



Streamline pressure equipment certification for Europe with one trusted source

UL Solutions is a Notified Body for the Pressure Equipment Directive

Safety. Science. Transformation.™

What is the Pressure Equipment Directive (PED)?

The PED is European Commission legislation covering the design, manufacturing and conformity assessment of pressure equipment and assemblies with a maximum allowable pressure greater than 0.5 bar, or 7.25 pounds per square inch. The PED outlines standards for the design and fabrication of pressure equipment used in the European Union (EU) market. The directive is not new, but the update of the F-gas (fluorinated greenhouse gas) regulation has consequences on the PED's application.

What changes have affected the PED?

The revision of the F-gas regulation has resulted in the banning of many gases with high global warming potential (GWP), including F-gases. Manufacturers must replace them with low GWP gases, classified in the PED as group 1, or dangerous. In fact, these “greener” (more climate-friendly) gases present additional risks for pressure equipment: they can more easily ignite and, in some cases explode. For this reason, the final products containing them — such as refrigerators or air conditioning equipment — may fall into an increased PED risk category.

For example, a common scenario in the past was that, based on the PED, the gas group was classified as 2 —

not dangerous — and the product risk category was 1. In that case, the manufacturer could self-certify the product. Using the greener gases, the PED gas group is 1 — dangerous — and the risk product category is often higher than 1. In this case, the manufacturer must get a Certificate of Conformity from a Notified Body such as UL Solutions.

How the Pressure Equipment Directive affects you

If you design or manufacture pressure equipment and assemblies for the EU market, you may need a PED Certificate of Conformity issued by a Notified Body. If related to production control, the Certificate of Conformity will authorize you to apply the CE marking on your equipment. As a designer or manufacturer, then, you'll need an accredited and trusted industry partner with extensive global expertise in pressure equipment and assemblies to achieve certification. Partnering with a trusted Notified Body that performs assessment and certification as well as quality audits will streamline a cost-efficient process that can ultimately help you get to market faster. You can rely on our expertise to help you cut through the complexity of the process and minimize compliance and regulatory delays, and you can achieve your goals with a quicker turnaround time, accelerating your market access.

[UL.com/Solutions](https://www.ul.com/Solutions)

UL Solutions scope of accreditations

UL International Italia S.r.l. is a Notified Body for 2014/68/EU and can provide all the conformity assessment procedures for any type of pressure equipment, including vessels, piping, valves, fired or otherwise heated equipment, safety accessories and assemblies.

Examples of the above products include:

- Unfired pressure vessels
- Portable fire extinguishers
- Refrigerating systems and heat pumps, including hermetic and some semi-hermetic compressors
- Cryogenic vessels
- Liquified petroleum gas (LPG) equipment and accessories
- Water-tube and shell boilers
- Cookware and otherwise fired pressure vessels
- Power and process piping
- Industrial and pressure relief valves
- Safety devices and accessories

At UL, we are a Notified Body for assessment and certification for design, production and quality system approvals.

Modules represent a conformity evaluation process and are based on the product risk category. They represent obligations that the manufacturer will fulfill and whose conformity shall be assessed by the Notified Body.

Module A2 – Internal Production Control, plus supervised product 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 product 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 product quality assurance

Module E1 – Conformity to type based on product quality assurance

Module F – Conformity to type based on product 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

As a recognized third-party organization, we can also provide approvals of permanent joining procedures, including brazing and welding.

Why UL Solutions

As a global safety science leader, UL Solutions continues to provide expertise, insights and services that meet ever-evolving product safety, performance and interoperability needs. Our global network of technical experts and state-of-the-art facilities, along with our long-standing relationships with regulatory authorities, partner laboratories and industry technical leaders, helps manufacturers gain the compliance credentials they need to compete in a more complex global supply chain.

Knowledge you can trust — Our experienced staff will support you from the initial development stage of product development through testing and production. Our experts can assist you in understanding the certification requirements for your specific markets.

Speed and efficiency — Our cost-effective systems and state-of-the-art facilities reduce procedural hurdles and help accelerate your time to market.

Single source provider — We meet all your compliance needs and, by bundling safety, performance and interoperability services, also help save you valuable time and money.

Global reach and access — Our global network of expert engineers helps you understand the various national and international requirements for your specific market application.

To learn more about our PED services, visit our [Pressure Equipment Directive Services](#) website.