

Awards

Investments

A commitment to people and environment

3rd EBS-Silo: Use of substitute fuels to reduce fossil fuels

A Commitment to people and environment

Kirchdorfer Zementwerk is situated a little less than 600 metres from the centre of the district capital town of Kirchdorf. While the local population is highly appreciative of the cement plant as a stable economic factor and reliable employer, the emissions the plant produces have always been a delicate issue of concern. As factory owners have been aware of their responsibility in this regard, they began launching initiatives back in 1958 and have continued to do so – some of them spectacular indeed. The first electrical filter was installed in 1958 just one year after building rotary kiln I. The dust emissions which had been so dramatic were almost totally eliminated, allowing the people living nearby to literally breathe again for the first time. The 2-MW heat recovery plant also proved of immediate benefit. Since 1983, it has been possible to recover hot water for the thermal plant of the local district-heating system from excess cooling air: This has turned out to be a happy marriage between ecology and economy which the cement plant is still proud of.

In the 1990's the plant concentrated its efforts on noise reduction. Today this goal has largely been achieved.

The cement plant drew particular attention from its peers when it undertook attempts to eliminate nitric oxide emissions using the SCR technique. It was a risk experts considered bound to fail. Following a comprehensive three-year trial run, the SCR technique was eventually proven to be the most appropriate for reducing nitric oxides in the cement industry. Besides causing a stir among experts, this pioneering achievement met with broad interest, including from international circles.

The number of environmental prizes awarded bears clear evidence of this fact.

These recognitions by themselves served as further encouragement to stay the course. In the future, Zementwerk Kirchdorf will focus on gradually substituting natural gas and coal, its primary fuels, by appropriate residual fractions. In that respect, the production of cement clinker at process temperatures exceeding 2000°C ensures complete thermal processing and material recycling, while making it possible to conserve natural resources and considerably reduce the greenhouse gas CO₂.

Management attaches priority to purchasing test, measuring and control equipment required for compliance with environmental standards and development of new techniques. Here, no costs or effort are spared. Despite the lack of relevant legislation concerning the measurement and monitoring of mercury emissions, the Zementwerk has routinely performed these activities for the past three years. In the future as in the past, both the local population and the public at large may rely on Kirchdorfer Zementwerk's philosophy of not leaving environmental protection concerns to mere chance.

