Composite Pressure Vessel Validation – PDL Solutions (Europe) Ltd

Andy Christie – PDL Engineer

Composite materials have been adopted for a huge number of applications, from a Formula 1 car chassis through to cutting edge bicycle frames.

In many instances, the motivation to adopt composites is a reduction in weight, with no loss in structural strength, when compared to traditional ferrous and non-ferrous metallic materials.

In this presentation we will identify the tools and techniques applied to the design, validation and testing of composite pressure vessels manufactured from filament winding.

We’ll bring samples of the final products, used in offshore rescue situations, for you to pick up and try for size!

Flexible Pipe Composite Pressure Armour Qualification

Vineet Jha – Principal Engineer BHGE

To meet future challenges faced by offshore oil and gas industry, especially in deeper water, the introduction of composite materials is considered essential. Hence, BHGE is developing hybrid composite riser for ultra-deep-water floating production systems, typically found in offshore Brazil and West Africa.

The oil and gas industry is highly regulated and the introduction of new technologies requires significant investment in qualification and validation. Qualification of traditional flexible pipe and newer thermoplastic composite pipe is covered by established International Standards API 17J/API17B and DNV-RP-F119.

However the BHGE solution is a hybrid product not fully covered by either standard.

This presentation shows the BHGE approach to qualification of this unique product, ensuring adherence to relevant requirements of both API 17B/17J and DNV-RP-F119 and providing a robust and safe introduction to the market.

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