

Heat Transfer Society Webinar – 4th March 2021

**PressureEquipment
in a Post-Brexit UK**

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UK Legislation

The UK has left the EU, and the transition period after Brexit finished at the end of December 2020.

The Pressure Equipment Directive 2014/68/EU (**PED**), as implemented in the UK by The Pressure Equipment (Safety) Regulations 2016 (**PER**), is no longer applicable for pressure equipment placed on the market in the **UK**.

Different regulations apply in **Great Britain** (England, Scotland and Wales) and in **Northern Ireland**.

Regulations for Great Britain

For pressure equipment placed on the market in **Great Britain**, the requirements of the **PER**, as amended by Schedule 24 of The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019 (**PSMR**) apply. The **CE** mark is replaced by the **UKCA** mark, and an **Approved Body** or user inspectorate appointed by the **UK** government must be used for mandatory conformity assessments (more on marking and conformity assessment bodies later).

Although we have got used to referring to the requirements of the PED, it was actually the Pressure Equipment (Safety) Regulations that specified the legal requirements in the UK, and that is still the case, with some modifications.

The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019 contain details of amendments to over thirty UK Regulations that implemented various EU Directives. Schedule 24 of the PSMR contains the amendments to the PER that apply to pressure equipment placed on the market in Great Britain

These requirements apply to pressure equipment manufactured in **Great Britain** or imported from outside the **UK**, but not to equipment manufactured in **Northern Ireland**.

Importers of pressure equipment into Great Britain will need to ensure that the equipment meets the new regulations, but there is a period of grace.

CE marked pressure equipment that meets the requirements of the **PED**, while these match the requirements of the **PER**, can continue to be placed on the market in **Great Britain** until 1 January 2022.

It is extremely unlikely that there will be any changes to the PER this year, so CE marked equipment will still be able to be placed on the market in Great Britain until the end of 2021.

Note: Definitions of the terms Authorised Representative, Importer and Distributor; and specification of the obligations of these economic operators are given in the PER, as amended by Schedule 24 of the PSMR.

Regulations for Northern Ireland

The rules in Northern Ireland are different.

For pressure equipment placed on the market in **Northern Ireland**, the requirements of the PER, as amended by Schedule 2 of The Pressure Vessels (Amendment) (Northern Ireland) (EU Exit) Regulations 2020 apply. Effectively the **PED** still applies and the **CE** mark is still used.

In Northern Ireland either a Notified Body or an Approved Body can be used, but this will affect where the equipment can be placed on the market.

If a **Notified Body** or user inspectorate appointed by a member state of the **EU** is used for mandatory conformity assessments, the equipment has freedom of movement within the **UK** and the **EU**.

If an **Approved Body** or user inspectorate appointed by the **UK** government is used for mandatory conformity assessments, additional **UKNI** marking is required and in the equipment has freedom of movement in the **UK**, but not in the **EU**.

These requirements apply to pressure equipment manufactured in **Northern Ireland** or imported into Northern Ireland, including those manufactured in **Great Britain**.

Equipment, manufactured in **Great Britain** and carrying only the **UKCA** mark is not valid for the **Northern Ireland** market.

Regulations for the European Union

For pressure equipment manufactured in the **UK** (including **Northern Ireland**) and placed on the market in **EU**, the requirements of the **PED** still apply, and the **CE** mark is still used when applicable.

Requirements of the PER in Great Britain

The requirements of the **PER**, as amended by Schedule 24 of the **PSMR** are very similar to the requirements of the **PED** 2014/68/EU. The main differences are:

- Removal of references to the Commission, European approval for materials and the Official Journal;
- Replacement of EU, the Community and member state by United Kingdom, harmonized standards by designated standards and notified bodies by approved bodies;
- The CE mark is replaced by the UKCA mark.

Essential Safety Requirements

The Essential Safety Requirements (**ESRs**) in Schedule 2 of the **PER** are essentially the same as those in Annex I of the **PED**, but the numbering is completely different.

For pressure equipment placed on the market in **Great Britain**, any declaration of conformity documentation that refers to the **ESRs** given in the **PED** will need to be revised to use the numbering given in the **PER**.

A draft amendment to **PD 5500:2021** contains revisions to Annex Z which include a new table which lists the ESRs in Schedule 2 of the **PER** and gives the clause(s) in PD 5500 which address each ESR (where applicable).

