



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	T-Drill Industries, Inc (U.S. Division of T-Drill OY)
Address	1740 Corporate Drive Suite 820, Norcross, Georgia, 30093, United States
Place of Production	T-DRILL Oy PL 20, LAIHIA, 66401, Finland
Place of Production	T-Drill OY 23 Tolkkintie, Isokyrö, 61500, Finland
Type	Pipes and Fittings
Description	Collared cold formed extruded outlets for butt welded branch connections from the run and tube/pipe material for straight and bend tubes/pipes.
Trade Name	T- Series Butt welded type extruded fittings.
Application	Pipe fittings where butt welded fittings are required with completed penetration for marine, offshore and Industrial application.
Specified Standard	Rules and Regulations for Classification of Ships 2021 Rules and Regulations for Classification of Offshore Units 2022 ASME B 31.3 -2020

1330 Enclave Parkway, Houston, Texas, 77077,
United States

Gopal Nair

Piping & Pressure System Principal Specialist
to Lloyd's Register North America, Inc.
A member of the Lloyd's Register group

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ASTM F 2014-00

Ratings

See Appendix to this certificate.

Other Conditions

1. The header and branch pipe design should comply with requirements of ASME B 31.3 paragraph 304.3.4 and ASTM F2014-00.
2. Extruded fittings are for butt weld applications.
3. Extruded fittings should be designed for all applicable loads based on the user input.
4. Where use of these extruded fittings is intended for I, II, LNG and LPG, materials have to meet the requirements of Lloyd's Register Rules for the Manufacture, Testing and Certification of Materials.
5. The products covered in this certificate for Lloyd's Register Class III systems may be produced at a third-party location using OEM machines (Collaring Machine TEC-Series S-80, T-115, S-56, SEC-100, Plus 500, CEC-170 and Collaring Stations T-150, T-850, S-54) & process, provided the products are produced in accordance with OEM procedures and the properties of the fittings or flanges are not unduly altered or impaired. This should be ensured periodically to the satisfaction of this certificate holder.

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 North America, Inc. of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: New

The Design Appraisal Document Q/ATSO-23-0692/002/GN and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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