Certificate No: LR23405009TA
Issue Date: 05/12/2023
Expiry Date: 04/12/2028

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	**PI.EFFE.CI. Srl**
Address	Via G. Marconi, 76/A, Parma, 43123, Italy
Type	Pipe Clamps
Description	PI.EFFE.CI. Clamps- Standard series, Heavy series, Twin series, Heavy series Twin design, Special Series, Light Series, Multi series, U-bolt, Square U-bolt, Super Heavy weight series and Metal DIN series.
Trade Name	PI.EFFE.CI. Clamps
Application	For piping system in Marine, Offshore Applications, for fastening and guiding of tubes, pipes, hoses and cables.
Specified Standard	Lloyd's Register Rules and Regulations for the Classification of Ships, July 2022 DIN 3015, Part 1, 2, 3 and 10; DIN 3567 DIN 1592 1593 1596 1597
Ratings	Please refer to the Appendix
Additional Tests	DIN 3015, Part 1, 2, 3 and 10; DIN 3567 DIN 1592 1593 1596 1597

Vahid Saremi Shahab

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

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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Type Approval Certificate

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.

The Design Appraisal Document LR23405009TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Reference: UKITSO/ VSS/LR23405009TA

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR23405009TA

Appendix

SERIES

TYPE	DIAMETER RANGE (mm O.D.)
STANDARD SERIES DIN 3015-1	6 to 102
HEAVY SERIES DIN 3145-2	6 to 406
TWIN SERIES DIN 3015-3	6 to 42,4
SPECIAL SERIES	8 to 42,4
HEAVY SERIES TWIN DESIGN	19 to 42,4
LIGHT SERIES A/B/C/LS/LSCF/LSRA/LSRD	4 to 25,4/6 to 22/6 to 32
MULTI SERIES	6 to 25,4
SUPER HEAVYWEIGTH SERIES	166 to 800
U-BOLT + BC/BL/CFP	10 to 630
SQUARE U-BOLT	30x30 to 120x120
METAL DIN SERIES	7 to 521

CLAMP MATERIALS	TEMPERATURE RANGE (°C)
POLYAMIDE (PA V0)	-40 / +140*
POLYAMIDE (PA6)	-30 / +85
POLYPROPYLENE (PP)	-30 / +90
POLYPROPYLENE SELF-ESTINGUISHING (AU)	-30 / +90*
ALUMINIUM (AL)	Up to +300
RUBBER ELASTOMER (GM)	-40 / +90 *

*Flame retardant spec. see catalogue

METAL PARTS:
Carbon steel

Stainless steel 1.4401 (316L)

Stainless steel 1.4307 (304)

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Reference: UKITSO/ENG/TA/VSS/PRJ11100411116

LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issue by: UK&I Technical Support Office
Issued to: PI.EFFE.CI. S.R.L. VIA G. MARCONI
For: : PI.EFFE.CI. Pipe Clamps

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	18/04/2023
Request for Marine Services- Type Approval TAC 2023-054 SQTBC	18/04/2023
Production Quality Assessment Form PQA report PRJ11100411116-2	15/06/2023
DIN 3015-2 Report	1999
DIN 3015-1 Report	1999
DIN 3015-3 Report	1999

TEST DOCUMENTATIONS

Material Test Report EN 10204 3.1	
Test Certificate 10722683584	
Material Test Report 564021 dated on	23/01/2023
Test Report dated on	12/05/2022
Material Test Report dated on	31/01/2023
Material Test Report dated	14/02/2023
Test Certificate dated	10/02/2023
Test Certificate dated	30/01/2023
Material Test Certificate dated	25/01/2023
Test Report No 0034\DC\TOX\21 dated	29/03/2021
Test Report No 0367\DC\REA\21 dated	29/03/2021
Test Report No 0367\DC\REA\21_2 dated	29/03/2021

OTHER DOCUMENTATION

ISO 45001:2018 Certificate No. IT 21/0968 Valid until October 2024
GENERAL PRODUCT CATALOGUE 2023

Vahid Saremi Shahab
Lead offshore Piping Engineer
Technical Support Office
UK&I TSO, Marine & Offshore, Lloyd's Register EMEA

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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.

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