

PFISTER® FRW 5 SERIES ROTOR WEIGHFEEDERS

THE RELIABLE WAY TO DOSE POWDERED AND FINE-GRAINED MATERIALS INTO THE KILN OR BLENDING PROCESS

The strength of the final product is dependent on getting the material feed just right. And it's not just product quality at stake. When dosing is not consistent, the efficiency and profitability of your process is also impacted.

Whether you're dosing raw meal to the kiln or cement blending materials to the finish mill, the Pfister® FRW rotor weighfeeder provides careful control of the material feed, enabling you to cut costs, reduce CO2 emissions, improve product quality and achieve a more sustainable production process.

KEY BENEFITS

**Large feed
ranges and feed rates**

**High short and long-term
dosing accuracy**

**Online calibration possible
during operation**

**Simple and modular design,
easy to maintain**

**ProsCon® prospective control
with flow balance control**

**Available with
PFISTER® Remote Support**

OPTIMISED DOSING WITH ABSOLUTE CONTROL

Working together to find the best solution for your application

Dosing accuracy has significant consequences for kiln stability and product quality, making the dosing operation critical to your plant's success.

The Pfister® FRW rotor weighfeeder is typically used together with a feed bin equipped with load cells to enable online calibration. In a standard kiln feed installation, raw meal is transported from the main storage silo into this feed bin. The material is fed to the rotor weighfeeder via an electro-pneumatic flow control gate. The load cell of the rotor weighfeeder measures the material content gravimetrically inside the rotor, before it is discharged. The speed of the rotor is controlled by the ProsCon® advanced weighing electronics.

What's new with the new series?

The FRW 5 series includes a new patented rotor design to avoid blockages and increase operational availability. This new design has been updated with state-of-the-art manufacturing technology and streamlined to offer a wide portfolio of feeder sizes to meet customer needs in terms of feed range flexibility.

Short-term accuracy, long-term benefits

Inconsistent dosing has an immediate effect on your process and the long-term impact can be severe. That's why we use ProsCon® advanced weighing electronics to proactively control dosing for continuous accuracy – short-term, long-term – all

Main features:

- Feed rates from 0 – 1000 t/h
- Rotary valve or flow control gate; as pre-feeding device
- Cabinet or field control solutions available
- Improved patented rotor design with sealings to avoid any blockage of the system and material flushing
- Suitable for installations in low or high ambient temperature environment

the time. Furthermore, if you combine the rotor weighfeeder with a feed bin equipped with load cells, you also have the option of online calibration to ensure reproducible weighing data.

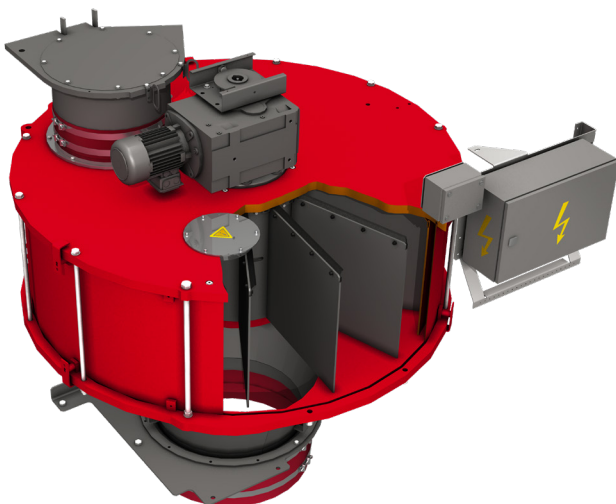
The state-of-the-art dosing controller and drive units provide user oriented access platforms, interfaces and prospective control. Remote service modules are integrated for online support services.

The dosing controller is integrated in a control cabinet placed in the motor control center room. Alternatively onboard controller solutions are available to connect the feeder directly to your plant control system, providing accurate dosing control, enhanced reliability and productivity without the need for additional cabinets.

Low and simple maintenance

Your operation is complex enough. You don't need any additional complications. That's why we design simplicity into our systems – simple maintenance, simple operation. The Pfister FRW has minimal moving parts to ensure optimal performance and low wear.

The modular design makes for easy installation and even easier maintenance. Everything that needs to be maintained can be accessed from the outside, making it both simple and safe. And there's no tricky cleaning to do. Spare parts are easily and quickly available and replaceable.



Pfister FRW 5 series rotor weighfeeder

REAL RESULTS

Improve cement quality reducing environmental footprint



Pfister® FRW blending installation at the finish mill of a cement plant in Germany.

Kiln dust with high chlorine content and fly ash are precisely dosed into the cement mill. Reproduceable weighing date ensures that the cement quality is maintained while adding blending materials to the cement mix and the final product's carbon footprint.

In total 6 FRW feeders are installed around the finish mill, enabling the client to run cement production highly flexible. The feed range of each feeder starts from some hundreds kg/h up 30 t/h.

Stable and accurate dosing improves kiln performance



Kiln feed installation at a clinker production line in Romania.

A feed bin on load cells provides raw meal to Pfister FRW rotor weighfeeder. The flow control gate ensures a pre-feeding into the rotor weighfeeder which then is providing an accurate and stable dosing of raw meal into the preheater at a rate of up to 380 tph.

With a feed accuracy of $\pm 0.5\%$, stability in the kiln feeding is improved, leading to better quality clinker production.