
Grundfos centrifugal pumps cement their status in Poland

NOWINY CEMENT FACTORY IS SITUATED IN SOUTHEAST POLAND BETWEEN WARSAW AND CRACOW, RIGHT ON THE EDGE OF THE SWIETOKRZYSKIE MOUNTAINS AND SOME 10 KILOMETRES FROM THE HISTORIC CITY OF KIELCE. NOWINY IS ONE OF THE TOP FIVE CEMENT PRODUCERS IN POLAND WITH ANNUAL PRODUCTION EXCEEDING ONE MILLION TONS OF CEMENT AND AFFILIATED PRODUCTS. SINCE 1996, THE COMPANY HAS BEEN A MEMBER OF THE RENOWNED DYCKERHOFF AG GROUP OF GERMANY, WHICH COMPRISES MORE THAN 23 OPERATING CEMENT FACTORIES WORLDWIDE.

Nowiny is the first cement factory in Poland to take advantage of Grundfos CRN-SF multistage centrifugal pumps in gas cooling systems used in connection with tower stabilisation.

THE SITUATION

In the production of clinker, grinded raw meal is fed into a pre-heater where it is heated by hot air rising from a kiln and transformed into clinker at extremely high temperatures. Effective cooling of outlet gasses from the clinker production is essential for tower stabilisation and thus efficient and safe production at Nowiny. The actual cooling process is realised by a system of dust extractors and heat exchangers, and, in the final stage, outlet gasses are cooled by water injection in the conditioning tower.

Mr Grzegorz Baliga, head energy specialist and responsible for energy and water systems, was looking to replace the existing cooling pumps, as they had demonstrated poor performance and revealed weaknesses in construction and bearings.

THE GRUNDFOS SOLUTION

TOPIC:

Reduced energy consumption
- Reliable pump solution -
Trouble-free operation

LOCATION:

Southeast Poland

COMPANY:

Nowiny Cement Factory

Implementing Grundfos CRN multistage centrifugal pumps in the cooling systems seemed the natural choice, as Grundfos pumps had excelled in performance and provided year after year of reliable and trouble-free operation in other vital production and auxiliary processes in the factory. For example in water supply, heating and water pressure boosting.

6 Grundfos CRN multi-stage centrifugal pumps in dual configuration have been installed in Nowiny's mill house to transport water for cooling of discharge gas. The stainless steel, in-line CRN pump is efficient, reliable and ideally suited for transportation of liquids in cooling systems. However, the CRN range offers an optimum pump solution for every conceivable industrial application as it represents state of the art technology and robustness inside out.

THE OUTCOME

Providing enhanced cooling performance and reduced energy consumption, the CRN pumps have made a big difference at Nowiny Cement Factory. The Grundfos "Cost of Ownership" principle has been communicated successfully to the decision-makers at Nowiny, so that they now realise that the most expensive part of owning a pump is not its purchase price and maintenance cost, but the actual cost of running it during its lifetime.