

 Page
 1 of 1

 Certificate No:
 LR2001990TA

 Issue Date:
 27/02/2020

 Expiry Date:
 26/02/2025

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 ACD LLC

Address 2321 S. Pullman Street

Santa Ana, CA 92705-5512

USA.

Place of Production 2321 S. Pullman Street

Santa Ana, CA 92705-5512

USA.

Type Submerged Pump

Description Centrifugal Submerged Cryogenic Pump

Trade Name TC (MSP) 34.2

Application LNG, liquid nitrogen, ethylene, ethane transfer operations for marine and off

shore installations

Specified Standard Rules and Regulations for the Construction and Classification of Ships for the

Carriage of Liquefied Gases in Bulk, July 2019

Rules and Regulations for the Classification of Ships using Gases or other Low-

flashpoint Fuels, July 2019

Ratings See enclosed Appendix

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 No. LR2001990TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

April

Abhijit Aul

Lead Regulatory Specialist to Lloyd's Register

A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, UK

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.