Subject to approval by the BSI committee PVE/1, this amendment will be published in September 2021.

For pressure equipment placed on the market in **Great Britain**, the changes to the **Essential Safety Requirements** in Schedule 2 of the **PER** are as follows:

- in paragraphs 21(4), 31(4)(b)(i) and 35(1) for "harmonized standards" substitute "designated standards";
- in paragraph 29(1) for "CE marking" substitute "UK marking";
- omit paragraph 31(4)(b)(ii), which refers to materials covered by a European approval for materials, and 31(8), which refers to material manufacturers which have an appropriate quality- assurance system, certified by a competent body established within the EU.

Materials for Pressure Parts

For pressure equipment placed on the market in **Great Britain**, due to the removal of ESR 31(4)(b)(ii) from the **PER** (ESR 4.2(b), 2nd indent in the **PED**), the use of materials covered by European approval for material does not provide compliance with the **PER**, as amended by Schedule 24 of the **PSMR**.

The only materials currently covered by European approval for material are one duplex steel and four nickel materials, so this should not be a problem for most manufacturers.

The Particular Material Appraisal (PMA) option is still available.

In **Great Britain**, the removal of ESR 31(8) from the **PER** (ESR 4.3, 3rd paragraph in the **PED**), which refers to material manufacturers which have an appropriate quality-assurance system, certified by a competent body established within the **EU**, means that certificates issued by these material manufacturers do not provide presumption of conformity with paragraph 31 of Schedule 2 of the **PER**.

It has been agreed by the Office for Product Safety and Standards that the removal of this ESR was a mistake and the legislation will be amended to reinstate it.

For pressure vessels placed on the market in **Northern Ireland**, "within the Union" is replaced by "in a relevant state" (i.e. Northern Ireland or any EEA state), so this is not a problem.

Standards

The role of standards in the UK regulatory framework for manufactured goods has not changed.

The current EU **harmonized standards** have been carried across as UK **designated standards**. The list of designated standards can be downloaded here:

www.gov.uk/government/publications/designated-standards-pressure-equipment

UK **designated standards** will provide a presumption of conformity with the applicable UK regulations, in the same way that EU harmonized standards provide a presumption of conformity with the applicable EU directives.

The use of other standards is permitted, provided that the manufacturer can demonstrate compliance with the legislation.

Manufacturers can continue to use PD 5500 or ASME VIII in the same way that they have done in the past.

The UK standard for unfired pressure vessels is, and will remain, **BS EN 13445**. PD 5500 does not have the status of a standard. There are no plans to withdraw PD 5500 at the present time.

The British Standards Institution (**BSI**) remains a member of **CEN** (the European Committee for Standardization) at least until the end of 2021, and BSI experts are still entitled to participate in CEN and CENELEC technical committees.

BSI is confident its membership will continue beyond that time.

Conclusions

Apart from the removal of the European approval for material option and the possible problems associated with material certificates issued by European material manufacturers, the new regulations are very similar to those that have been used for the last few years.

Manufacturers need to review their declaration of conformity documentation to ensure that they are referring to the new legislation rather than the PED.

Importers of pressure equipment need to ensure that the manufacturers are aware of the new requirements for vessels to be placed on the market in Great Britain.

The regulations for Northern Ireland are more complicated.

The standards that support the new legislation are the same as those that supported the PED. These standards will continue to be developed, and UK experts will still contribute to that development.

There is no mandatory requirement to use the designated standards.

Additional Information

There is a lot of information available:

Statutory Instruments

The Pressure Equipment (Safety) Regulations 2016:

www.legislation.gov.uk/ukxi/2016/1105

The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019:

www.legislation.gov.uk/ukxi/2019/696/made

The Pressure Vessels (Amendment) (Northern Ireland) (EU Exit) Regulations 2020:

www.legislation.gov.uk/ukxi/2020/678/made

Guidance

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/949799/Guide-to-pressure-equipment-regulations-2016-tp.pdf

www.gov.uk/guidance/placing-manufactured-goods-on-the-market-in-great-britain

www.gov.uk/guidance/placing-manufactured-goods-on-the-eu-market

www.gov.uk/guidance/using-the-ukca-marking

www.gov.uk/guidance/conformity-assessment-and-accreditation

Some guidance is also given in the new edition of PD 5500 that was published in January 2021, in a new Enquiry Case 5500/144.