Confirmation of Product Type Approval

Company Name: TEADIT INTERNATIONAL PROD. GMBH

Address: EUROPASTRASSE 12 Austria

Product: Gasket

Model(s): 24SH, 30SH, TF1570, TF1574, TF1580, TF1590, NA1002, NA1005, NA1006, NA1100, NA1122, SWG 913/913M

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	21-2063743-1-PDA	05-APR-2023	05-JAN-2026
Manufacturing Assessment (MA)	21-4901437	17-AUG-2021	25-AUG-2025
Product Quality Assurance (PQA)	NA	NA	NA

Tier
3 - Type Approved, unit certification not required

Intended Service
Marine & Offshore Application.

Description
Gaskets and Gasket-Materials:

24SH is a large gasket sheet produced from 100% pure, multi-directionally expanded PTFE.

30SH is a large gasket sheet produced from 100% pure, multi-directionally expanded PTFE.

TF1570 and TF1574 are structured PTFE - Gasket - Sheet produced from virgin PTFE resin filled with hollow glass micro spheres.

TF1580 is a structured PTFE - Gasket - Sheet and produced from virgin PTFE resin filled with Barium Sulfate.

TF1590 is a structured PTFE - Gasket - Sheet and produced from virgin PTFE resin filled with Silica.

NA1002 is a compressed non-asbestos jointingsheet material produced from Aramid fibres, bonded with Nitrile rubber (NBR). It is being manufactured by means of a hot calender process under quality control standards which are registered under ISO 9001 certification.

NA1005 is a compressed non-asbestos jointingsheet material produced from Aramid fibres, bonded with Nitrile Rubber (NBR). It is being manufactured by means of a hot calender process under quality control standards which are registered under ISO 9001 certification.

NA1006 is a non-asbestos jointing-sheet material produced from cellulose fibres, bonded with Nitrile rubber (NBR). It is being manufactured by means of a hot calender process under quality control

standards, registered and certified under ISO 9001.

NA1100 is a universal jointing sheet with high temperature and pressure resistance, manufactured from graphite and carbon fibre, bonded with Nitrile rubber (NBR). It is manufactured by means of a hot calender process under quality control standards which are registered and certified under ISO 9001.

NA1122 is a compressed non-asbestos sheet gasket material produced from a combination of inorganic fibers, bonded with nitrile rubber (NBR). It is being manufactured by means of a hot calender process under quality control standards which are registered under ISO 9001 certification.

Spiral-Wound Gaskets (SWG) 913/913M are made of a preformed metallic strip and a soft filler material (PTFE or graphite), wound together under pressure, and optionally with an inner and/or outer guide ring. The metal strip holds the filler.

Ratings
24SH

Temperature Min./continuous Max.: -240°C/270°C

Pressure: Max. 200 bar

Color: white

30SH

Temperature Min./continuous Max.: -268°C/260°C

Pressure: Max. 200 bar

Color: white

TF1570, T1574

Temperature Min./Max.: -210°C/260°C

Pressure: Max. 55 bar

Color: blue

TF1580:

Temperature Min./Max: -210°C/260°C

Pressure Max.: 83 bar

Color: Off-White

TF1590:

Temperature Min./Max: -210°/260°C

Pressure Max.: 83 bar

Color: Fawn

NA1002

Temperature Max./Continuous Max. 400°C / 260°C

Pressure Max./ Continuous Max: 110 bar / 80 bar

Color: Green

NA1005

Temperature Max./Continuous Max. 400°C / 240°C

Pressure Max./ Continuous Max: 110 bar / 50 bar

Color: Blue

NA1006

Temperature Max./Continuous Max. 450°C / 270°C

Pressure Max./ Continuous Max: 130 bar / 70 bar

Color: Black

NA1100

Temperature Max./Continuous Max. 450°C / 270°C

Pressure Max./ Continuous Max: 130 bar / 70 bar

Color: Black

NA1122

Temperature Max./Continuous Max. 550°C / 430°C

Pressure Max./ Continuous Max: 150 bar / 102 bar

Color: Black

Spiral-wound Gaskets (SWG) 913/913M

Max Temperature for PTFE filler material: 260°C

Max Temperature for Grafite filler material: 450°C

Max Temperature with steam and under inert conditions: 650°C

Service Restrictions
1) Unit Certification is not required for this product.

2) 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.

3) This product is not to be used where materials rendered ineffective by heat are prohibited in accordance with 4-6-2/9.13.1, 4-6-4/13.5.3, 4-6-4/15.3.2 and 4-7-3/1.11.1 of the 2023 MVR, unless the gasket materials are to be tested of passing a recognized fire test acceptable to the Bureau.

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

2) Physical properties and manufacturer´s acceptance criteria are to meet the design/application requirements.

3) Chemical compatibility as per manufacturer´s recommendation.

4) The Flange seals (NA1002, NA1005, NA1006) have been Fire-Tested according ISO 19921.

Notes, Drawings and Documentation
See Attached File.

Term of Validity
This Product Design Assessment (PDA) Certificate remains valid until 05/Jan/2026 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.

ABS Rules
2023 Rules for Condition of Classification: 1-1-4/7.7, 1-1-A3 and 1-1-A4, which covers the following:

2023 Rules for Building and Classing Marine Vessel: 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-6-1/3.5, 4-6-1/7.5.2, 4-6-2/5.15, 4-6-2/9.5, 4-6-2/9.13.1, 4-6-2/9.15, 4-6-4/13.5.3, 4-6-4/15.3.2, 4-7-3/1.11.1

2023 Rules for Conditions of Classification - Offshore Units and Structures: 1-1-A2, 1-1-A3, 1-1-4/9.7.

International Standards
ISO 19921:2005

ISO 19922:2005

EU-MED Standards
NA

National Standards
ASTM F36 (Edition 2015), F37 (Edition 2019), F38 (Edition 2018), F104 (Edition 2020), F152 (Edition 2017), F146 (Edition 2019), F1315 (Edition 2017), F495 (Edition 2019), D792 (Edition 2013).

DIN 28090-2 (Edition 2014), DIN 52913 (Edition 2002), DIN 3535 (Edition 2019).

EN 13555 (Edition 2014).

Government Standards
NA

Other Standards
NA

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 06-Apr-2023 8:11

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 is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. 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.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

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.

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.