

Information Bulletin No. IB21-002

March 18, 2021

INTERPRETATION
Registration of Pressure Equipment Alteration Design with use of Engineered Composite Systems

This Information Bulletin establishes that the installation of an Engineered Composite Systems (ECS) to reinforce a thin area or to restore the structural integrity of pressure equipment is deemed to be an alteration; and establishes implementation requirements to be met to obtain design registration for an ECS installation.

Interpretations Pressure Equipment Safety Regulation

Section 1(1)(d)

(d) "alteration" means any change to an item of pressure equipment as described in the original manufacturer's data report that requires a change of design calculations or otherwise affects the pressure-containing capability of the item of pressure equipment

Section 40(4) Repairs and Alterations

(4) An owner of pressure equipment that is to be altered must ensure that the alteration design is registered by the Administrator, in accordance with section 14, prior to the commencement of the alteration.

The installation of an ECS to reinforce a thin area or to restore the structural integrity of pressure equipment does not conform strictly to the code of construction, therefore is hereby deemed to be a type of alteration, the design of which requires registration in accordance with Section 40(4) of the Pressure Equipment Safety Regulation.

Implementation

This Information Bulletin establishes that ABSA Document AB-539, *Engineered Composite Systems for Pressure Equipment Alterations*, Edition 1 Revision 0 issued on March 18, 2021 specifies requirements that must be met to comply with Section 40 of the Pressure Equipment Safety Regulation for registration of alteration design and associated ECS procedure design.

AB-539 also establishes requirements for ECS Design, installation, testing, ECS procedure specification registration, maintenance, monitoring and removal of an ECS, which must be met in order to obtain registration for the design and installation of the ECS on pressure equipment.

Background

AB-539 provides information to assist industry in the development of registration submission for an ECS procedure design and alteration design that uses ECS for restoring the integrity of the pressure equipment.

These requirements are based ASME PCC-2 Part 4 Article 401, and ISO 24817 as the industry recognized standards and engineering practice for the external application of engineered composite systems to damaged pressure equipment.

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