

ISO 14692 edition 2017, the changes and the background

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ABSTRACT

Recently in the fall of 2017 a renewed edition of the ISO14692, the governing standard for fiber reinforced plastic piping, was officially released. The objective of ISO 14692 is to provide the oil and gas industry, as well as the supporting engineering and manufacturing industry, with mutually agreed specifications and recommended practices for the purchase, qualification, manufacturing, design, handling, storage, installation, commissioning and operation of GRP piping systems. The previous official release was in the year 2002. Since then the experience with FRP-piping and the ISO14692 is used has increased significantly, much of this experience is now included in this latest revision of the standard.

ISO14692:2017 contains more background to design requirements and it provides with increased clarity guidelines what steps need to be completed. By providing clearer requirements for the provision of information, there is a much higher chance that all selection and design of the FRP system occurs conform the standard requirements.

The 2017 edition of the standard contains a large number of changes. As a member of the ISO14692 workgroup DRG has participated in the discussions that have led to these changes. Some of the more salient changes and their background are addressed in this paper. These are, the regression gradient for qualification, the maximum pressure rating terminology, the stress Intensification Factors that are revised, the changed stress envelope definition, the scaling rules for qualified components. Some other notable changes are the additional of buried piping assessment, the revised fatigue method, test methods for flanges.