

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Windlass

with type designation(s)
Windlass Type SW 12

Issued to

**Steger & Windhagen GmbH Windenbau
Duisburg, Germany**

is found to comply with

DNV GL rules for classification – Inland navigation vessels

Application :

Product approved by this certificate is accepted for installation on all vessels classed by DNV GL.

Issued at **Hamburg** on **2017-06-09**

This Certificate is valid until **2022-06-08**.

DNV GL local station: **Essen**

for **DNV GL**

Approval Engineer: **Wolfgang Schütz**

.....
**Burkhard Lilienthal
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.



Product description

Stud-link chain cable : $\varnothing$ 24 – 36 mm, Grade K₁ and K2
Studless chain cable : $\varnothing$ 23 – 36 mm, Grade K₁ and K2
Brake holding load : 80 % of minimum breaking load of the chain. If a chain stopper is fitted the brake holding load of windlass can be reduced to 45 % of minimum breaking load of chain.
Drive : Electric, diesel- or hydraulic motor

Application/Limitation

Use onboard inland navigation vessels.

For approval of the complete windlass the following must be submitted case-by-case:

- Technical data sheet
- Installation drawing

Each windlass to be tested in accordance with RU-INV Pt.4 Ch.1 Sec.2 [7.5]

Certificate no. TAS000012W replaces certificate no. 42 220 – 01 HH.

Type Approval documentation

Drawings and calculations approved with ref. 88406/01 WSz dated 2001-12-13

Tests carried out

Prototype test in connection with approval of drawings and calculations have been carried out.

Marking of product

Each windlass is to be marked with manufacturer's name or trademark and type number identification.

Periodical assessment

For retention of the Type Approval, DNVGL surveyor shall perform a survey every second year and before expire date of this certificate to verify that the conditions of the type approval are complied with.

END OF CERTIFICATE