



**« In order to maintain pulsation-free coal dosing at our high substitution rates, we purchased a smaller weighfeeder in 2015, if the FEEDflex technology had existed at that time, we could have saved this investment. »**

**- SVEN GLÄB, PRODUCTION MANAGER, SCHWENK ZEMENT KG – MERGELSTETTEN**

## SCHWENK ZEMENT KG ACHIEVES FLEXIBLE SOLID FUEL DOSING WITH **PFISTER® FEEDFLEX™**

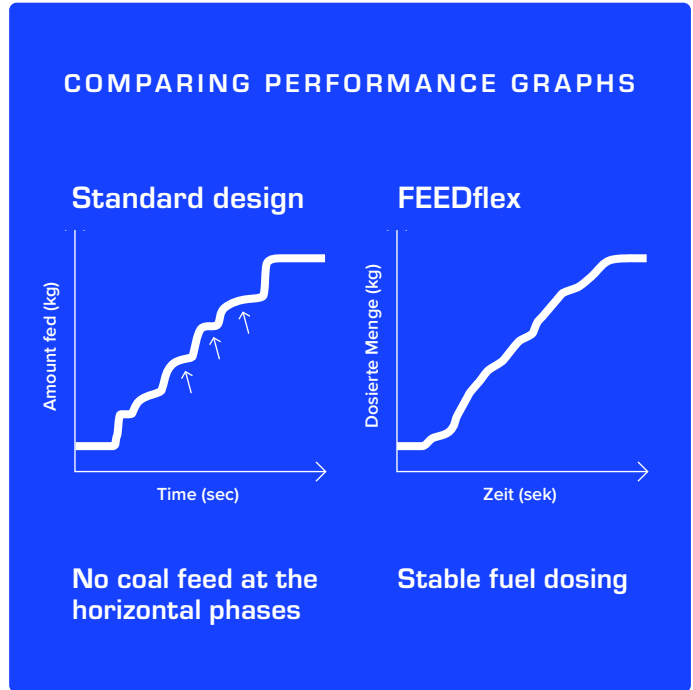
Due to high alternative fuel (AF) use at Schwenk Zement KG's Mergelstetten plant, a solid fuel feed system that could cope with highly variable feed rates was needed. The plant had been using two Pfister weighfeeders to achieve the required flexibility but recently upgraded one of these with FEEDflex. Now the plant gets the same performance with only one weighfeeder.

The growing use of AF at many cement plants is putting pressure on solid fuel feed systems. Although once the primary fuels at many cement plants, solid fuels are now used flexibly to fill the gap left by AF. As a result, solid fuel feed systems are being asked to cope with feed rates that vary from the tens of kilograms per hour when AF fuel use is high to some tonnes per hour when AF are not available or in short supply.

To achieve this level of flexibility, the Mergelstetten plant was using two Pfister rotor weighfeeders. A DRW 3.12 rotor weighfeeder handled the higher feed rates, while a smaller DRW 4.10 had been installed in parallel some years ago to handle the smaller feed rates.

But when Schwenk Zement heard about FEEDflex, which could allow them to cover all required feed rates with just one weighfeeder, they were keen to give it a go.

Pfister FEEDflex allows weighfeeders to dose pulverised solid fuels at highly variable feed rates, without pulsations and related CO spikes. It can be implemented in new feeders or retrofitted to existing machines.



The upgrade of the existing Pfister® DRW 3.12 includes mechanical modifications with optimised air distribution. After a successful four-month test phase, FEEDflex™ was put into permanent operation at Mergelstetten, covering the full range of feed rates. The plant is now investigating alternative uses for the smaller Pfister DRW 4.10 weighfeeder:

**After 10 months of operation at Mergelstetten, FEEDflex achieved:**

- Stable fuel dosing at the required 1:50 feed range.
- The potential to further decrease the minimum feed rates, as Pfister FEEDflex is designed for a 1:100 feed range.
- A 25% reduction in conveying air volume.
- A reduction in energy consumption.
- No signs of increased wear.

Two further FEEDflex installations at other sites have reinforced the results achieved at Mergelstetten, achieving a feed range of 60 kg/hour to 6 tonne/hour on DRW 4.10 weighfeeders.

**KEY BENEFITS**

**Is your alternative fuel rate increasing? If yes, this means that your quantities of primary fuel usage will probably decrease. PFISTER FEEDflex upgrade is our solution to your problem.**

- Sustainability: You can dose very small quantities of pulverized coal without pulsation and related CO spikes.
- Productivity: PFISTER FEEDflex does not affect the maximum feed rate your DRW feeder currently achieves.
- Flexibility: You can still use it up to its maximum capacity as required in the kiln start-up.
- Profitability: The FEEDflex technology reduces fuel cost with fast ROI. You can save several hundred kg of solid fuel per hour.

**TECHNICAL SPECS**

Pulsation-reduced dosing within the complete feed range from current max. feedrate down to 60-250 kg/hr. with the Pfister dosing.

**Min. feed rate with FEEDflex:**

DRW x.10/1,25	DRW x.10/1,6	DRW x.12/2
60 kg/h	140 kg/h	250 kg/h