

Certificate number: 55268/A0 BV



Marine & Offshore

File number: ACM171/505

Product code: 0015H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

RESIMAC LTD

Thirsk - UNITED KINGDOM

for the type of product

SURFACE PROTECTION AND COLD REPAIR PRODUCTS

101 METAL REPAIR PASTE, 103 METAL REPAIR STICK, 106 METAL REPAIR PASTE XF, 108 PIPE REPAIR TAPE, 201 CERAMIC REPAIR PASTE, 202 CERAMIC REPAIR FLUID, 203 SUPER FLOW, 205 CERAMIC HT FLUID, 208 CERAMIC UW, 301 EPOXY RESIN AND HARDENER, 501 CRSG

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 15 Mar 2024

For Bureau Veritas Marine & Offshore,

At BV LONDON, on 15 Mar 2019,

Spencer Yule



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarpm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=be1zaqfh3f>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Resimac Product Name	Composition
101 METAL REPAIR PASTE	a 100% solids 2 component, epoxy based, metal repair paste.
103 METAL REPAIR STICK	a 100% solids 2 component, epoxy based, metal repair stick.
106 METAL REPAIR PASTE XF	a 100% solids 2 component, epoxy based, metal repair paste.
108 PIPE REPAIR TAPE	a water activated pipe repair bandage, based upon Polyurethane Resins and solvent free.
201 CERAMIC REPAIR PASTE	a 100% solids 2 component, epoxy based, repair paste which contains hardened Ceramic fillers.
202 CERAMIC REPAIR FLUID	a 100% solids 2 component, epoxy based, fluid which contains hardened Ceramic fillers.
203 SUPER FLOW	a 100% solids 2 component, epoxy based, repair paste which contains hardened Ceramic fillers.
205 CERAMIC HT FLUID	a 100% solids 2 component, epoxy novolac based, brush applied fluid which contains hardened Ceramic fillers.
208 CERAMIC UW	a 100% solids 2 component, epoxy based brush applied underwater coating.
301 EPOXY RESIN AND HARDENER	a 100% solids 2 component, epoxy based gel.
501 CRSG	a 100% solids 2 component, epoxy coating.

2. DOCUMENTS AND DRAWINGS :

RESIMETAL 101 PSS.101.rev2.17052018
 RESIMETAL 103 TDS.103.rev2.17052018
 RESIMETAL 106 PSS.106.rev2.17052018
 RESIMETAL 108 TDS.108.rev2.17052018
 RESIMETAL 201 PSS.201.rev2.17052018
 RESIMETAL 202 PSS.202.rev2.17052018
 RESIMETAL 203 PSS.203.rev2.17052018
 RESIMETAL 205 PSS.205.rev2.17052018
 RESIMETAL 208 PS.rv2 208 150714
 RESIMETAL 301 PSS.301.rev2.15052018
 RESICHEM 501 PSS501CRSG.rv2.17102018

3. TEST REPORTS :

Tests/Resimac products	101	103	106	108	201	202	203	205	208	301	501
Hardness ASTM D785	X	X	X		X	X				X	
Shore D Hardness ASTM D2240				X				X	X		X
Adhesion ASTM D1002	X	X	X	X	X	X	X	X	X	X	X
Flexural strength ASTMD790	X	X	X	X	X	X	X	X	X	X	X
Compressive strength ASTM D695	X	X	X		X			X		X	X
Compressive strength ASTM B117						X	X				
Tensile strength ASTM D638				X							
Salt Spray testing of 5000h w/ periodic inspection	X				X	X	X	X	X	X	X
Taber abrasion resistance							X				
Cathodic bondment testing											X
Test report n° , date	n°1028, 15/04/2010 n°1095, 13/03/2012	n°1078, 14/10/2011	n°1039, 11/06/2010	n°1191, 16/02/2019	n°1028, 15/04/2010 n°1095, 13/03/2012	n°1029, 21/05/2010 n°1095, 13/03/2011	n°1051, 28/11/2010 n°1095, 13/03/2011	n°1116, 15/06/2014 n°1076, 21/11/2011	n°1157, 16/07/2016	n°1036, 22/07/2010 n°1099, 14/09/2012	n°1192, 17/02/2019 n°1140, 25/08/2015 n°1188, 11/02/2019

4. APPLICATION / LIMITATION :

- 4.1 - Repairs of machinery components according to the recommendations of the Maker's specifications and procedures:
4.2 - The load carrying capacity and / or the structural integrity of the repaired machinery component are not to depend on the strength of the added above products.
4.3 - All repairs and coatings are to be carried out in accordance with Manufacturer's recommendations and instructions.
4.4 - If the repair involves any under pressure or structural components, details of the proposed repair are to be submitted to BUREAU VERITAS for review.

5. PRODUCTION SURVEY REQUIREMENTS :

- 5.1 - The above products are to be supplied by **RESIMAC LTD (Thirsk - UNITED KINGDOM)** in compliance with the type described in this certificate.
5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
5.3 - **RESIMAC LTD (Thirsk - UNITED KINGDOM)** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
5.4 - For information, **RESIMAC LTD (Thirsk - UNITED KINGDOM)** has declared to Bureau Veritas the following production site(s):

Resimac Limited
Unit B, Park Barn Estate, Station Road, Topcliffe,
Thirsk, North Yorkshire, YO7 3SE, UK

6. MARKING OF PRODUCT :

None

7. OTHERS :

It is **RESIMAC LTD (Thirsk - UNITED KINGDOM)**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

*** END OF CERTIFICATE ***