

No. 218n

Customer: Thermal-Electric Power Station

Nadzór: M.Sc. Eng. Marek Wnęk - CHESTER MOLECULAR - Rzeszów

PROBLEM DESCRIPTION: The subject of protection were the pump impellers. Due to the long-term operation, the impellers had to be replaced. The old type of pumps made it impossible to buy new impellers. The impellers required protection with a material resistant to abrasion, cavitation and high temperature (up to 100° C). Therefore, it was decided to use the Chester Molecular technology.

DESCRIPTION OF THE REPAIR: impellers were sandblasted (photo 1), and then degreased with **Chester Fast Cleaner F-7**. After evaporation of the preparation, two layers of **Chester Metal Ceramic FSL** (thickness approx. 0.5 mm) were applied. After the material had cured (photo 2), it was balanced to check the operation of the impellers after protecting it.

ACHIEVED EFFECTS: the protection of the impellers with the Chester Molecular technology allowed the repair team of the Thermal-Electric Power Station to use cheap alloy steel for the production of new impellers. Without Chester Molecular technology, the station would have been forced to buy a new pump. Thanks to its parameters, **Chester Metal Ceramic FSL** guarantees many years of operation.

photo 1

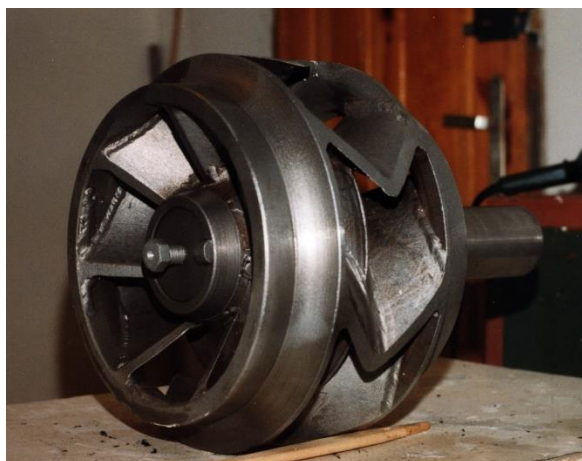


photo. 2

