



CERTIFICATE NUMBER	23-2442533-PDA
EFFECTIVE DATE	14-Sep-2023
EXPIRY DATE	13-Sep-2028
ABS TECHNICAL OFFICE	London Engineering Department

## CERTIFICATE OF Product Design Assessment

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

### **SCHMITT ANCHORS & CHAINCABLES BV**

located at

**KREEKWEG 10, , ZWIJNDRECHT, Netherlands, 3336 LC**

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:** Anchor, High Holding Power  
**Model:** SHH TYPE (weight in kg) STANDARD  
**Endorsements:**  
**Tier:** 5 - Unit Certification Required

This Product Design Assessment (PDA) Certificate remains valid until 13/Sep/2028 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Nitin Tyagi,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, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

## SCHMITT ANCHORS & CHAINCABLES BV

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ZWIJNDRECHT

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**Tier: 5 - Unit Certification Required**

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**Product:** Anchor, High Holding Power  
**Model:** SHH TYPE (weight in kg) STANDARD  
**Endorsements:**

**Intended Service:**  
STOCKLESS ANCHORS FOR TEMPORARY, MOBILE AND PERMANENT ANCHORING SYSTEMS ON SHIPS AND OFFSHORE INSTALLATIONS

**Description:**  
TWEEN PLATES AND STOP PLATES WELDED TOGETHER FORM ANCHOR CROWN TO WHICH BASE TRIPPING PLATES AND PLATE FLUKES ARE CONNECTED BY WELDING. LAMELLED/MASSIVE SHANK IS SECURED TO THE CROWN BY A THROUGH BOLT THE AXIS OF WHICH IS IN PLANE WITH FLUKES. ANGLED BASE PLATES HELP TO TRIP THE FLUKES WHEN THE ANCHOR IS AGROUND. A SHACKLE IS ATTACHED TO THE TOP OF SHANK. PLACE OF FINAL TESTING AND INSPECTION

**Rating:**  
180kg - 9700kg

**Service Restriction:**  
Unit Certification is required for this product. The scope of unit certification is to cover the following:  
1. All materials and welding are to be in accordance with the Rules 2-2-1 and to the Surveyor's satisfaction.  
2. The Anchors are to be inspected and tested by the ABS Surveyor according to the Rules 2-2-1/7.  
3. Tolerances are to be as per the Rules 2-2-1/5.1.  
4. NDE is to be carried out for welding before and after Proof Load application. NDE is to be carried out in accordance with the Rules 2-2-1/7.3.  
5. SHP anchors are to be proof tested with loads required by the Rules 2-2-1/Table 6 for an anchor mass equal to 1.33 times the actual mass of the SHP anchor. The proof loading procedure and examination procedure for SHP anchors are to comply with those for ordinary anchors, described in the Rules 2-2-1/7.1.  
6. Marking is to be carried out in accordance with the Rules 2-2-1/9.  
7. Product tests are to be in accordance with 2013 Steel Vessel Rules 2-2-1/7.3.  
8. Anchor is to remain unpainted until all tests and inspections have been completed.

For ABS Classed vessels when the Equipment Symbol Circle E, Circle M and Circle P are requested or if the anchor is used on a site specific application; the anchor is to be reviewed specifically on a case by case basis.

The scope of type approval is to comply with MSC.1/Circ.1221 dated 11th December 2006.

**Comments:**  
Anchor holding power should be suitable for the intended installation. Accordingly, the exact holding power of the anchor system should be based upon the test data appropriate for the soil at the installation site. This Type approval covers the structural design of the anchor. Each anchor is subject to individual certification during the manufacturing and proof tests. The anchor shackle is designed as part of the anchor. An additional fatigue analysis may be required for each permanent installation on a case by case basis.

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

**Notes/Drawing/Documentation:**  
Doc. no. SHH 585 ST dated 24.7.2010 - Anchor SHH Type 585 kg Standard  
Doc. no. SHH 970 ST dated 26.7.2010 - Anchor SHH Type 970 kg Standard  
Table of design dimensions for Schmitt high holding anchor - Standard type

**Terms of Validity:**  
This Product Design Assessment (PDA) Certificate remains valid until 13/Sep/2028 or until the Rules and/or

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**Tier: 5 - Unit Certification Required**

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Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

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**STANDARDS**

**ABS Rules:**

ABS Rules for Condition of Classification 2023: 1-1-4/7.7, 1-1-A3 & A4

ABS Rules for Materials and Welding 2023: 2-2-1

ABS Rules for Building and Classing Marine Vessels 2023: 1-1-4/7.7, 1-1-A3 & A4, 3-5-1

ABS Rules for Condition of Classification -Offshore Units and Structures 2023 - Mobile Offshore Units: 1-1-4/9.7, 1-1-A2 & 1-1-A3, 3-4-1

**National:**

NA

**International:**

NA

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

NA