



Certificate No:
TAE00004NC

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Cable Ladders

with type designation(s)
Ladder type Cable Tray

Issued to

Suhhan Industry Co., Ltd.
Busan, Korea, Republic of

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Material **Stainless Steel (SS316L) or Hot Dip Galvanized Steel (HDG)**

Suitable for open deck **Yes**

Issued at **Høvik** on **2023-03-24**

This Certificate is valid until **2028-03-23**.

DNV local unit: **Ulsan**

for **DNV**

Approval Engineer: **Ivar Bull**

Frederik Tore Elter
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 251

Revision: 2022-12

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Product description

Cable ladder type cable tray

Classification according to:	IEC 61537 Class
6.1 Material	Metallic
6.2 Resistant to Flame Propagation	Non Flame Propagation
6.3 Electrical Continuity Characteristics	With Electrical Continuity Characteristics
6.4 Electrical Conductivity	Electrical Conductivity Characteristics
6.5 Resistance Against Corrosion	Stainless steel (SS316L) with post treatment: Class 9D Hot Dip Galvanized Steel (HDG) Min 45 µm : Class 5
6.6.1 Minimum Temperature	- 40 °C
6.6.2 Maximum Temperature	+120 °C
6.7 Perforation in the Base Area	NA
6.8 Free base area	Classification Z
6.9 Impact resistance	Up to 20 J

Type:	LADDER TYPE CABLE TRAY, Stainless steel (SS316L)
Standard surface:	SS316L

Number	Type	Dimensions (mm)
LSTLCRI30-03030	SS316L / LADDER TYPE CABLE TRAY	300W x 150H x 3000L
LSTLCRI30-04530	SS316L / LADDER TYPE CABLE TRAY	450W x 150H x 3000L
LSTLCRI30-06030	SS316L / LADDER TYPE CABLE TRAY	600W x 150H x 3000L
LSTLCRI30-07530	SS316L / LADDER TYPE CABLE TRAY	750W x 150H x 3000L
LSTLCRI30-09030	SS316L / LADDER TYPE CABLE TRAY	900W x 150H x 3000L
LSTLCRI30-0306020C	SS316L / LADDER TYPE CABLE TRAY	300W x 150H x 6000L
LSTLCRI30-0456020C	SS316L / LADDER TYPE CABLE TRAY	450W x 150H x 6000L
LSTLCRI30-0606020C	SS316L / LADDER TYPE CABLE TRAY	600W x 150H x 6000L
LSTLCRI30-0756020C	SS316L / LADDER TYPE CABLE TRAY	750W x 150H x 6000L
LSTLCRI30-0906020C	SS316L / LADDER TYPE CABLE TRAY	900W x 150H x 6000L
LSTLCPI30-03030	SS316L / LADDER TYPE CABLE TRAY	300W x 100H x 3000L
LSTLCPI30-04530	SS316L / LADDER TYPE CABLE TRAY	450W x 100H x 3000L
LSTLCPI30-06030	SS316L / LADDER TYPE CABLE TRAY	600W x 100H x 3000L
LSTLCPI30-07530	SS316L / LADDER TYPE CABLE TRAY	750W x 100H x 3000L
LSTLCPI30-09030	SS316L / LADDER TYPE CABLE TRAY	900W x 100H x 3000L

Type:	LADDER TYPE CABLE TRAY, Hot Dip Galvanized Steel (HDG)
Standard surface:	Hot Dip Galvanized
Thickness of zink coating:	Minimum 45 µm

Number	Type	Dimensions (mm)
LST0CRI30-03030	HDG / LADDER TYPE CABLE TRAY	300W x 150H x 3000L
LST0CRI30-04530	HDG / LADDER TYPE CABLE TRAY	450W x 150H x 3000L
LST0CRI30-06030	HDG / LADDER TYPE CABLE TRAY	600W x 150H x 3000L
LST0CRI30-07530	HDG / LADDER TYPE CABLE TRAY	750W x 150H x 3000L
LST0CRI30-09030	HDG / LADDER TYPE CABLE TRAY	900W x 150H x 3000L
Table continued		
LST0CRI30-0306020C	HDG / LADDER TYPE CABLE TRAY	300W x 150H x 6000L
LST0CRI30-0456020C	HDG / LADDER TYPE CABLE TRAY	450W x 150H x 6000L

Number	Type	Dimensions (mm)
LST0CRI30-0606020C	HDG / LADDER TYPE CABLE TRAY	600W x 150H x 6000L
LST0CRI30-0756020C	HDG / LADDER TYPE CABLE TRAY	750W x 150H x 6000L
LST0CRI30-0906020C	HDG / LADDER TYPE CABLE TRAY	900W x 150H x 6000L
LST0CPI30-04530	HDG / LADDER TYPE CABLE TRAY	300W x 100H x 3000L
LST0CPI30-06030	HDG / LADDER TYPE CABLE TRAY	450W x 100H x 3000L
LST0CPI30-07530	HDG / LADDER TYPE CABLE TRAY	600W x 100H x 3000L
LST0CPI30-09030	HDG / LADDER TYPE CABLE TRAY	750W x 100H x 3000L
LST0CPI30-04530	HDG / LADDER TYPE CABLE TRAY	900W x 100H x 3000L

Application/Limitation

Cable ladder for installation on board Offshore Units and Ships.

The cable ladder system shall be installed in accordance with the producer's loading table for the mentioned type.

The installation is to be mechanically protected in accordance with DNV Rules and especially on weather decks in cargo hold areas and through cargo holds.

Cable ladders must not to be used as a walkway.

Type Approval documentation

Tests carried out

Load bending test according to IEC 61537, Test for impact resistance, Electrical continuity.

Salt mist test for hot dip galvanized types

Marking of product

Suhhan – Type designation – Width x Height x Length – Material (cover marking).

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Assessment to be performed at 2 and 3,5 year and at renewal.

END OF CERTIFICATE