

## MISSISSIPPI TRANSPORT AFDELING – BILOXI BRUG – VERENIGDE STATEN

In **November 2002** werden de stalen constructies van de Back Bay Bascule brug over de Mississippi in Biloxi, gecoat met **ZINGA**.

Voor de renovatie van deze brug heeft de **Mississippi transportafdeling (MDOT)** gekozen voor **ZINGA**, rekening houdend met een onderzoek van de van het Amerikaans Leger m.b.t. corrosiecontrole en –beheersing.



Biloxi, Back Bay Bascule  
Brug (MDOT US 1-110)



### Corrosion Prevention & Control Update

A Bulletin Dedicated to the  
Establishment and Operation of an Aggressive Corrosion Prevention Control Program

In 1995, Battelle Corporation scientists updated a joint Battelle - National Institute of Standards 1978 report entitled "Economic Effects of Metallic Corrosion in the United States". In that update, it was estimated that corrosion of metal costs the United States economy almost \$300 billion per year. It was also suggested that one-third of these costs could be reduced by broader application of corrosion resistant materials and the application of best corrosion-related technical practices. The bottom line conclusion based on the current contract efforts and a decade of corrosion specific research and testing, is that the United States Army can save over 30% of its current corrosion related annual costs. This can be accomplished through continued aggressive implementation of recently adopted Army Material Commands (AMC) corrosion prevention control practices and application of commercially available corrosion protection technologies.

*Extracted from the Fielded Fleet Corrosion Control Program Report, 1997*

The purpose of the Corrosion Prevention & Control Update is to make important product information available to you about the approved

commercial sources referred to in the referenced study. The data provides information about commercial vendors, which are approved and available for providing information and products. The vendor information, here in, is provided in alphabetical order, with no preference given or inferred. Each company participated in the Fielded Fleet Corrosion Control Program and was chosen as an approved vendor for corrosion products and applications.

#### Commercial Vendor List

- **Carwell Products Inc.**  
275 cooper Avenue, Suite 105  
Tonawanda, NY 14150  
(716) 877-2363 or 1-800-856-6798  
Fax: (716) 877-2364  
POC: Barry O'Halloram/ Bill Balcom  
Bill@carwell.com
- **Sulzer Metco**  
1101 Prospect Avenue  
Westbury, NY 11590-0201  
(516) 338-2303  
Fax: (516) 338-2134  
POC: Peter Foy/Patty Cook
- **Tafa** - Midwest Thermal Spray  
2013 Marie Street  
Westland, MI 48185  
(313) 729-2990  
Fax: (313) 729-2992  
POC: Thomas Gross/Michael Poe

#### Vender List Continued.

- **Zingametall**  
Industriepark VENECO  
Rozenstraat, Belgium  
09 385.68.81  
Fax: 09 385.58.69  
POC: Piet Van Riet

#### Vendor Products/Applications Carwell Products, Inc.

**Corrosion Inhibitor Spray (NSN 8030-01-389-1413)** - This product has been approved for the inside of doors and wheel wells of trucks. Over spray of this product does not affect the infrared reflectance. Overall product performance was well above 30% in corrosion protection. Additionally, the movement of corroded hinges and rusted moving parts was restored to full operational condition with application of this product.

#### Sulzer Metco

**Metallizing Spray System, Flame Sprayed Zinc/Arc Sprayed Zinc** - The performance of metallized spray proved to be well above 30% improvement in performance as a corrosion resistant application. This product has been approved for use on the exterior of vehicles.

#### Tafa

**Metallizing Spray System, Arc Sprayed Zinc** - The performance of metallized spray proved to be well above 30% improvement in performance as a corrosion resistant application. This product has been

approved for use on the exterior of vehicles.

#### Zingametall

**Zinc Rich Coating** - The performance of this zinc rich coating also proved to be well above the 30% improvement in corrosion protection. This product has been approved for use on the exterior of vehicles.

