Certificate No: LR2443637TA
Issue Date: 21/11/2023
Expiry Date: 20/11/2028

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	**Hilti Corporation**
Address	Feldkircherstrasse 100, 9494 Schaan, Liechtenstein
Place of Production	Hilti Corporation Feldkircherstrasse 100, 9494 Schaan, Liechtenstein
Place of Production	WP-Wörgartner Produktions-GmbH Bahnhofstrasse 21, Oberndorf / Tirol, 6372, Austria
Place of Production	Ningbo World Broad Hardware & Electrical Co. Ltd. No. 139 Xinyang Road, Ditang Town, Yuyao City, Ningbo City, Zhejiang, 315491, China
Type	Building Construction Elements
Description	Hilti DX Direct Mechanical Fastening System, Comprising Hilti X-CR fastenings produced using the Hilti DX process.
Trade Name	General purpose nails: X-CR, X-R. Threaded stud connections: X-ST-GR M8. Composite fasteners: X-FCM-R and X-FCP-R.
Application	For use in fastening carbon steel, stainless steel or aluminium base components in marine, offshore or industrial environments as per Hilti Product Information.

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Jenny Wilson

Engineering - Machinery Principal Specialist
to Lloyd's Register EMEA
A member of the Lloyd's Register group

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Specified Standard Hilti Direct Fastening Technology Manual, Product Information.

Other Conditions This Type Approval certificate should be read in conjunction with LR technical Report no. 2003/CSG/TI/6331.

Unless otherwise stated in the Hilti Direct Fastening Technology Manual, the tensile strength of the fastened and base material should be not less than:

Carbon steel	360N/mm^2
Stainless steel	360N/mm^2
Aluminium	200 N/mm^2

The end user must ensure that the base and fastened materials possess adequate corrosion resistance for the environments in which they are to be used.
For use on LR Classed ships, the locations and systems for which they are to be used are to be subject to a ship specific agreement.

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: LR2410653TA

The Design Appraisal Document LR2443637TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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