

TYPE APPROVAL CERTIFICATE

Certificate No: **TAK00001RN** Revision No:

This is to certify:	
That the Rope Socketing Compound	
with type designation(s) Wirelock®	
Issued to Millfield Enterprises (Manufacturing) Newcastle upon Tyne, United Kingdom	Limited
is found to comply with DNV class programme DNV-CP-0095 – Type approval – DNV offshore standards	Pourable compound for rope socketing
Application :	
For socketing wire rope terminations.	
Product(s) approved by this certificate is/are accepted fo	or installation on all vessels classed by DNV.
Issued at Hamburg on 2023-04-05 This Certificate is valid until 2024-08-22 . DNV local unit: UK & Ireland CMC & VMC	for DNV
Approval Engineer: Gisle Hersvik	
	Thorsten Lohmann
	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: **262.1-010575-3** Certificate No: **TAK00001RN**

Revision No: 1

Product description

Wirelock®: Unsaturated polyester resin, dissolved in styrene, for socketing wire rope terminations.

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

Property	Test Method	Results		
Compressive Strength	ISO 604	156	MPa	msv (mean)
Compressive Strength	ISO 604	147	MPa	msmv
Compressive Modulus	ISO 604	13 766	MPa	msv (mean)
Barcol Hardness	ASTM D2583	42	-	msv (mean)
Density	ISO 3838	1.85	g/m ³	msv (mean)
Density	ISO 3838	1.81	g/m³	msmv
Curing procedure used for Type Testing		Min. 12 hrs at room temperature, followed by		
		2 hrs at 70°C and 1 hr at 120°C		

Legends:

mean: Mean of Type Test results

msv: Manufacturer's Specified Value (mean of Type Test results)

msmv: Manufacturer's Specified Minimum Value (to be below mean minus 2 standard deviations)

Application/Limitation

Cold socketing compound for use with wire ropes. For further details, please refer to the Wirelock® Technical Data Manual, latest version: 2-11/17.

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*; **Millfield Enterprises (Manufacturing) Limited, UK** and *type designation*; **Wirelock**®.

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

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