

TYPE EXAMINATION CERTIFICATE

This is to certify:**That the Dosing system**

with type designation(s)
D1, D2, D3

Issued to

U.N. Produkte GmbH
Geesthacht, Germany

is found to comply with

Application :

Products approved by this certificate are accepted for installation on all vessels, yachts and offshore units.

Type:	Working pressure:	Working temperature:	Volume flow rate:
D1, D2, D3	2 [bar] up to 6 [bar]	0 [°C] up to 50 [°C]	13 [liter / min] up to 24 [liter / min]

Issued at **Hamburg** on **2016-06-07**

for **DNV GL**

This Certificate is valid until **2021-06-06**.

DNV GL local station: **Hamburg**

Approval Engineer: **Peter Gierhan**

Olaf Drews
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 Examination Certificate and not to the approval of equipment/systems installed.

Product description

U.N. Dosing Centre D1-D3:

- Change of the proportioning only possible by instructed persons

Technical Data:

Materials:

Body:	Stainless steel
Push button:	PP (Polypropylene)
Ejector:	PP (Polypropylene)
Pipe breaker:	PP (Polypropylene)
Valve block:	PA / GF (Glass fiber reinforced polyamide)
Spring:	Stainless steel
Membrane:	Elastomere
Gasket:	Synthetic rubber
Suction hose:	PVC (Polyvinylchloride) with reinforcements
Filling hose:	PVC (Polyvinylchloride)

Working pressure	2 [bar] up to 6 [bar]
Working temperature	0 [°C] up to 50 [°C]
Volume flow rate	13 [liter / min] up to 24 [liter / min]

Application/Limitation

The above mentioned DOSING SYSTEM may be used as system for dosing and mixing of following liquid detergents :

- U.N. 250A spec. ship's inside cleaner
- U.N. 200 ship- and engine cleaner
- U.N. 400B ship deck power wash

The selection of the DOSING SYSTEM for the corresponding application and the right installation and maintenance are to be in acc. with the instructions of the manufacturer.

Approval documentation

- Test report : Company U.N. Produkte, dated: 2010-12-16
DOSING CENTER tested with U.N. 250A, U.N. 200 and U.N. 400B

Marking of product

Each device shall bear legible and durable marking on the body or on a plate securely fixed to the body as follows:

- Manufacturer`s Mark • Type • DNV GL Certificate No. •

Periodical assessment

For retention of the type approval, a DNV GL surveyor shall perform a survey, every second year and before the expiry date of this certificate, to verify that the conditions for the type approval are complied with.