

# BELZONA REPAIRS NAVY VALVE

ID: 5359

Industry: *Military*  
Application: *ENC-Engines and Casings*  
Substrate: *Bronze*  
Products: *\* Belzona 1111 (Super Metal) ,*  
*\* Belzona 9411 (Release Agent) ,*

Customer Location: *VA, USA*  
Application Date: *2011*

## Problem

*The bronze substrate had eroded in the valve seating area to the point where the rubber O-ring could no longer seal.*



## Photograph Descriptions

- \* Bronze valve casing eroded in the seat O-ring area ,
- \* Formers seated in Belzona 1111 to mold a smooth oil seal surface ,
- \* Newly molded O-ring surfaces. Also, a new valve seat with O-ring is shown as well ,
- \* Left newly molded area with the excess of Belzona 1111 filed away using round rasp files ,

## Application Situation

Leaking valve seats.

## Application Method

The bronze valve housing was blasted to a near white metal finish. Dummy valve seats were manufactured and coated with Belzona 9411 to serve as formers. Belzona 1111 was applied to the blasted housing and to the formers. The formers were seated into the fresh Belzona 1111. Several hours later the formers were removed and the excess of Belzona 1111 was removed using coarse files.

## Belzona Facts

The Belzona repair was completed in a few hours. Sourcing the damaged part could have taken weeks at much higher price than the cost of the repair.

For more examples of Belzona Know - How In Action, please visit <https://khia.belzona.com>

ISO 9001:2015  
FS 695214  
ISO 14001:2015  
EMS 695213

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