



# Pfister® Wear Index

# Pfister® Wear Index: Know the wear status, decrease wear effects

Any mechanical system in a cement plant is subject to wear. With Pfister® control systems and an innovative predictive maintenance strategy you will now know about the condition of your system's wear parts. This helps you to avoid damaging wear effects and plan your maintenance at the right time.

If you want to dose pulverized fuels such as petrol coke, lignite or coal dust in the cement burning process rotor weighfeeder Pfister® DRW is the state-of-the-art system. Its compact design integrates material extraction, weighing, dosing and material transfer into one pneumatic conveying line. Due to its dosing strategy ProsCon® it allows for a high short- and longterm accuracy as well as dosing stability.

Rotor weighfeeder Pfister® DRW is designed for dosing pulverized fuels such as coal dust



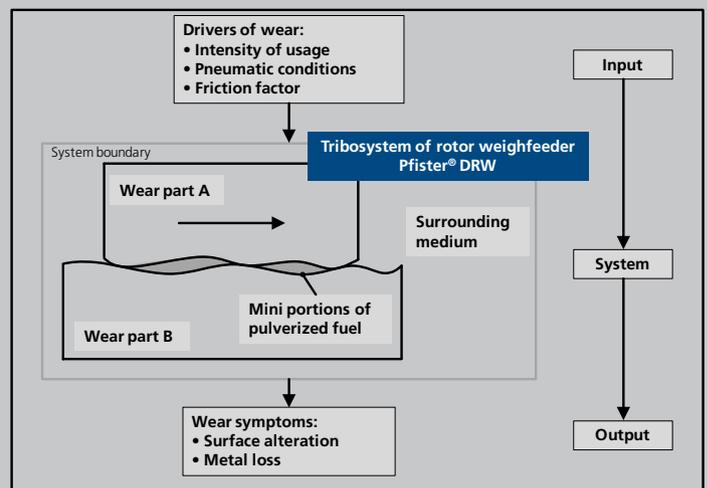
## What causes wear?

In order to analyze the original causes for wear, FLSmidth Pfister engineers scrutinized the root causes of wear by taking a tribosystem perspective:

Due to the physical and mechanical properties of your pulverized fuels like the tiny grain size mini portions of fuel residues in and on moving parts of your machine act as wear agents. Additionally, due to the pneumatic extraction of the pulverized fuel out of the rotor chambers, abrasive effects can be observed. Overall this leads to two major wear symptoms: Surface alteration and metal loss.

**You cannot change your production factors but you can prevent wear damages at your Pfister® rotor weighfeeder!**

Rotor weighfeeder Pfister® DRW in a tribosystem perspective



## Forecast your ideal service dates. Save time and money.

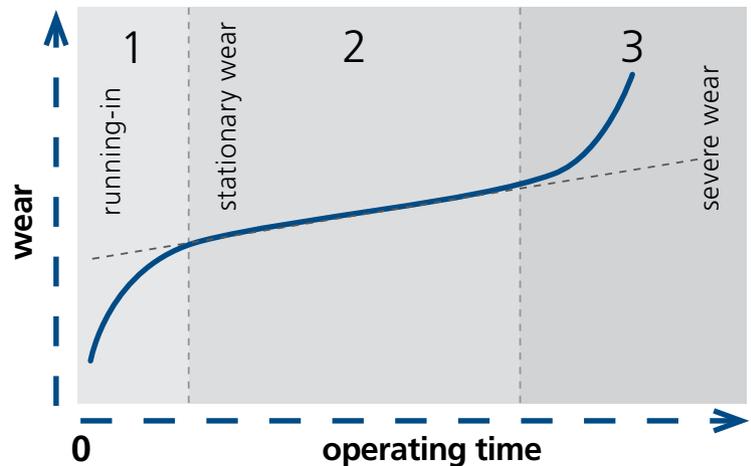
Any mechanical systems underlie typical states of wear during their operating life. Dosing systems for pulverized fuels shows three phases:

1. Running-in phase
2. Stationary wear phase
3. Severe wear phase

During the running-in phase and also after each renewal of wear parts wear strongly increases. In the stationary wear phase wear linearly increases on a slower inclination while during the severe wear phase wear strongly increases. This may lead to a significant decrease in accuracy or even a system failure.

### Your objective:

**Avoid phase 3 and discover your most ideal maintenance dates!**



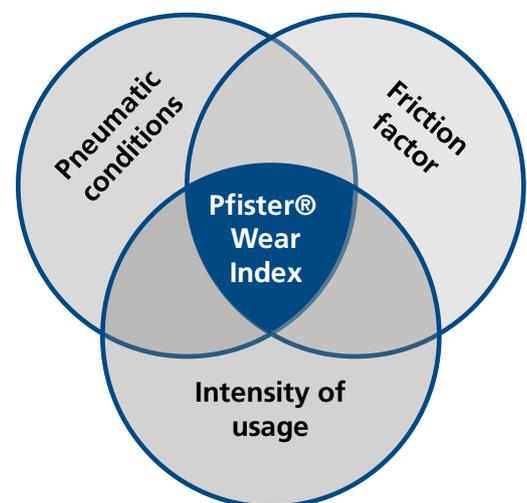
Model of the three phases of wear

## Pfister® Wear Index: Your tool to determine your ideal maintenance dates

In order to detect your individual, ideal time for maintenance, FLSmidth Pfister dosing experts developed Pfister® Wear Index: Within the control system of your weighfeeder we implemented a model-based condition surveillance. Under consideration of your individual field conditions we compare a wear model to the real operational data of your system.

Based on the typical curve of wear, the control system indicates to you if your system is currently object to low, medium or high wear. This allows you to find ideal maintenance dates and reduces your risk of wear-triggered down times.

**Ideal maintenance dates increase machine life and lower service and operation costs.**



Major pillars of Pfister® Wear Index

## **FLSmidth Pfister: Your industrial dosing experts**

Stable and accurate dosing of fuels and materials are key elements required to produce clinker profitably and efficiently. With its state-of-the-art Pfister® rotor weighfeeder concept, FLSmidth Pfister is offering a future oriented technology that is able to dose small to huge numbers of tons per hour. With almost 3,000 installations worldwide, customers of FLSmidth Pfister are feeding millions of tons each and every year.



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