



PED Directive

The key to access
the markets for
pressure equipment.



WE ENABLE A REAL SAFETY

DEKRA

Expertise, People, Global presence

The width and depth of expertise in **Testing and Certification** makes us one of the top 4 organizations in the world for inspection, verification, testing and certification services.

We conduct constant research in test centers, laboratories, offices all over the world, for your professional and personal safety. An absolute safety, which derives from independence of judgement, third party and transparency to which we orient our way of working and our behavior on the market for over 90 years.

We support our customers in developing a correct safety culture in their industries and offices based on the safety of their staff. Our testing and certification services are impartial, independent and comply with the latest European directives and international standards to ensure that the products that arrive in your homes and businesses are safer every day.

We are a service unit of DEKRA, a global leader in safety since 1925 with over 44.000 employees in 60 countries. As a part of the world's leading expert organization DEKRA, we are the **global partner for a safe world**.

PED Directive

Freedom of movement for pressure equipment

The Directive 2014/68/EU - PED (Pressure Equipment Directive) on pressure equipment aims to **ensure the free circulation of these products** within the European Union. In particular, the legislation regulates "the design, manufacture and conformity assessment of pressure equipment and assemblies subjected to a maximum allowable pressure PS higher than 0.5 bar".

For example, the following are subject to the provisions of the legislation: vessels, pipes, safety accessories and pressure accessories such as condensers, evaporators, accumulators and liquid receivers, filters, valves, pipes, pressure switches, thermostats. The **CE marking** ensures that the equipment, from the design and construction phase, to installation and maintenance, does not jeopardize the health and safety of people.

The authorization for the CE Marking, mandatory for placing pressure equipment on the European market, is issued in most cases necessarily by a Notified Body, following verification of compliance with the requirements of the PED Directive.



A Notified Body is required Independence and impartiality in evaluation

DEKRA is a **Notified Body** PED N.B. 2577, with authorization issued by the Ministry of Economic Development following specific **accreditation by Accredia**, and carries out conformity assessment activities for all the Modules provided for by the same Directive where the intervention of a Notified Body is required.

As a Notified Body, we offer the following services to manufacturers of equipment / assemblies:

- technical assistance and legislation on the application of the PED Directive
- conformity assessment according to the modules provided by the PED Directive
- design approval according to harmonized standards or even according to calculation codes chosen by the manufacturer (eg ASME, VSR, AD 2000 Merkblatt, etc.) which allow to comply with the requirements of the directive
- inspections and tests on equipment
- approval of welders / welding operators and welding procedures pursuant to Annex I - Art. 3.1.2 of the Directive
- approval of the personnel who carry out non-destructive tests pursuant to Annex I - Art. 3.1.3 of the Directive
- issue of the Certificate of Conformity according to the certification module adopted

We support manufacturers from the analysis of the most suitable Conformity Assessment Modules, to product and design checks, up to the inspection of pressure equipment and the correct installation of the assemblies and related safety accessories, where required, so that they can effectively meet the requirements of the PED Directive and the Italian legislation relating to the commissioning and use of pressure equipment.

DEKRA Program

Verification of system safety devices

Reliable and accurate management of the safety valves and rupture discs of a system is essential for the correct management of the safety of the system itself. A proactively planned disk and valve management program has many benefits, including maintaining **low failure rates**, **maximizing safety**, **improving system reliability** and process operational quality, reduction of unplanned downtime of the process and a reduction of emissions into the atmosphere.

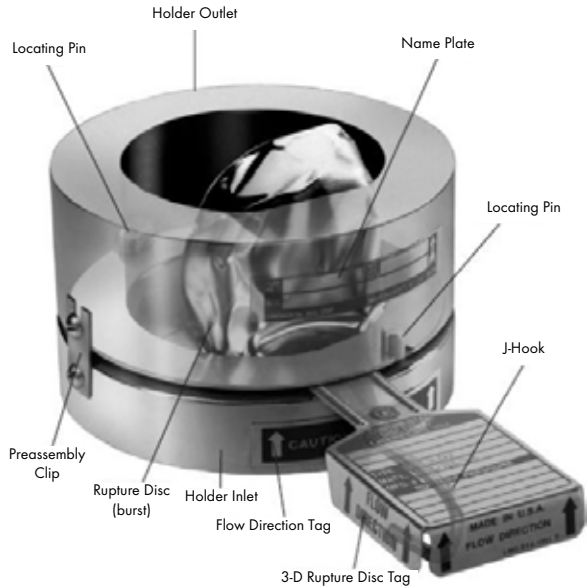
Failure to inspect and maintain the discs and valves can lead to serious problems and safety risks. Accurate and reliable controls help prevent major problems such as premature failures, unplanned downtime and interruptions in process output.

Furthermore, as a result of process and personnel changes, the data on the sizing of the safety devices may be obsolete or unavailable and risk compromising the safety of the process from any overpressures.



Keep your plant efficient and safe with:

- + Program for mapping and checking your safety devices for overpressures, identification and recording of operating conditions, inspection and maintenance plans.
- + Update of the calculations relating to disks and valves, with new plant or process conditions (variations in temperature, pressure, different substances).
- + Identification of the rupture disk application as primary, secondary or isolation relatively to the safety valve.
- + Identification of any risk of fragmentation of the rupture disk relatively to the correct functioning of the safety valve.
- + Calculation and forecasting of uncontrolled overpressure scenarios (Runaway Reactions) using the DIERS method.
- + Small scale simulation of Runaway reactions by specialized laboratories.
- + Sizing of devices subject to Runaway reactions through specific spreadsheets.
- + Consultancy on the design of the open exhaust vent line and its installation.
- + Verification of the correct rupture disk and of the operating ratio relatively to the operating pressures of the process.

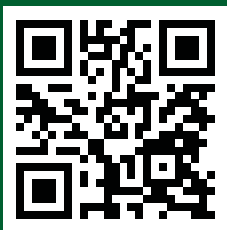




**PREVENT YOUR RISK,
EMPOWER YOUR BUSINESS.**

Less incidents. Fewer injuries. Saved lives.
Expertise | Team | Global Presence

Discover our integrated solutions on
www.dekra.it/real-safety



brand.it@dekra.com
www.dekra.it

