



ABS

CERTIFICATE NUMBER

05-YO117616-2-PDA

DATE

12 December 2012

ABS TECHNICAL OFFICE

Yokohama Engineering Services

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
NOV FGS SINGAPORE (PTE) LTD - SINGAPORE

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

PRODUCT: **Fiberglass (FRP) Pipe, Fittings and Joints**

MODEL: **Bondstrand Filament Wound, Fiberglass Reinforced Piping System - S2000M WD, S7000M WD, S2400 WD (S2410/12/14/16/20/25 WD) & S2400CWD (S2410/12/14/16/20/25C WD)**

This Product Design Assessment (PDA) Certificate 05-YO117616-2-PDA, dated 12/Dec/2012 remains valid until 11/Dec/2017 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Junji Nakagawa
Engineer