

CERTIFICATE NUMBER 17-GE1698015-PDA DATE 26 Jan 2018

ABS TECHNICAL OFFICE Genoa Engineering Department

## CERTIFICATE OF

# **Design Assessment**

#### This is to certify that a representative of this Bureau did, at the request of

### HYDRO BOND ENGINEERING, LTD.

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: Electrical Penetrator and Cable Assembly

#### Model: Diving Bell Pin Type Penetrators HPS (Hydro Bond Penetrator Series) Types: HPS-17, HPS-16, HPS-15, HPS-22, HPS-14, HPS-21, HPS-20. Inline or Right Angle

This Product Design Assessment (PDA) Certificate 17-GE1698015-PDA, dated 26/Jan/2018 remains valid until 25/Jan/2023 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

Giorgio Barbini Engineer/Consultant

NOTE. This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS is committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this ortificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

AB258(0110)