



## *Confirmation of Product Type Approval*

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product. This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 20-MAR-2022. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

**Product Name:** Strainer  
**Model Name(s):** DH, QH, DA, QA, SA, SH

**Presented to:**  
THE HELLAN STRAINER COMPANY  
3249 EAST 80TH STREET  
OH 44104  
United States

**Intended Service:** Marine and Offshore Applications - Including fuel oil, lube oil, hydraulic oil, fresh water, sea water systems for marine vessels and Floating Processing Storage and Offloading Vessels.

**Description:** Strainers, Manual and Motorized Self Cleaning in the following Styles and Pipe Sizes Model SH/SA: 1-1/2", 2", 2-1/2", 3" Model DH/DA: 3", 4", 6", 8", 10", 12" Model QH/QA: 14", 16"

**Tier:** 5

**Ratings:** Ratings depend on style, material, connection and temperature. See Attachment.

**Service Restrictions:** Unit Certification is not required for this product. If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined. 1. Cast iron filters are permitted for Class III systems only and where permitted by the Steel Vessels Rules. 2. Piping containing flammable fluids is to be constructed of steel or other materials approved by ABS as per 4-6-2/3.5 of the Steel Vessels Rules.

**Comments:** The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. 1. When they are required to be opened for cleaning during operation, they are to be fitted with means of depressurizing before being opened and venting before being put into operation. For this purpose, valves and

cocks for drainage and venting are to be provided as per 4-6-4/13.7.5 and 4-6-4/15.5.3 of the Steel Vessels Rules. 2. The strainers' body is to bear permanent identification, such as manufacturer's name or trademark, standard of compliance, material identity, pressure rating, etc., as required by the standard of compliance, as per 4-6-1/7.1.4 & Table 2 of the Steel Vessels Rules. 3. The installation of the strainers is to comply with the applicable requirements in 4-6-5/3.3.4, 4-6-5/3.5.4, 4-6-5/5.3.6, 4-6-5/5.5.2 and 4-6-5/7.7.2 of the Steel Vessels Rules as applicable.

**Notes / Documentation:** DOC: Declaration of Conformity ( 04, August, 2017) Report: Design Analysis for ABS, Dual Basket Strainer. Issued October 24, 2016 Report: Type Q Strainers, Issued February 11, 2015 Report: Straight Strainers, Issued December 12, 2016 Report: Hydrostatic Pressure Test Results on (6) strainers. July 29, 2003 Report: B16.5 Flanges. October 24, 2016 Report: MIL PRF20042 F. October 24, 2016 Catalog: Hellan Fluid Strainer. Revised 9/15

**Term of Validity:** This Product Design Assessment (PDA) Certificate 16-HS1550099-PDA, dated 21/Mar/2017 remains valid until 20/Mar/2022 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.

**ABS Rules:** The Rules for Conditions of Classification, Part 1 2016 Steel Vessels Rules 1-1-4/7.7, 1-1-Appendix 3 and 4 which covers the following: 2017 Steel Vessels Rules 4-6-1/7.1.2, 7.1.3, 4-6-2/3.1.3, 4-6-2/5.15, 4-6-4/13.7.5; 2017 MODU Rules 1-1-4/9.7, 1-1-Appendix 2 and 3, 4-2-2/1.3; 2017 Guide for Building and Classing Floating Production Installations 1-1-4/9.7, 1-1-Appendix 2 and 3, 7-2-6/9.3.2;

**National Standards:** 2015 ASME B16.1 Gray Iron Pipe and Flanges; 2015 ASME B16.24 Cast Copper Alloy Flanges and Fittings. 2015 ASME B16.5 Pipe Flanges and Pipe Fittings. 2015 ASME Boiler and Pressure Vessel Code.

**International Standards:**  
**Government Authority:** MIL-PRF-20042F. FLANGES, PIPE, BRONZE (SILVER BRAZING) May 2015.

**EUMED:**  
**Others:**

Model Certificate	Model Certificate No	Issue Date	Expiry Date
PDA	16-HS1550099-PDA	23-MAR-2017	20-MAR-2022



ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.

**Rating:**

Ratings depend on style, material, connection and temperature.

Style	Material	Flange	Pressure psi	Temperature deg F
SA/SH	Bronze	250 Navy	250	150
QA/QH	Iron	125 ASME B16.24	150	200
	Steel	150 ASME B16.5	285	200
DA/DH	Steel	150 ASME B16.5	285	100
			260	200
			260	300
			200	400
		300 ASME B16.5	450	400
	Stainless	150 ASME B16.5	275	100
			235	200
			215	300
			195	400
		300 ASME B16.5	450	400
	Bronze	150 ASME B16.5	220	100
		150 ASME B16.24	220	100
		300 ASME B16.5	450	400
		150 Navy	150	150
250 Navy		250	100	

Interpolation between temperatures is allowed.

All Strainers are rated for -15 psid