

# TYPE APPROVAL CERTIFICATE

Certificate No: **TAS00001ZV** Revision No:

This is to certify:	
That the Lifting Gear	
with type designation(s)  DynaOne HS Geobend	
Issued to Gleistein GmbH Bremen, Germany	
is found to comply with  Red Ensign Group Yacht Code – Part A, January 2019 Edition  DNV standard DNV-ST-0377 – Standard for shipboard lifting appliances	
Application:	
Product(s) approved by this certificate is/are accepted for DNV product certification and installation on all vessels classed by DNV.	
Issued at Hamburg on 2022-10-24	for <b>DNV</b>
This Certificate is valid until 2027-10-23.	IOI DIAV
DNV local unit: Hamburg - CMC North/East	
Approval Engineer: Knut Polonji	Jörg Kallies Head of Section

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.

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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: **262.1-027424-4** Certificate No: **TAS00001ZV** 

Revision No: 2

# **Product description**

Fibre Ropes type "DynaOne HS GeoBend" referring to ISO 10325, braided 12-plait made of heat-set HMPE fibres Dyneema SK 78 mixed with GeoBend Fibres

### Application/Limitation

Fibre Ropes for Launching Appliances on board of seagoing ships under the following conditions:

- Flag acceptance is granted
- Safety factor: 7 (unmanned); 8 (manned)
- D/d bending ratio: min. 10 (5 for standing rigging, no bending of the splice)
- Monthly inspection by a qualified person
- Annual thorough examination of the rope by a competent person
- The rope must be renewed when this becomes necessary owing to wear or at latest after 700 load cycles or two years in service, whichever comes earlier. Flag requirements must be observed in addition.

This Type Approval certificate is not valid for launching and recovery of potentially dangerous material and where special conditions apply.

Each product is to be delivered with the following documentation:

- 1. DNV Test certificate form F497
- 2. Operational and maintenance manual according to DIN EN 1492-4:2009-02, Annex C
- 3. Detailed documentation about discard criteria of the rope

## Type Approval documentation

Technical documentation, approved with DNV GL Reference No. 14-079200/KPo

#### **Tests carried out**

Test report of company Gleistein Ropes, dated 2010-12-17 Test report of company Gleistein Ropes of used ropes 2012-07-12

## **Marking of product**

Each product is to be labelled as follows:

- 1. Traceability No. of the manufacturer
- 2. DNV Stamping

#### Periodical assessment

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 <a href="https://approvalfinder.dnv.com">https://approvalfinder.dnv.com</a>

#### **End of Certificate**

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