASSEMBLIES SUBJECT TO PED



- **VESSEL**: housing designed and built to contain fluids under pressure;
- **PIPING**: piping components intended for the transport of fluids, when connected together for integration into a pressure equipment;
- **PRESSURE ACCESSORIES**: devices with an operational function and having pressure-bearing housing;
- **SAFETY ACCESSORIES**: devices designed to protect pressure equipment against the allowable limits being exceeded;
- **ASSEMBLIES**: several pieces of pressure equipment assembled by a manufacturer to constitute an integrated and functional whole.

DANGER CATEGORY CLASSIFICATION

The PED requires manufacturers to identify the danger category of the equipment built, which is linked to the concept of **energy stored** in the equipment. The energy stored is evaluated based on the following parameters:

- Maximum allowable pressure (PS);
- Own volume V or own nominal size DN, as appropriate;
- Fluid type and state.

Annex II defines, through 9 tables, the belonging of the component or of the equipment to one of the four risk categories, with reference to the type of pressure equipment, to the group and to the physical state of the fluid, to the PSxV value in the case of vessel and PSxDN in the case of pipes . The category of the assemblies is determined by the highest category of components, excluding safety accessories.

AUTHORISATIONS

ECO works as **Notified Body nr. 0714** for the conformity assessment of Pressure Equipments according to the following procedures defined by the PED :

Module A2: Internal production control plus supervised pressure equipment checks at random intervals

Module B: EU-Type examination - Production Type

Module B: EU-Type examination - Design Type

Module C2: Conformity to type based on internal production control plus supervised pressure equipment checks at random intervals

Module D: Conformity to type based on quality assurance of the production process

Module D1: Quality assurance of the production process

Module E: Conformity to type based on pressure equipment quality assurance

Module E1: Quality assurance of final pressure equipment inspection and testing

Module F: Conformity to type based on pressure equipment verification

Module G: Conformity based on unit verification

Module H: Conformity based on full quality assurance

Module H1: Conformity based on full quality assurance plus design examination

On request, ECO, during the testing phase, performs the **inspection of safety devices efficiency** as required by the Italian Ministerial Decree n. 329 of 01/12/2004 - art. 5, paragraph D - which exempts the user from requesting inspection of commissioning by INAIL (National Institute for Insurance against Workplace Accidentals and Occupational Disease).