



JO / File Ref: T-8-6  
OPN: 2867444 / Ref. 946861

01 October 2012

Coating, Rust Preventative Seawater Ballast Tank Coating  
Red Devil 888  
Coating, Thermal Spray  
Zinc & Aluminum Thermal Spray Coatings  
**Type Approval – Product Design Assessment Revalidation & Revision**

International Metalizing Corporation  
900 NW 10<sup>th</sup> Ave.  
Fort Lauderdale, FL 33311

Attention: Carl Tudor

Dear Mr. Tudor

We have your application for Type Approval dated 06 September 2012 together with appropriate enclosures and are pleased to advise that we have completed the design assessment phase of the type approval revalidation and revision process.

Enclosed is your original copy of the **Certificates of Design Assessment 12-HS813237-2-PDA, 04-HS419023A-2-PDA & 04-HS419023B-2-PDA**. Please read the pages attached to the certificates to be sure you understand the scope and conditions of validity of the certificate. Since the original certificate is multi-colored, we have no objections to unlimited black and white photocopies being distributed.

Should you desire to continue with Product Type Approval or Product Quality Assurance, please contact the ABS Office at Fort Lauderdale, Tel: 1-954-424-0051, Fax: 1-954-424-3833 to arrange for production testing as may be necessary and audit of your quality assurance and control arrangements. You may also consult the ABS Programs staff at Tel. 281-877-6018, Fax 281-877-6012, or email [type\\_approval@eagle.org](mailto:type_approval@eagle.org).

Please find enclosed our invoice to cover the cost of the design assessment phase of the type approval process.

Should you have any comments relative to the scope and conditions of the assessment of your product, or if we can be of any further assistance, please do not hesitate to contact us.

Very truly yours,

Gopal Magadi  
Manager,  
ABS Materials, Houston

Enc.: as stated

cc: ABS Fort Lauderdale w/inv, w/p  
Manufacturer's file (T-8-6)



CERTIFICATE NUMBER

12-HS813237-2-PDA

DATE

12 March 2012

ABS TECHNICAL OFFICE

Houston Materials

# CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of  
**INTERNATIONAL METALIZING CORP - FORT  
LAUDERDALE**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

PRODUCT: **Coating, Thermal Spray**

MODEL: **Red Devil 888**

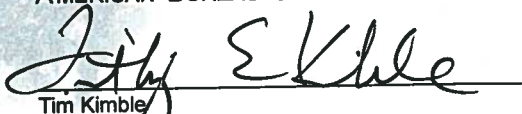
This Product Design Assessment (PDA) Certificate 12-HS813237-2-PDA, dated 12/Mar/2012 remains valid until 11/Mar/2017 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

  
Tim Kimble  
Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

## **INTERNATIONAL METALIZING CORP**

900 NW 10TH AVENUE  
FORT LAUDERDALE  
FL 33311  
United States  
Telephone: 1-954-424-0051  
Email: us@intmetl.com

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**Product:** Coating, Thermal Spray

**Model:** Red Devil 888

**Intended Service:**

Marine & Offshore Application - The Red Devil 888 Coating System may be used as a protective coating for dedicated Seawater Ballast Tanks in all type of Ships and double-side skin spaces in Bulk Carriers. For applications requiring coating approval in accordance with IMO PSPC used over suitably prepared bare steel in compliance with IMO PSPC requirements as minimum.

**Description:**

The Red Devil 888 Coating System is a Thermal-Electric Arc Zinc Wire Spray System.

**Ratings:**

Compliance if the subject Coating System with IMO PSPC [MSC 215(82)] requirements has been verified by review of CCS-DNV Technology Institute report reference No, CDTI-CL-09A012 dated 06 June 2009 indicating that the test of Red Devil 888 was performed in accordance with the test procedures referred to in IMO PSPC Appendix 1 & Appendix 2.

As the subject Coating is a Thermal Sprayed Zinc Wire System and not a two part primer/epoxy system as required by the PSPC Table 1 section 2.3, the enhanced acceptance criteria for alternative systems was applied as required by the PSPC Section 8.4 and provided by the right columns of the acceptance criteria Table of the PSPC Appendix 1 and 2.

**Service Restrictions:**

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

- (1). A minimum roughness profile of 125 Microns as applied on the Test Panels (instead of 30-75 Microns PSPC requirement) is to be applied.
- (2). The manufacturer must have a certified quality management system and be under the appropriate product quality assurance (PQA) category.
- (3). For each batch manufactured for marine use, the manufacturer is required to issue an affidavit declaring conformity with type approval that is co-signed by the laboratory.
- (4). The manufacturer is responsible for identifying all containers in the batch with some form of permanent marking.
- (5). The manufacturer can download the confirmation of type approval from the ABS website at [www.eagle.org](http://www.eagle.org) which would be considered equivalent to a type approval certificate or statement of compliance as mentioned in MSC 215(82).
- (6). If the manufacturer wants to subcontract the process, the secondary company is to be given a secondary PDA and is required to do a type test of the product as part of its enrollment in PQA.
- (7). The approved product is solely related to the corrosion protection properties of the subject coating system as per IMO PSPC and is not relevant to the evaluation of the toxicity, flammability and polluting properties of the product.

