



CERTIFICATE NUMBER	22-2221700-1-PDA
EFFECTIVE DATE	04-Dec-2024
EXPIRY DATE	17-Apr-2027
ABS TECHNICAL OFFICE	Houston ESD - Piping

CERTIFICATE OF Product Design Assessment

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

THE HELLAN STRAINER COMPANY

located at

3249 EAST 80TH STREET, , CLEVELAND, OH, United States, 44104

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: Strainer
Model: DH, QH, DA, QA, SA, SH, TSH, TSA, HH, HA, XH, XA
Endorsements:
Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 17/Apr/2027 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
Electronically Signed by:

John Vincent B. Ulep
Senior Principal Engineer

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)

THE HELLAN STRAINER COMPANY

3249 EAST 80TH STREET

CLEVELAND OH

United States 44104

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Email: BTrout@hellanstrainer.com

Web: www.hellanstrainer.com

Tier: 2 - PDA Issued

Product: Strainer
Model: DH, QH, DA, QA, SA, SH, TSH, TSA, HH, HA, XH, XA
Endorsements:

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", 14"

Model QH/QA: 14", 16"

Model TSH/TSA : 1-1/2", 2", 2-1/2", 3"

Model HH/ HA: 20"

Model XH/XA: 20"

Rating:

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

Service Restriction:

1. Unit certification is required for units over 150 psi or 10" for installation aboard facilities on offshore installations (provided Topside is class item) as per 3-2/Table 2 of ABS Facility Rules.
2. Unit Certification is required for units over 6" in diameter installed onboard the vessel and falling within the requirements of 4-4-1/Table 1 of the Marine Vessel Rules.
3. 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.
4. Cast iron filters are permitted for Class III systems only and where permitted by the Marine Vessels Rules.
5. 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 Marine Vessels Rules.

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. 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 Marine Vessels Rules.
3. 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 Marine Vessel Rules.
4. 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 Marine Vessel Rules as applicable.

Notes/Drawing/Documentation:

Drawing No. 140DH-2, 14" DH Strainer Manual Section, Revision: -1

Drawing No. 200XH-2, 20" XH Strainer Manual Section, Revision: -1

Drawing No. 1403DH-1, 14" DH Strainer Manual Section, Revision: 1

Drawing No. 1404DH-1, 14" DH Strainer Manual Section, Revision: 1

Drawing No. 2003XH-1, 20" XH Strainer-Manual Section, Revision: 1

Drawing No. 2004XH-1, 20" XH Strainer-Manual Section, Revision: 1

Drawing No. 18840f-1 R1, Finite Element Analysis Report-14" Strainer Design, Revision -,

Drawing No. 19487f-1 R0, Finite Element Analysis Report 20" Strainer Design, Revision-

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Terms of Validity:

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STANDARDS

ABS Rules:

2024 Rules for Conditions of Classification, 1A-1-4/7.7, 1A-1A-A3, 1A-1-A4, which covers the following:
2024 Rules for Building and Classing Marine Vessels: 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

2024 Rules for Conditions of Classification, Offshore Units and Structures, 1B-1-4/9.7, 1B-1-A2, 1B-1-A3, which covers the following:

2024 Rules for Building and Classing Mobile Offshore Units: 4-2-2/1.3

National:

2020 ASME B16.1 Gray Iron Pipe and Flanges;
2016 ASME B16.24 Cast Copper Alloy Flanges and Fittings.
2020 ASME B16.5 Pipe Flanges and Pipe Fittings.
2021 ASME Boiler and Pressure Vessel Code.

International:

NA

Government:

MIL-PRF-20042G. FLANGES, PIPE, BRONZE (SILVER BRAZING) May 2020.

EUMED:

NA

OTHERS:

NA