



Certificate no.:
TAK00002FU

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Rope Socketing Compound

with type designation(s)
Dehanne®

issued to

BSW Steel Wire Rope(Shanghai)Co.,Ltd
Shanghai, China

is found to comply with

DNV class programme DNV-CP-0095 – Type approval – Pourable compound for rope socketing
DNV-OS-E304 – Offshore mooring steel wire ropes, Edition July 2023

Application:

For socketing wire rope terminations.

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

Issued at **Hamburg** on **2025-03-11**

This Certificate is valid until **2030-03-10**.

for **DNV**

DNV local unit: **Shanghai**

Approval Engineer: **Gisle Hersvik**

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 USD 300 000.

Product description

Dehanne®: Polyester resin, for socketing wire rope terminations.

The following properties have been verified by Type Testing of cured resin samples:

Properties	Test Method	Results		
Compressive Strength	BS 6319-6:1984	128	MPa	mean
Compressive Strength	BS 6319-6:1984	120	MPa	msmv
Compressive Modulus	BS 6319-6:1984	9 670	MPa	mean
Compressive Modulus	BS 6319-6:1984	9 000	MPa	msv
Barcol Hardness	ASTM D2583-13a	45	-	msv
Density	ISO 1183-1:2019, Method A	1.604	g/m ³	mean
Density	ISO 1183-1:2019, Method A	1.55	g/m ³	msmv
Curing procedure used for Type Testing		24 hours at room temperature, followed by 24 hours at 70°C and 1 hour at 100°C		

Legends:

mean: Mean of type test results

msv: Manufacturer's Specified Value (verified to be within $\pm 10\%$ of mean of type test results)

msmv: Manufacturer's Specified Minimum Value (verified to be below mean minus 2 standard deviations of type test results)

Place of manufacture

BSW Steel Wire Rope (Shanghai) Co., Ltd., No. 1565, Fengzhe Road, Fengxian District, Shanghai, P.R. China

Application/Limitation

Wire rope socketing shall be carried out in accordance with manufacturer's recommendations.

Ref. DNV-OS-E304, Ch.1 Sec.2 for the performance criteria to be met in connection with pouring and socketing.

Any significant changes in design and / or quality of the material will render the approval invalid.

Type Approval documentation

Tests carried out

Type Testing carried out in accordance with **Type Approval documentation**.

Marking of product

Product/package shall be marked with *manufacturer's name*: **BSW Steel Wire Rope (Shanghai) Co., Ltd, China**, *type designation*: **Dehanne®**, *batch number* and *weight*.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV Type Approval Certificate.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical assessments (for Certificate Retention / Certificate Renewal) shall be performed according to DNV-CP-0338.

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>

END OF CERTIFICATE