



CERTIFICATE NUMBER	20-1949435-PDA
EFFECTIVE DATE	30-Jun-2020
EXPIRY DATE	29-Jun-2025
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

## **GPT INDUSTRIES**

located at

**4990 IRIS ST., WHEAT RIDGE, CO, United States, 80033**

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 Gasket**

**Model EVOLUTION**

This Product Design Assessment (PDA) Certificate remains valid until 29/Jun/2025 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

Yongjin Lee,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)

## GPT INDUSTRIES

4990 IRIS ST.

WHEAT RIDGE CO

United States 80033

Telephone: 1 303 988 1242

Fax: 1 303 988 1922

Email: Tim.hurley@gptindustries.com

Web: www.gptindustries.com

**Tier: 2 - PDA Issued**

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**Product:** Gasket

**Model:** EVOLUTION

**Intended Service:**

Marine and Offshore Applications - For resistance to abrasion and impact while providing chemical resistance to hydrogen sulphide (H<sub>2</sub>S), steam, carbon monoxide, carbon dioxide and other aggressive hydrocarbon media

**Description:**

Flange isolation gasket composed of a fully encapsulating high dielectric strength thin-film coated stainless steel grade 316L gasket retainer, NACE MR0175/ISO 15156 Inconel 718 C-ring with high dielectric strength thin-film coating, and Silica Filled PTFE ID-Seal where applicable:

**Rating:**

Size: 1/2 to 24 inch NPS

Pressure Class: ASME B16.5 150# to 2500#

Temperature range: 0F to 500F

Fire tested per API 6FB

Please consult with the manufacturer for more detail about specifications including aging time and available flange types of each size of gasket in consideration of medium transferred, pressure & temperature ratings

**Service Restriction:**

Unit Certification is not required for this product.

If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

**Comments:**

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

**Notes/Drawing/Documentation:**

Drawing No. ENG11J-1G, EVOLUTION ID-SEAL SPECIFICATION OVERVIEW, Revision: 01, Date: 2019-11-19, Sheets: 5;

Drawing No. ENG11J-1DB, EVOLUTION C-RING SPECIFICATION OVERVIEW COATED, Revision: 01, Date: 2019-11-15, Sheets: 3;

Drawing No. ENG11J-1DA, EVOLUTION C-RING SPECIFICATION OVERVIEW UNCOATED, Revision: 01, Date: 2019-11-06, Sheets: 3;

Drawing No. ENG11I-12-F, EVOLUTION METALLIC RETAINER SPECIFICATION OVERVIEW COATED TYPE F, Revision: 01, Date: 2019-11-07, Sheets: 8;

Drawing No. ENG11I-11-F, EVOLUTION METALLIC RETAINER SPECIFICATION OVERVIEW UNCOATED TYPE F, Revision: 01, Date: 2019-11-06, Sheets: 9;

Fire Test Report by Yarmouth Research and Technology, LLC for 2 inch Class 2500 Evolution Gasket w/ DHX Kit, Date: 2019-12-11, Pages: 16;

Fire Test Report by Yarmouth Research and Technology, LLC for 6 inch Class 300 Evolution Gasket w/ Mica Kit, Date: 2019-12-10, Pages: 16;

Fire Test Report by Yarmouth Research and Technology, LLC for 6 inch Class 300 Evolution Gasket w/ DHX Kit, Date: 2019-12-11, Pages: 16;

Test Report for 4" Class 300 per Shell Specification MESC SPE 85/300 by AMTEC North America, Inc., Date: 2020-2-17, Pages: 49;

GPT Bolt Torques Calculations per ASME B16.5, Revision: F, Date: 2018-11-28;

Statement on Testing of Coating with NORSOK M710 Edition 3, Date: 2015-12-22, Pages: 6;

RoHS 3 Compliance Statement of Garlock GYLON Gasketing, Date: 2017-12-21, Sheet: 1;

Garlock GYLON Style 3500 Spec Sheet, Date: 2016-12-01, Sheet: 1;

**Terms of Validity:**

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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:**

Rules for Conditions of Classification, Part 1 - 2020 Rules for Building and Classing Marine Vessels 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:  
2020 Marine Vessels Rules: 4-6-1/7.1;

Rules for Conditions of Classification, Part 1 - 2020 Rules for Building and Classing Mobile Offshore Units 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:  
2020 Mobile Offshore Units Rules: 6-1-6/5.1;

**National:**

API STANDARD 6FB - Standard for Fire Test for End Connectors, Fourth Edition, May 2019;  
2019 ASME Boiler and Pressure Vessel Code, Section VIII, Division 1, Mandatory Appendix 2: Rules for Construction of Pressure Vessels;

**International:**

NA

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

NA