

# TYPE APPROVAL CERTIFICATE

**This is to certify:****That the Epoxy Systems**

with type designation(s)  
**Belzona® 1321 (Ceramic S-Metal)**

Issued to

**Belzona Polymerics Ltd.**  
**Harrogate, NY, United Kingdom**

is found to comply with

**DNV GL rules for classification – Ships**  
**GL Rules for Classification and Construction VI - Additional Rules and Guidelines Part 9 -**  
**Materials and Welding Chapter 5 - Guidelines for the Approval of Reaction Plastics and**  
**Composite Materials for the Seating and Repair of Components**

**Application :**

**Coating system for protection against corrosion and erosion on metal surfaces.**

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

Issued at **Hamburg** on **2018-12-04**

This Certificate is valid until **2023-06-30**.

DNV GL local station: **Manchester**

for **DNV GL**

Approval Engineer: **Joachim Rehbein**

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**Thorsten Lohmann**  
**Head of Section**

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: **262.1-028819-1**  
Certificate No: **TAK00001DC**

## **Product description**

**BELZONA ®1321 (Ceramic S - Metal):** Two - component epoxy resin with ceramic filler

## **Application/Limitation**

Coating system for protection against corrosion and erosion on metal surfaces.

The application has to be in accordance with the work instruction of manufacturer and the rules of classification.

The application has to be carried out under supervision of the resin manufacturer or an authorized representative recognized by the Society.

This approval does not relieve from material test and final testing of finished product, as far as required. Every test on the basis of this approval has to be notified in written form to this Society.

Any application which may affect the class of the vessel has to be announced and agreed with the Society.

## **Acknowledged production site:**

Belzona Polymerics Ltd.; Claro Road, Harrogate; HG1 4DS; United Kingdom

## **Type Approval documentation**

### **Tests carried out**

According to type approval documentation

### **Marking of product**

The product is to be marked with manufacturer's name or trademark and type number identification.

### **Periodical assessment**

The scope of the periodical assessments is to verify that the conditions stipulated for the certification are in compliance with the Type Approval documentation and no alterations are made to the product design or choice of materials.

Periodical assessments will be carried out bi-yearly(Certificate Retention) and at renewal after 5 years (Certificate Renewal).

When possible, this assessments may be harmonised with normal surveys for product certification and / or other surveys and audits carried out.

END OF CERTIFICATE