



Revitalised Impeller Performance: Overcoming Heavy Erosion and Pitting

In the dynamic engineering landscape of a thermal power plant nestled in South Eastern India, a critical challenge emerged. The super duplex SS impellers of the vertical turbine pumps (Flow rate - 45,500 M³/ Hr), vital for the plants circulating seawater system, began to show signs of wear and tear after 12 years of service. Heavy erosion and pitting threatened the efficiency and reliability of these essential components, jeopardising the plant's operation.

Kirloskar Corrocoat Pvt Ltd. (KCPL) were asked to step in to provide their expertise in pump refurbishment and coating technology. Having a proven track record of restoring pumps and impellers for the client, KCPL accepted the challenge.

Utilising engineering techniques and specialist coatings, KCPL refurbished the impellers, ensuring not only the refurbishment of erosion and pitting but also protecting against future wear. The result? A rejuvenated lifespan for the impellers, increased performance, and substantial cost savings for the client.

The impellers were dynamically balanced following mechanical repair and re-profiling, and following the surface preparation and coating to ensure optimum performance.

Throughout the refurbishment process KCPL also ensured the integrity of the impellers' material of construction (MOC) was uncompromised.

For engineering refurbishment and coating solutions, KCPL continues to be the trusted ally for industries seeking reliability, efficiency, and peace of mind.