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#### Points of Contact


##### United States

**Mr. Donald Tapscott**  
Materials Modification Inc  
2929 Eskridge Road  
Eskridge Centre, Merrifield  
Laboratory/Suite P1  
Fairfax VA 22031  
(703) 560-1370 Ext. 12  
Fax: (703) 560-1372

##### IMMC

**Ms. Mary Grzenkowitz or  
Mr. Gene Teufel**  
USATACOM  
ATTN: AMSTA-IM-HHH  
Warren, MI 48397-5000  
(810) 574-8496/8900  
DSN 786-8496/8900  
Fax: (810) 574-7510

De "Update van corrosie preventie en controle", uitgegeven in 1997, beschrijft het onderzoek door het Amerikaans Leger aangaande kostenvermindering op het vlak van anticorrosieve bescherming met 30%. Ingesloten is een lijst van erkende verkopers, waaronder Zingametall. Deze goedkeuring is gebaseerd op de tests die werden uitgevoerd door de Automobiel Leiding van het Amerikaans Leger (TACOM) in Hawaï in 1995. ZINGA werd geselecteerd uit een grote waaier van anticorrosieve beschermingsproducten, samen met slechts een paar andere producten (geen directe concurrenten).



**NEWS RELEASE**

**SOUTH MISSISSIPPI CONGRESSMAN**

**Gene Taylor**

**5th Congressional District**

Press Contact: Amy P. Gregory • 601-864-7670 • FAX: 601-864-3099  
2424 14th Street, Gullport, MS 39501

For Immediate Release

Thursday, Dec. 23, 1999

**Taylor announces \$500,000 award for I-110 bridge**

U.S. Rep. Gene Taylor announced today that the U.S. Department of Transportation (DOT) has approved \$500,000 for a recoating project for the I-110 bridge at d'Iberville. The Mississippi Department of Transportation (MDOT) had requested federal funds for the testing and evaluation of a system for recoating steel bridges.

Taylor said, "This could be an important step in reducing the costs and maintenance associated with repainting bridges with a steel superstructure. The d'Iberville bridge on I-110 is a 500 foot bascule bridge. The steel is currently protected with a coating, but repainting is necessary."

MDOT wants to reduce costs by using a system of surface preparation and recoating developed by Total Rust and Corrosion, Inc. The TBI system includes a zinc rich coating called "Zinga." The system was originally developed for use in the naval and maritime industry.

Taylor said the project will result in bridges with significantly lower rehabilitation costs and will add to the expected life of bridges. He added, "It is important that this recoating process will also have less impact on our environment."

The DOT agency approving the project is the Federal Highway Administration.

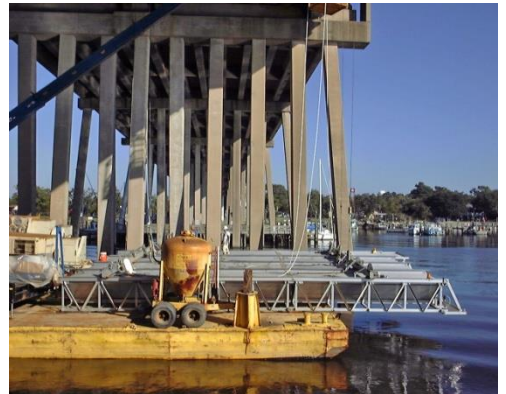


Op de persconferentie van **23-12-1999**, kondigde Congreslid Gene Taylor aan dat **de brug met ZINGA beschermd zou worden**. Deze basculebrug was de eerste in een reeks van bruggen over de Mississippi die behandeld zullen worden met **ZINGA**.

### VOOR DE APPLICATION



De applicatie werd in **November 2002** succesvol uitgevoerd in aanwezigheid van Zingametall en het controleorganisme SGS Axa-Med.



### System:

ZINGA 2 x 75 µm DFD  
(of 2 x 3 mills)

Hieronder vindt u het CAB rapport van de inspectie die werd uitgevoerd op **15 november 2007**, hetzij 5 Jaren na de applicatie.