This assessment was not conducted on behalf of any administration. The subject coating system is to be applied in accordance with the IMO PSPC standard and/or the requirements provided by the applicable manufacturer's datasheets, whichever is stricter. This coating system has been identified by infrared scanning, be determination of specific gravity, and by determination of volatile/non-volatile content.

**Comments:**

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

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**Notes / Drawings / Documentation:**

Identifying Data:

Data Sheet - Zinc Wire;

Safety Data Sheet (6 shts) - Zinc Wire;

Safety Data Sheet SDS No 7994-F- Aluminum Welding Wire & Metallizing Wire . (9 shts. Revised 10 Oct 08) ;

Lab No. 342477 Certificate of Analysis: Metal Sprayed Steel Bars dated 6/16/11;

**Term of Validity:**

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**STANDARDS**

**ABS Rules:**

2012 Steel Vessels Rules 1-1-4/7.7, 1-1-A3;

2007 ABS Guidance Notes of the Inspection, Maintenance and Application of Marine Coating System.

**National:**

NA

**International:**

IMO PSPC

**Government Authority:**

NA

**EUMED:**

NA

**Others:**

NA



CERTIFICATE NUMBER

04-HS419023B-1-PDA

DATE

01 October 2012

ABS TECHNICAL OFFICE

Houston Materials

# CERTIFICATE OF DESIGN ASSESSMENT

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**INTERNATIONAL METALIZING CORP - FORT  
LAUDERDALE**

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PRODUCT: **Coating, Thermal Spray**

MODEL: **Aluminum Thermal Spray Coating**

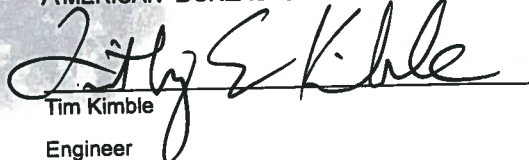
This Product Design Assessment (PDA) Certificate 04-HS419023B-1-PDA, dated 01/Oct/2012 remains valid until 30/Sep/2017 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

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AMERICAN BUREAU OF SHIPPING

  
Tim Kimble  
Engineer

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**Product:** Coating, Thermal Spray

**Model:** Aluminum Thermal Spray Coating

**Intended Service:**

Corrosion protection of carbon steel structures. Shipping, shipbuilding, pipelines. Coating may be used alone or in combination with other coating systems. Metal Fusion of cargo and ballast tanks, double bottoms, hulls, decks, and super structure for corrosion control and to build up pitted and corroded areas to original thickness.

**Description:**

High speed field coatable metal fusion application using spooled wire and an electric arc together with compressed air.

**Ratings:**

Not Applicable

**Service Restrictions:**

Unit certification may be required when components of ABS Class vessels are thermally spray-coated using this process and product. Otherwise, unit certification is not required for this product.

**Comments:**

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. Application speeds equal or exceed those of airless applied paints.

**Notes / Drawings / Documentation:**

Identifying Data:

Alumminum Welding Wire and Metallizing Wire Safety Data Sheet, SDS No. 7994-F (9 shts).

**Term of Validity:**

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### **STANDARDS**

**ABS Rules:**

2012 Steel Vessels Rules 1-1-4/7.7, 1-1-Appendix 3;

**National:**

NA

**International:**

NA

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**Government Authority:**

MIL-STD-1687

**EUMED:**

NA

**Others:**

IMC Specification



CERTIFICATE NUMBER

DATE

04-HS419023A-1-PDA

01 October 2012

ABS TECHNICAL OFFICE

Houston Materials

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PRODUCT: **Coating, Thermal Spray**

MODEL: **Zinc Thermal Spray Coating**

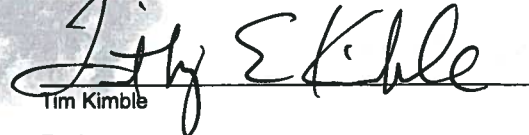
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AMERICAN BUREAU OF SHIPPING



Tim Kimble

Engineer

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**Product:** Coating, Thermal Spray

**Model:** Zinc Thermal Spray Coating

**Intended Service:**

Anodic protection of carbon steel structures. Shipping, shipbuilding, pipelines. Coating may be used alone or in combination with other coating systems. Metal Fusion of cargo and ballast tanks, double bottoms, hulls, decks, and super structure for corrosion control and to build up pitted and corroded areas to original thickness.

**Description:**

High speed field coatable metal fusion application using spooled wire and an electric arc together with compressed air.

**Ratings:**

Contact Manufacturer

**Service Restrictions:**

Unit certification may be required when components of ABS Class vessels are thermally spray-coated using this process and product. Otherwise, unit certification is not required for this product.

**Comments:**

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. Application speeds equal or exceed those of airless applied paints.

**Notes / Drawings / Documentation:**

Identifying Data:

Zinc-Wire Safety Data Sheet (6 shts);

Zinc-Wire Data Sheet (2 shts).

**Term of Validity:**

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**STANDARDS**

**ABS Rules:**

2012 Steel Vessels Rules 1-1-4/7.7, 1-1-Appendix 3;

**National:**

NA

**International:**

NA

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**Government Authority:**

MIL-STD-1687

**EUMED:**

NA

**Others:**

IMC Specification