Stay Ring and Draft Tube Repaired with Belzona

ID: 8704

Industry: *Power*
Application: *CEP-Centrifugal Pumps*
Substrate: *Carbon Steel*
Products: ** Belzona 9111 (Cleaner Degreaser) ,*
** Belzona 1311 (Ceramic R-Metal) ,*
** Belzona 1321 (Ceramic S-Metal) ,*
** Belzona 1341 (Supermetalglide) ,*

Customer Location: *Hydroelectric Power Plant, Turkey*
Application Date: *October 2021*

Problem

Foreign matter such as stand & stones entrained within the water had caused the stay ring and draft tube to erode and loose thickness over time. The equipment had also been subjected to general erosion-corrosion due to the nature of fluid handling equipment.

Photograph Descriptions

* 1.) The damaged stay ring prior to applciation ,
* 2.) The stay vanes prior to application ,
* 3.) The stay ring after application ,
* 4.) The appearance of the fixed wings after coating with Belzona 1341 ,

Application Situation

Repair of a stay ring and draft tube in a 20Mw hydroelectric power plant, consisting of 3 units.

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

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Application Method

This application was carried out in accordance with modified system leaflets CEP-01, CEP-05 & CEP-10.

After mechanical cleaning of the substate, the surface was cleaned with Belzona 9111. After cleaning, any loss of substrate was rebuilt with Belzona 1311. Finally, Belzona 1321 was applied to the draft tube area and Belzona 1341 was applied to the stay ring and vanes for efficiency enhancement.

Belzona Facts

The customer had previosuly welded more steel to restore thickness to the equipent, however, the welded steel continued to erode when unprotected proving to be a short-term fix. After the customer had seen references of applications carried out with Belzona on similar equipment, they wanted to go ahead with the applicaiton. The customer was very happy with the final results.

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