Certificate no.:
TAA00003DS

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Bridge instrumentation

with type designation(s)
MTA-800 Telegraph Agent

issued to
Nabtesco Corporation
Kobe, Hyogo Pref., Japan

is found to comply with
DNV rules for classification – Ships
IEC 61162-1 Ed. 5.0 (2016-08) Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 1: Single talker and multiple listeners
MSC.191(79) Performance standards for presentation of navigation-related information on shipborne navigational displays
IMO Resolution MSC.302(87) Performance standards for Bridge Alert Management

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Temperature	**B**
Humidity	**A**
Vibration	**A**
EMC	**B**
Enclosure	**A**

Issued at **Høvik** on **2024-05-30**
This Certificate is valid until **2026-05-29**.
DNV local unit: **Japan CMC**

for **DNV**

Approval Engineer: **Roger Lauritsen**

.....

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.

Product description

MTA-800 Telegraph Agent consist of the following components:

Unit Name	Description	SW version
Display Unit		
Display indication PCB	PCB for display indication	XTA0100.V9
Display PCB	PCB for display function	S922.04.mot
C&H Unit		
SCC-101-01	CPU for system control	XTA0100.mot
SCC-102-01	CAN comm. and power supply.	N/A
HUB in C&H		
SCC-301-01	CAN comm. and power supply	N/A
SCC-302-01	Operation for CAN and alert monitoring	S302.22.mot
CR1-TD Unit		
SCC-201-01	Controller for digital interface	S201.01I.mot
SCC-202-01	Digital relay output	N/A
SCC-203-01	Digital input, analog input/output	N/A

Approval conditions

When the type approved software is revised (affecting all future deliveries) DNV is to be informed by forwarding updated document 74SO46542-01 including the software version history. If the changes are judged to affect functionality for which rule requirements apply, a new functional type test may be required, and the certificate may have to be renewed to identify the new software version.

Application software control

All changes in software are to be recorded as long as the system is in use on board.

Application/Limitation

MTA-800 Telegraph Agent include following functions:

- TA Auto (Automatic set of speed in knots based on external input)
- TA manual (Manual set of speed in knots based on manual input)
- RCS mode (Speed controlled by inputs installed as part of the remote control system)

For TA Auto mode following conditions apply:

- MTA-800 Telegraph Agent to be installed with an external input for speed commands. Following unit(s) have been verified as part of this certificate:
  - DeepSea HyperPilot, see certificate TAA00003D8
- To be interfaced to a speed log holding a valid type approval certificate at the time of installation.

MTA-800 Telegraph Agent may be interfaced with following remote control systems:

- M-800-II (for retrofit only)
- M-800-III (for retrofit only)
- M-800-V
- M-800-VII

Generic:

- Installation to be done according to manufacturer's documentation.
- The scope related to the certification of remote control system is not covered by this approval.
- Loss of the MTA-800 Telegraph agent shall automatically switch to RCS mode. Such switching to the RCS mode shall be alerted to the user, either by the remote control system or an external monitoring function.

Type Approval documentation

DNV No	Doc. Ref.	Rev.	Description
28	74SO46443-01	A	Doc: FMEA for Speed Pilot Control System
23	74SO46542-01		Doc: Software version control Procedure for Telegraph Agent
26	74SO46439-01	C	Doc: Speed Pilot Control Unit Interface Specification
32	74SO46439-11	A	Doc: Telegraph Agent Interface specification for M/E Remote Control System (RCS)
25	74GK45418-01	B	Doc: Type approval for Speed Pilot Control Unit
22	74SS49930-01	A	Manual: Installation and Maintenance Manual
21	74SS49925-01	C	Manual: TA Operating Instruction Manual
8	74GK45268-02	0	Report: Labotech, Test report for M-800-III & M-800-V, IACS UR E10
20	74GK45477-01	E	Report: Test report for Telegraph Agent

Tests carried out

- Environment test: IACS UR E10 (Edition 9, 2023)
- Serial interface test: IEC61162-1 (Edition 5, 2016)
- Presentation test: IEC62288 (Edition 3, 2021)
- Bridge alert management test: IEC 62923-1 (2018) and IEC62923-2 (2018)
- Performance test: Custom test program, see doc no. 20

Marking of product

The type designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to the product. In addition the product shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

Periodical assessment

A renewal assessment will be performed at renewal of the certificate.
The scope of the renewal assessment is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.
This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com