



CERTIFICATE NUMBER	19-GE1920310-PDA
EFFECTIVE DATE	09-Dec-2019
EXPIRY DATE	08-Dec-2024
ABS TECHNICAL OFFICE	Genoa Engineering Department

CERTIFICATE OF Product Design Assessment

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

RACCORDERIE METALLICHE SPA

located at

**STRADA SABBIONETANA, 59, CAMPITELLO DI MARCARIA
(MANTOVA), Italy, 46010**

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 Piping System and Fittings

Model INOXPRES

This Product Design Assessment (PDA) Certificate remains valid until 08/Dec/2024 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

Cristina Generale, 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)

RACCORDERIE METALLICHE SPA
STRADA SABBIONETANA, 59
CAMPITELLO DI MARCARIA (MANTOVA)
Italy 46010
Telephone: +390376960291
Fax: +39037696422
Email: info@racmet.com
Web: WWW.RACMET.COM

Tier: 5 - Unit Certification Required

Product: Piping System and Fittings

Model: INOXPRES

Intended Service:

Installation on board ships and offshore unites in the following systems: fresh and sea water cooling, deck washing, sprinkler, ballast, bilge, sanitary fresh and sea water, compressed air.

Description:

AISI 316L piping system and fittings with integral O-ring seal.

Rating:

Pipe sizes OD x t [mm]: 15 x 1.0, 18 x 1.0, 22 x 1.2, 28 x 1.2, 35 x 1.5, 42 x 1.5, 54 x 1.5, 76.1 x 2.0, 88.9 x 2.0, 108 x 2.0.

Design Pressure: 16 bar

Design Temperature: dep. on sealing (see comments).

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.

Manufacturer recommended O-ring seals:

EPDM -20 C deg to 120 C deg (up to 16 bar)

NBR -20 C deg to 70 C deg (up to 5 bar)

FKM -20 C deg to 220 C deg (up to 16 bar)

MVQ -20 C deg to 180 C deg dedicated for Fire Test (up to 16 bar)

Only MVQ O-ring seal is to be used for fire resistant applications.

The fittings are pressed (crimped) in place by means of pressing tool according to Manufacturer's Technical Handbook.

Notes/Drawing/Documentation:

Cetena Test Report no. 10906 Rev. 1 dated 25 July 2011:

Drawing No. Test Report Cetena, 25 Jul 2011 Test Report Gas Cetena Inoxpres, Revision: 0, Pages: 1

RINA Fire test report no. 2010CS0129887/1 dated 11 Oct 2010:

Drawing No. Inoxpres Fire Test, Inoxpres Fire Test 11 Oct 2010, Revision: 0, Pages: 1

LAPI test report no. 1515/13/AC dated 24 Oct 2013:

Drawing No. LAPI_fiamma Inoxpres 108, LAPI_fiamma Inoxpres 108, Revision: 0, Pages: 1

Report no. PRTP/20100301/AT_REV.01 dated 30 Nov 2010:

Drawing No. Inoxpres Test, Inoxpres Vibration-Pulsation Test At Prototipo Terst.ing dated 23 Oct 2013, Revision: 0, Pages: 1

Drawing No. Pressfitting product range, General Pressfitting Product Range, Revision: 0, Pages: 1

Drawing No. Product range, Inoxpres product range, Revision: 0, Pages: 1

Drawing No. SAG 76-108, detail drawing size 76-108, Revision: 0, Pages: 1.

Drawing No. SAG15-54 0, detail drawing size 15-54, Revision: 0, Pages: 1.

Terms of Validity:

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STANDARDS

ABS Rules:

2019 Rules for Conditions of Classification – Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2019 Mobile Offshore Units Rules 4-2-1/11

2019 Rules for Conditions of Classification, 1-1-4/7.7, 1-1 A3, 1-1-A4, which covers the following:

2019 Marine Vessels Rules 4-6-2/5.9

2019 Steel Vessels Rules 4-6-2/5.9

2019 Steel Vessels Under 90 Meters (295 Feet) in Length Rules, 4-4-2/13.7

2019 Offshore Support Vessels Rules, 4-6-2/5.9

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA