

PELTON TURBINE NOZZLE HEAD

ID: 8935

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

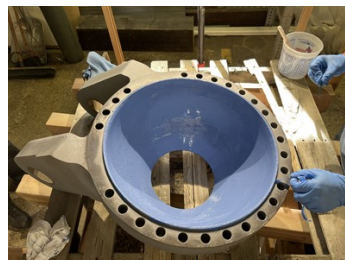
Cavitation damage on the substrate due to high pressure on the nozzle head



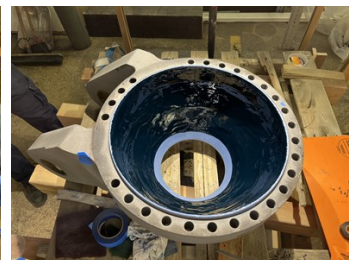
Before / Damage on the Nozzle head



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



Belzona 1341 applied 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.

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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