Certificate No: LR20102607TA
Issue Date: 29/11/2020
Expiry Date: 28/11/2025

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**Millfield Enterprises (Manufacturing)**
Address	Newburn Ind Estate, Ltd, Shelley Road, Newcastle Upon Tyne, NE15 9RT, United Kingdom
Type	Slings And Accessories
Description	Maklock resin system (a high volume variant of the Wirelock system) for Flemish-Lock® terminations of cable laid wire rope slings. Flemish-Lock® is registered by Franklin Offshore International. Pte. Ltd.
Trade Name	Maklock, Wirelock Sling
Application	Termination of cable laid wire rope slings for marine, offshore and industrial use.
Specified Standard	EN 13411-4: 2011 – Terminations for steel wire ropes – Safety – Part 4 : Metal and resin socketing. ISO 17558: 2006 – Steel wire ropes socketing procedures. Molten metal and resin socketing.
Ratings	**Flemish Lock®:**
	Rope diameter (mm): Unit rope: 6 to 154 Cable laid rope: 77 to 559
	Termination efficiency (%): 100% of calculated sling breaking load

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Amrit Nair

Specialist - Rule Development - Ship Structures to Lloyd's Register EMEA
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Terminal Efficiency is based upon the results of witnessed tests carried out, and is applicable where the Calculated Breaking Load of products, made in the same manner, comprises the sum of the breaking loads of the component ropes, less a 15% spinning loss.

Other Conditions

1. This Type Approval Certificate applies only to the resin system used in the termination of cable laid wire rope slings. Terminations as such including Flemish-Lock® is not part of this approval.
2. All terminations are to be made in accordance with Maklock Technical Data Manual, and by suitably trained operators.
3. Sleeves for Flemish Lock® slings are to be manufactured in accordance with Millfield Enterprises' dimensions and drawings.
4. This certificate is a renewal of Type Approval certificate 05/00108(E3). Approval documentation of previous extensions form part of this Type Approval certificate.
5. Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.
6. If the specified standards are amended during the validity of this certificate, the product is to be re-approved.
7. The application of this Type Approval Certificate will be limited to the relevant scope of the Specified Standards and acceptance thereof by the local authorities.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document LR20102607TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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