# PELTON TURBINE NOZZLE HEAD

*ID: 8935*

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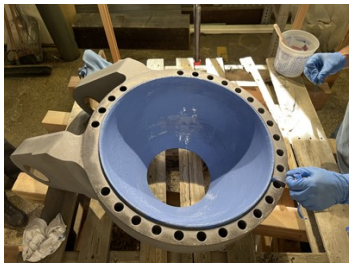
|---|---|---|---|
| Industry: | *Water / Wastewater* | Customer Location: | *California* |
| Application: | *CEP-Centrifugal Pumps* | Application Date: | *December 2022* |
| Substrate: | *Carbon steel* | | |
| Products: | *Belzona 1341 (Supermetalglide), Belzona 2141 (ACR-Fluid Elastomer), Belzona 2941 (Elastomer SP-Conditioner)* | | |

Problem

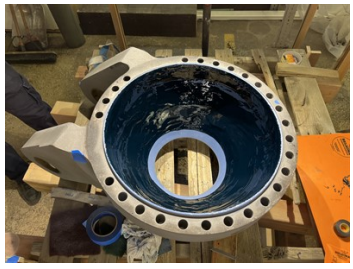
*Cavitation damage on the substrate due due to high pressure on the nozzle head*

Before / Damage on the Nozzle head

After abrasive blasting to SSPC SP-10/3 mil profile Surface Preparation



Belzona 1341 applied was applied as a base coat as per system instructions



Belzona 2141 applied as a topcoat to protect against future cavitation damage

## Application Situation

Cavitation was present due to high pressure and high flow rate at the tip of the pelton turbine nozzle head.

## Application Method

Blasting to SSPC SP-10/3 mil profile Surface Preparation. Hand application using short bristled brush and applicator. Belzona 1341 was applied to the blasted substrate. Belzona 2941 conditioner was applied to the Belzona 1341 for correct adhesion with the Belzona 2141 topcoat. Belzona 2141 was applied in a 2 coat system.

## Belzona Facts

No other coating was remotely capable to withstand the conditions. The Belzona anti-cavitation system was an excellent option to the replacement solution. The customer saved thousands on using Belzona vs part replacement.