



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	Isotubi, S.L.
Address	P.I. Santa Rita, C/ Mecánica, 6, Castellbisbal-Barcelona, 08755, Spain
Place of Production	P.I. Santa Rita, C/ Mecánica, 6, Castellbisbal-Barcelona, 08755, Spain C/Costa l deu, 91 08205 Sabadell, Barcelona, Spain
Type	Flexible Pipe Couplings And Hoses
Description	Stainless steel welded pipe system with couplings (stainless steel tubes and press fittings). TYPES NUMEPRESS pipes to EN 10312 and EN 10217-7. Press Type Compression fittings with 'O' ring seal.
Trade Name	NUMEPRESS
Application	For use in Class III systems where no fire endurance test is required, and in domestic and sanitary systems. Couplings with seals sensitive to heat are not acceptable in the following locations: <ol style="list-style-type: none">Starting/control air and CO₂ systems.Inside machinery spaces of category A or accommodation spaces for main lines of inert gas systems & Pipe systems for flammable liquids including corresponding vent and sounding pipes.Fire main, water spray or sprinkler systems which are not always filled

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Vahid Saremi Shahab

Piping & Pressure System Lead Specialist to
Lloyd's Register EMEA
A member of the Lloyd's Register group

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with water.

4. Bilge lines in high fire risk compartments
5. Scupper pipes below freeboard deck over board

Specified Standard Lloyd's Register's Rules and Regulations for the Classification of Ships
IACS P2
EN 10312
EN10217-7

Ratings Refer to the Appendix

Other Conditions

1. Pipes and fittings are to be selected and installed in accordance with the manufacturer's instructions and recommendations, and LR Ship Rules Part 5, Chapter 12, Sections 2.12 and Table12.2.7 as applicable.
2. Where a piping system penetrates watertight or fire bulkheads or decks the penetration is to be approved in each individual case
3. If the piping system penetrates watertight bulkheads below the freeboard deck then the whole systems is to be approved with regard to progressive flooding.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 13/00017(E1)

The Design Appraisal Document LR23399264TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR23399264TA

Appendix

<u>RATINGS</u>	Temperature range (°C):	0 to 120
	Maximum pressure (bar):	16
	Maximum diameter (mm):	108
	Maximum wall thickness (mm):	2

Stainless steel welded tubes (TIG) acc. EN 10312

Steel 1.4301/1,1.4401/1.4404

Outside diameter (mm):	15	18	22	28	35	42	54	76.1	88.9	108
Wall thickness (mm):	1	1	1.2	1.2	1.5	1.5	1.5	2	2	2

Stainless steel welded tubes (TIG) acc. EN 10217-7

Steel 1.4301/1.4401/1.4404

Outside diameter (mm):	13.5	17.2	21.3	26.9	33.7	42.4	48.3	60.3
Wall thickness (mm):	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65

Press Type Compression fittings with O-ring seal

Austenitic stainless steel acc. 1.4401/1.4404

O-ring seal EPDM or FKM

Outside diameter (mm):	15	18	22	28	35	42	54	76.1	88.9	108
Wall thickness (mm):	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2	2	2

Outside diameter (mm):	13.5	17.2	21.3	26.9	33.7	42.4	48.3	60.3
Wall thickness (mm):	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65



**ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR23399264TA****Press Fittings Types**

Coupling	Valve connector with swivel nut	Pipebridge
Slip coupling	Female tee threaded adaptor	Three pieces adaptor
90 deg. elbow	Male female reducer	Female pipebridge
90 deg. elbow one plain end	Reducing tee	Female connector
45 deg. elbow	Equal tee	Male connector
45 deg .elbow one plain end	Female adaptor	Press flanged adaptors
90deg. female angle adaptor	Male adaptor	Flexible tube
90deg. Male angle adaptor	Flanged adaptor	Equal or reduced cross
90 deg. Female elbow with wall plate	Pre-formed pipe bridge	
90 deg. Elbow with plain ends	Plug	
	Air tube pipe bridge	



LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issue by: UK&I Technical Support Office

Issued to: ISOTUBI, S.L.

For: NUMEPRESS PIPE SYSTEM WITH COUPLINGS

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (September 2020) and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Application Checklist – Appendix to Form 2502TA Signed	17/11/2022
Request for Marine Services- Type Approval 349370	02/01/2023
Production Quality Assessment Form PQA report PRJ11100400930	19/04/2023
LR Design Appraisal Document (DAD) 13-00017 (E1)	07/02/2018

Vahid Saremi Shahab

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Technical Support Office

UK&I TSO, Marine & Offshore, Lloyd's Register EMEA

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations. Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.