

Learn more about PED, TPED and Hydrostatic Certificate

1 Introduction

The Leutert Samplers, Benches and Cylinders are high pressure instruments. High pressure instruments need to be handled with special care to avoid damage to the instruments as well as injury to the operators. In accordance with the Leutert quality policy and the regulations of the European Union, Leutert offers different types of pressure test certificates. These certificates prove that the instruments allow safe operation. In the following essay the contents of the available certificates will be explained.

2 The Pressure Equipment Directive (PED)

2.1 Intention of the PED

The PED is a European Directive (97/23/EC) that is intended to remove all technical barriers to Trade within the EU¹⁾ for certain Pressure Equipment with a working pressure of 0.5 bar above ambient. It achieves this by ensuring that all relevant products entering the market place are "Safe". This Directive became mandatory in the EU on 29 May 2002. Save for a few minor exceptions, no Pressure Equipment that is covered by the PED can legally be put on the market anywhere in the EU, unless it conforms to the PED and is CE marked.

The CE mark, placed on the PDS Samplers by the Notified Body²⁾ or with its express authority, is the definitive final proof that a PDS Sampler conforms with the PED.

The PED addresses Pressure Equipment as "Assemblies", pressure components making up the assembly must conform with the PED in their own right.

The PED contains no requirements for re-testing or refurbishment of Pressure Equipment. At the present time National Regulations apply for these activities.

1) European Economic Community

2) A Notified Body is an inspection organization that has been audited by an approved and designated National Body to approve its competency in relation to the PED/TPED. The Notified Body registered as such with the European Commission's Headquarters in Brussels via the DTi. A Notified Body is a powerful agency that deems compliance, via a process known as Conformity Assessment, or otherwise of an item of Pressure Equipment. A Notified Body, such as Germanischer Lloyd and TUV, is universally acceptable throughout the EU. A Member State cannot dictate which Notified Body it will accept.

2.2 What is Included in the PED?

With respect to sampling the following products are covered by the PED:

- PDS Sampler

2.3 What does the PED mean to you?

For our Customers the PED will mean:

- Ability to move, rent and sell products across EU borders unhindered by national rules and customs.
- A uniform inspection process through a single Notified Body.
- Using a safe product.

2.4 Relevant passages of the PED³⁾

“The European Parliament and the Council of the European Union, [...] have adopted this Directive:

Article 1 - Scope and definitions

1. This Directive applies to the design, manufacture and conformity assessment of pressure equipment and assemblies with a maximum allowable pressure PS greater than 0.5 bar.
2. For the purposes of this Directive:
 - 2.1 “Pressure equipment” means vessels, piping, safety accessories and pressure accessories.
 - 2.1.1. [...]
 3. The following are excluded from the scope of this Directive:
 - 3.1. [...]
 - 3.19. equipment covered by the ADR⁴⁾, the RID⁵⁾, the IMDG⁶⁾ and the ICAO Convention⁷⁾;
 - 3.20. [...]
 - 3.21. vessels designed to contain liquids with a gas pressure above the liquid of not more than 0.5 bar. [...]

3) http://ec.europa.eu/enterprise/sectors/pressure-and-gas/documents/ped/index_en.htm
4) ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road.
5) RID = Regulations concerning the International Carriage of Dangerous Goods by Rail.
6) IMDG = International Maritime Dangerous Goods Code.
7) ICAO = International Civil Aviation Organization.

3 The Transportable Pressure Equipment Directive TPED

3.1 Intention of the TPED

The TPED is a European Directive (1999/36/EC) that is intended to remove technical barriers to trade within the EU for certain types of Transportable Pressure Equipment and is linked to the ADR. It achieves this by ensuring that all relevant products entering the market place meet specified Design & Manufacturing & Testing requirements. This directive became mandatory in the EU on 1 July 2003. Save for a few minor exceptions, no Transportable Pressure Equipment that is covered by the TPED, can legally be put on the market anywhere in the EEC, unless it conforms with the TPED & is II Marked, from this date.

The II mark, placed on the cylinders by TPED Notified Body or with its express authority, is the definitive final proof that a cylinder conforms with the TPED. Unlike the PED, the TPED addresses Pressure Equipment as "Components" as opposed to "Assemblies".

3.2 What is Included in the TPED?

With respect to sampling the following products are covered by the TPED:

- Sample Cylinder Type 600
- Sample Cylinder Type 600 one phase

3.3 What does the TPED mean to you?

For our customers the TPED will mean:

- Ability to sell products across EU borders unhindered by national rules and customs.
- A uniform inspection process through a single Notified Body.
- Using a safe product.

3.4 Relevant passages of the TPED⁸⁾

"The Council of the European Union, [...] has adopted this Directive:

Article 1 - Scope and definitions

1. The purpose of this Directive shall be to enhance safety with regard to transportable pressure equipment approved for the inland transport of dangerous goods by road and by rail and to ensure the free movement of such equipment within the Community, including the placing on the market and repeated putting into service and repeated use aspects.

8) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997L0023:en:NOT>

2. this Directive shall apply:
 - (a) for the purpose of placing on the market: to new transportable pressure equipment as defined in Article 2;

[...]

Article 2 - Definitions

For the purpose of this Directive:

1. "transportable pressure equipment" means:
 - all receptacles (cylinders, [...]) used for the transport of Class 2 Gases [such as LIQUEFIED HYDROCARBON GAS MIXTURE,...] including their valves and other accessories used for transport."

4 Hydrostatic Certificate

4.1 Intention of the Hydrostatic Certificate

As described above, PED and TPED are imperative standards within the EU. For areas outside the EU Leutert offers to issue a Hydrostatic Test Pressure Certificate. The procedures in pressure testing are the same as those which are used to achieve the PED and TPED certificates. The difference is that no personnel of a notified body witnesses the pressure test. The Hydrostatic Pressure Testing can be witnessed by a third party. Leutert cooperates with the certification company Germanischer Lloyd.

4.2 What is Included in the Hydrostatic Certificate?

With respect to sampling the following products are covered by the Hydrostatic Certificate:

- Transfer Bench
- PDS Sampler
- Surface Sampling Bench
- Sample Cylinder Type 600
- Sample Cylinder Type 600 one phase

4.3 What does the Hydrostatic Certificate mean to you?

For our Customers the Hydrostatic Certificate will mean:

- A uniform inspection process through Leutert or a certification company.
- Using a safe product without additional costs.