# CAB

**COATING ADVIESBUREAU BVBA**  
**Coating Consulting Office**  
 'T HOGE 11, B - 8200 BRUGGE (BELGIUM)

## ASSESSMENT REPORT

**SUBJECT :** Back Bay Bridge - Assessment  
**SITE :** Back Bay Bridge Biloxi,  
 Louisiana, USA

**INSPECTION DATE :** 5/11/2007

### 1. SPECIFICATIONS

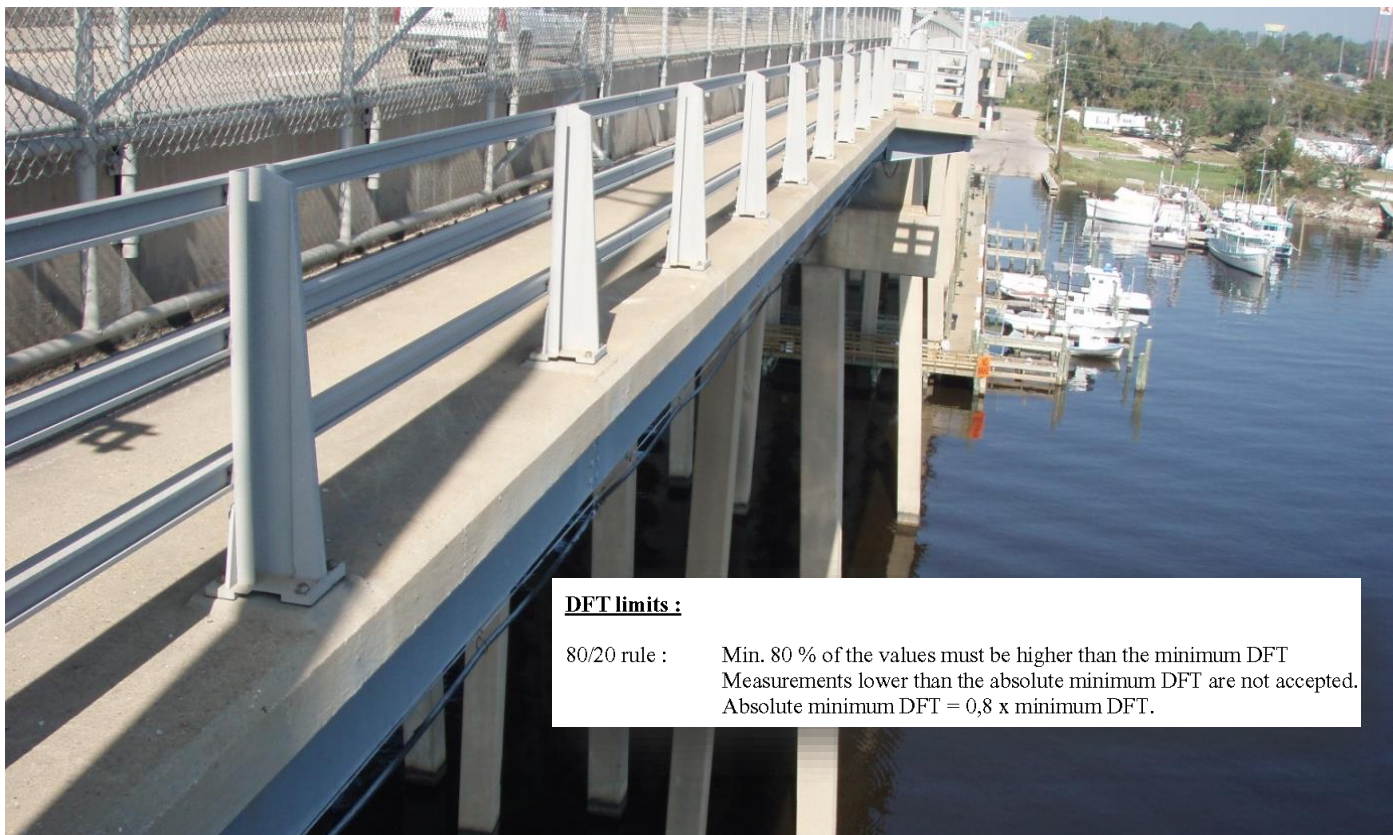
#### 1.1. Object description

Back Bay Bridge – Northern approach (section 4) of the I-110 bride in Biloxi, MS.  
 Estimated surface coated: 25.000 ft<sup>2</sup> (2.322,98m<sup>2</sup>)

#### 1.2. System specifications

**Surface preparation :**

Shop :  
 Yard : SSPC – Roughness : Rz 2 to 3 mil



#### DFT limits :

80/20 rule : Min. 80 % of the values must be higher than the minimum DFT  
 Measurements lower than the absolute minimum DFT are not accepted.  
 Absolute minimum DFT = 0,8 x minimum DFT.

