

Information regarding the requirements of the Pressure Equipment Directive 2014/68/EU.

Dovre Sertifisering AS GUIDELINE

GL-DSE-2020-005 Acceptance of using TR2000 and ASME under PED 2014/68/EU

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1. Information and background

This report is made based on the work done by DNV and TI on the approval of the materials in TR2000 for piping and valves specification. This work was done based on the Directive 97/23/EC.

In 2014 the Pressure Equipment Directive 97/23/EC was replaced with a new Directive 2014/68/EU. The new directive is a revision of the old Directive 97/23/EC.

The scope of the work done by DNV and TI was to review the Material data sheets against the essential safety requirements in the Directive 2014/68/EU, when the used design code for the components is ASMEB31.3.

Note: The referenced documents are issued by Statoil. It has to be mentioned that Statoil has changed it's name to Equinor. Due to this change we have used the Name Equinor in our documents. Whenever Statoil is mentioned we will use the name Equinor.

2. Summary

The new Directive (2014/68/EU) contains no additional technical requirements that could affect the conformity assessments already performed by Notified Bodies based on the 97/23/ EC Directive. Dovre Sertifisering AS will therefore adopt the approved materials on the same basis as the other Notified Bodies.

3. General information

As required by the Pressure Equipment Directive (PED) Annex I section 4.2, the pressure equipment manufacturer is responsible for preparing documentation for materials to be used for pressure equipment in categories I to IV.

For pressure equipment in categories III and IV this documentation is submitted to the Notified Body in charge of the conformity assessment for the equipment so they can perform an appraisal of the particular material with regard to the pressure equipment, the intended use and applicable design rules.

This requirement is independent for the used module of the PED.

The approval of a material manufacturer according to Annex 1 §4.3 is in itself not enough to verify compliance with the requirements of the PED.

Materials that have no clear indication to any harmonised material standard need to be confirmed with a PMA.

Sufficient for such is a reference to a harmonised standard (EN standard) on the material document. Reference to a harmonised material indication ex. P265.. or 1.4404 will be sufficient too.

It is therefore of importance that all materials are ordered with the correct reference to prevent the need of PMA. If this is for some reason not possible the requirements on PMA are to be followed. The approval of TR2000 and ASME materials based on this document does not imply that a PMA isn't need.

References and data

Report No. 2010-3469 /Rev 2, 2011-07-05 /DNV

Report No. 63161 /Rev 4, 2011-05-05 / TI

Letter. ZNWNO440/HDR/341.1-J-4637 /DNV

Letter. NACNO378/HDR/341.1-J-5834 /DNV

Guidelines: G-12; G-17; G-29; I-02; I-11; I-13

PED Guidelines: <https://ec.europa.eu/docsroom/documents/33402>

PED Requirements PMA:

<http://ec.europa.eu/DocsRoom/documents/10642/attachments/1/translations>

4. Basis for acceptance

We hereby confirm that Dovre Sertifisering AS, Notified Body Number 2654, has reviewed Equinor piping class "TR2000 EC Master Material Components" including the memo's form Equinor and letters from DNV and TI. This is done to verify that using materials from ASME B31.3 standards under PED 2014/68/EU is acceptable

The documents we reviewed are non-specific for any project and are found to cover piping, design and materials selection for piping, piping components and valves.

The assessment performed covers the relevant parts of the EU Pressure Equipment Directive 2014/68/EU for materials fabrication and design. The principle used by Equinor is to refer to ASME B31.3 as the product standard for piping.

Possible additional requirements and modifications necessary for fulfilling the essential safety requirements according to PED will be mentioned in the material documents we assessed.

Dovre Sertifisering AS has found the essential safety requirements as specified in the Directive 2014/68/EU are covered.

Components covered by this document are found to comply with the essential safety requirements of PED 2014/68/EU covering material selection, and design. We refer to the Commission's guideline for PED 2014/68/EU and the requirements for Particular Material Appraisal.

All products mentioned in the documents will have to be clearly indicated and a PMA needs to be issued at all times.

5. Final comments

If there are any revisions of the TR2000 Piping and Valve Material Specification, a new assessment of the approval might be needed. These changes include, but is not limited to, the following:

- Changes in the material specifications (ex. Increase of C, S, P and / or CE (carbon equivalent)).
- Changes in the approved delivery conditions.
- New or additional materials are added.
- Changes in temperature and or pressure ranges.
- Reduced absorbed impact energy (ex. Charpy).
- Changes in the approved welding procedures.
- Toughness requirements.
- Changes in the ASME B31.3 standard.