



LESS MAINTENANCE AND MORE EFFICIENCY WITH LECHLER RS II-4 NOZZLE LANCES IN THE GCT OF A POLISH CEMENT PLANT

Industry: Cement
Country: Poland
Application: Gas cooling in the evaporative cooler



PROJECT GOAL

For a cement plant in Poland, the replacement of the existing 12 nozzle lances is being examined in order to reduce energy consumption and at the same time improve the efficiency and ease of maintenance of the plant.



CHALLENGE

The previous RS 3 cluster head nozzle lances work at an operating pressure of 35 bar and require a high amount of energy and excessive power consumption. In addition, maintenance of the 72 nozzles is time-consuming and resource-intensive. The heavy weight of the lances also makes handling more difficult for maintenance personnel.



SOLUTION

The use of new nozzle technology could significantly increase the efficiency of the system. Replacing the cluster head nozzle lances with more powerful RS II-4 nozzle lances would offer the following advantages:

- **Optimized evaporation** due to finer droplets
- **Energy savings** (reduction of pump pressure)
- **Easier maintenance**
- **Minimal conversion work**

RS 3 cluster head nozzle lances

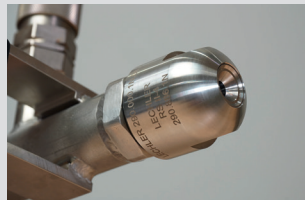


Cluster heads with 6 nozzles
Operation at 35 bar

25 kg/Lance



New RS II-4 nozzle lances



Single nozzle lances
Operation at 25 bar

12 kg/Lance



ENERGY SAVING

20 %

TIME SAVING

80 %

To calculate your specific future savings, please contact us at aqcs@lechler.de



CUSTOMER BENEFITS

The use of the lighter RS II-4 single lances makes handling easier and simplifies maintenance. As a result, the cement plant in Poland could not only sustainably reduce its energy consumption, but also significantly optimize its operating and maintenance processes.



Spillback RS II-4 nozzle lances

- New generation of spillback nozzles
- Fine droplet spectrum without compressed air
- Spray angle of 90° for good coverage of the cross-section
- Lance design can be adapted to customer requirements

We are committed to responsibility and sustainability. Our products support you on your way to achieve your own sustainability goals.