## 3. CONCLUSION

**The coating works executed on the Biloxi bridge in 2002 remain in a very good condition.**

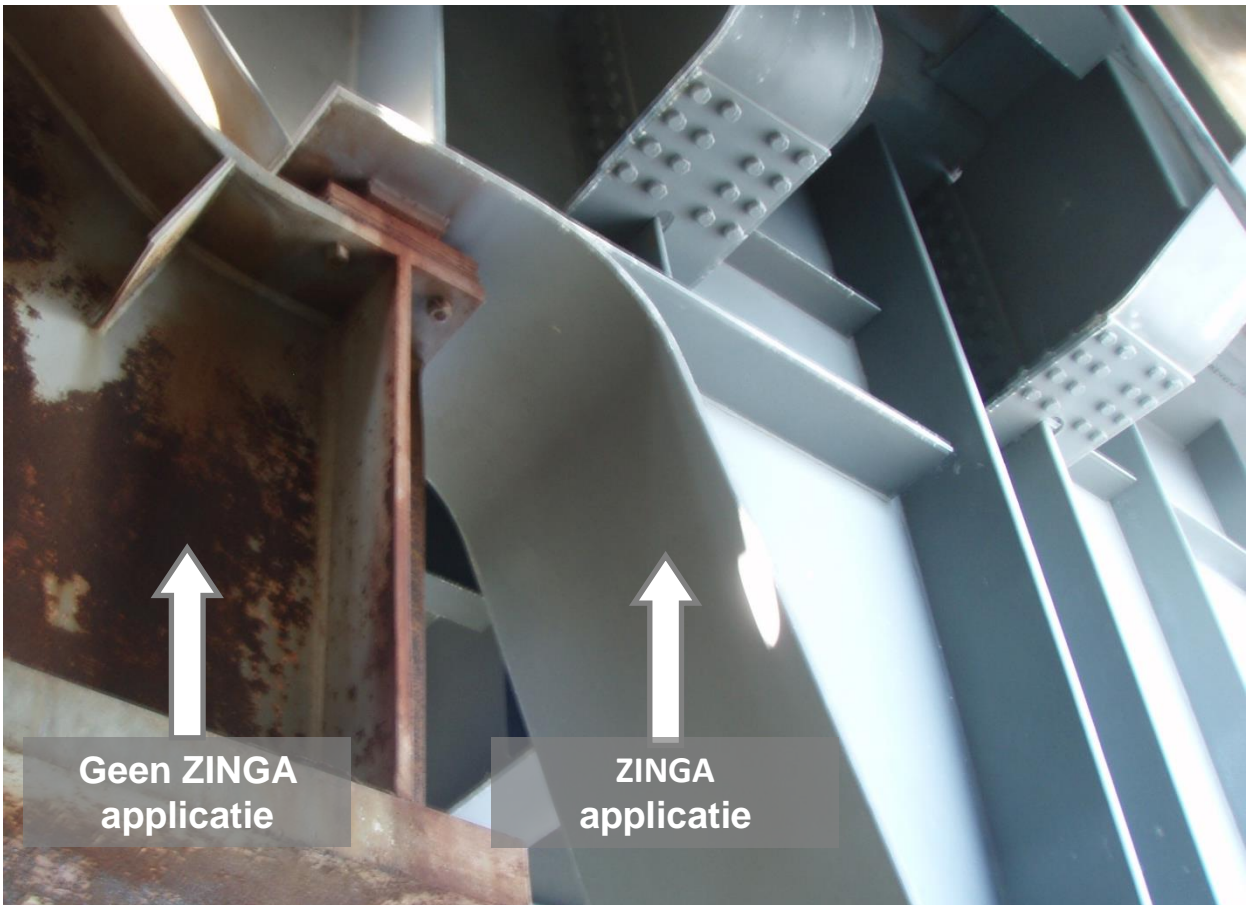
**So far no beginning of corrosion was stated.**

**No accumulation of zinc salts was seen and the surfaces were equally dull grey.**

**Pigeons are living on the bridge parts but no destructive influence was stated due to this aggression.**

*De werken zijn nog steeds in goede staat. Nog geen roest vastgesteld, noch zinkzouten. De oppervlakte is egaal mat grijs en onaangestast door duiven die in en op de structuur leven.*

Hieronder vindt u de foto's die **op 15 november 2007** tijdens de inspectie genomen werden.



↑  
Geen ZINGA applicatie

↑  
ZINGA applicatie