

Zenit UNIQA, Molib-tech and Vulkollan for heavy lifting in the ceramic industry

Situation

Emilgroup is one of the leading companies in the ceramic sector, present in more than 70 countries with 30,000 square meters of tiles delivered daily.

The Group entrusted us with the task of lifting the wastewater from ceramic processing, supplying electric pumps capable of withstanding the abrasive force of the pumped liquids over time, such as slip and water from the squaring processes of the tiles containing highly abrasive residues and solids requiring appropriate handling technology capable of ensuring strength and reliability.

Solution

First of all, the electric pumps to be used were identified and the choice fell on the UNIQA series, equipped with a vortex impeller, which in addition to the full free passage, guarantees less wear on the hydraulic parts, which is essential for this type of application. Each UNIQA electric pump is designed on the working point required according to a modular logic and uses IE3 premium class motors to ensure high energy efficiency.

Each impeller was provided with Molib-tech, a coating of molybdenum carbide applied in a cold process which gives a surface hardness significantly greater than that of the cast iron. In addition, the pump casing was coated with a layer of Vulkollan applied by spray to further increase the life of the hydraulic components.

In this way, the necessary resistance of the hydraulic parts to the slip and to the highly abrasive ceramic fragments was guaranteed.

Benefits

The installation of UNIQA has guaranteed energy efficiency and reliability. Molib-tech® and Vulkollan made the hydraulic parts resistant to the wear of charged liquids.

Plant downtime for repairs dropped dramatically to the normal scheduled maintenance required for such heavy-duty applications. Production times and energy resources were optimised.

To date, the lifting plant for slip and water from the processing of ceramics is fully functional and the operators are fully satisfied with their investment.



Ceramic processing steps



Vortex impeller with Molib-tech® coating



UNIQA hydraulics Vulkollan coating

Customer	Emilgroup				
Company Profile	Ceramics production				
Location	Fiorano Modenese (MO)	Country	Italy	Area	Europe
Application	Process wastewater lifting				
Installed Products	ZUG V080D 11/4AW 266SA				
Date	March 2019				