

**TYPE APPROVAL CERTIFICATE****This is to certify:****That the Pipe System with Couplings**with type designation(s)  
**STECKDRAIN**

Issued to

**Ilta Inox S.p.A. - Division CHIBRO**  
**Montano Lucino CO, Italy**

is found to comply with

**DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems**  
**DNVGL-OS-D101 – Marine and machinery systems and equipment, Edition January 2018****Application :****Products approved by this certificate are accepted for installation on vessels classed by DNV GL.****Temperature range: -25°C to +100 °C****Max. pressure: 10 bar / 5 bar (size dependent - see page 2)****Design: Stainless Steel Discharge Pipes with press fittings**Issued at **Høvik** on **2019-08-22**for **DNV GL**This Certificate is valid until **2024-08-21**.DNV GL local station: **Italy/Malta CMC**Approval Engineer: **Adel Samiei**.....  
**Zeinab Sharifi**  
**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.



Job Id: **262.1-025867-2**  
Certificate No: **TAP00000ZE**  
Revision No: **1**

## Product description

STECKDRAIN piping system including pipes and press fittings made of AISI 304 (X5CrNi18-10) or AISI316L (X2CrNiMoTi17-12-2) and EPDM sealing

<b>Outer diameter (mm)</b>	40	50	65	80	100	125	150	200
<b>Pipe Thickness (mm)</b>	1	1	1.25	1.25	1.25	1.50	1.50	2
<b>Design Pressure (bar)</b>	10	10	10	10	10	10	5	5

## Application/Limitation

Pipe system covered by this certificate is approved for drainage and discharge systems (non-main class systems) under gravity and vacuum. (Only sizes 40, 50 and 65 mm can be used under vacuum condition)

The piping system may not penetrate enclosed spaces below the freeboard deck (e.g. watertight- or fire bulkheads).

The components are to be mounted according to manufacturer's instructions and with the equipment (e.g. pressing machine) as described in the manufacturer's catalogue.

## Type Approval documentation

Test report no. 010/Comm1/PM/rb dated 1999-11-15,  
Test report no. 17/Comm1/PM/rb dated 1999-11-15,  
Burst pressure test report dated 2017-04-21, witnessed by DNV GL,  
Manufacturer's catalogue 10/2013

## Tests carried out

Vacuum test, Burst pressure test, Leakage test

## Marking of product

For identification to this type approval the products are to be marked with:

- Manufacturer's name or trade mark.
- Type designation

## Periodical assessment

For retention of the Type Approval, a DNV GL Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNVGL-CP-0338.