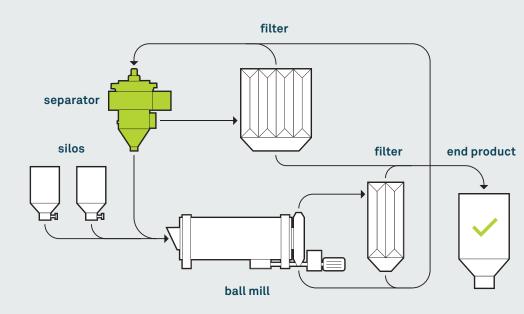
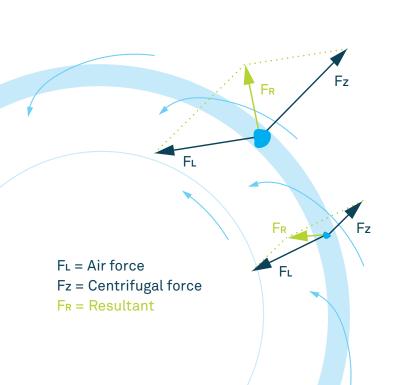
# The separator in the grinding process

Following the grinding process, a separator classify the ground material according to different grain sizes. The material of the desired quality is discharged as product and the coarse material is returned to the



## Focusing on the Separator: The effect



Centrifugal, gravity and flow forces act on the mass particles of different sizes and ensure separation on the basis of natural

The separator can produce product fineness up to --> TIM (How you explain it to a maintenance guy).ww

Ensure the quality of your product and increasethe **EFFICIENCY** of your grinding plant with a separator of Christian Pfeiffer.

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## More than just grinding and separation: **EFFICIENT PROCESSES**

We analyze and understand to optimize the entire grinding process. Thanks to this expertise, Christian Pfeiffer has been one of the technology leaders in the grinding industry for nearly a century. Separator





# Decades of experience in separator technology



**Christian Pfeiffer** 

At Christian Pfeiffer, we have been developing components for high-quality grinding systems since 1925. In the late 1930s, we added the Heyd Separator which revolutionized the market in terms of quality and efficiency.

With our decades of experience and extensive process know-how, we offer a comprehensive range of highly efficient classifier models, each separator is adapted to the grinding plant.

## This allows us to:

- ensure the quality of the end product
- ightarrow increase the efficiency of the grinding plant
- ightarrow reduce the specific energy consumption

## 1 if needed: Cooling of finished product temperature to below 70°C by a filter system More reliable and durable.

- v-belt drive without gears
- 3 consistent conditions throughout the separation zone due to especially designed rotary, air 6 economical and easy to main-
- a no dust or coarse material particles (spray grain) in the Separator thanks to wear-free sealing of the air barrier
- 5 durable hardfacing as an indesspeeds of the feed material

## Quality for your industry

Separators from Christian Pfeiffer are utilized in many industries, as they are suitable for a wide variety of grinding plants to ensure the product quality of:

- > Cement
- > Raw meal
- > Coal / petroleum coke
- > Quartz sand / blast furnace slag
- > Graphite / fly ash
- > Gypsum
- > Lime
- > Calcium carbonate
- > Zeolite
- > Iron ore
- > Feldspar
- > Tabular
- > Ferrosilicon

## Universal separator



**Heyd Sichter Dynamic Separator** 1st generation

The universal talent Our favorable all-in-one



QDK-S cross-flow high efficiency separator

For all grinding circuits Can be integrated into

almost any grinding plant

QDK-T Top gas separator

For space limited installations Same technology as the

QDK but with more

feed grinding circiuts installation flexibility





FIX + QDK-F **Twin Feed Separator** 

For combined grinding For rollerpress grinding systems and combined

A smart concept

## Dynamic separators for vertical mills



**Dynamic Separator** Air flow

For raw meal, coal and Installed in air-swept mills and vertical mills for

ultrafine classfication

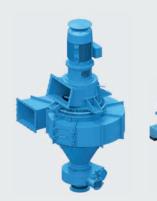


QDK-K

QDK-M Minerals

For separating products with relatively low

# Ultrafine classifier

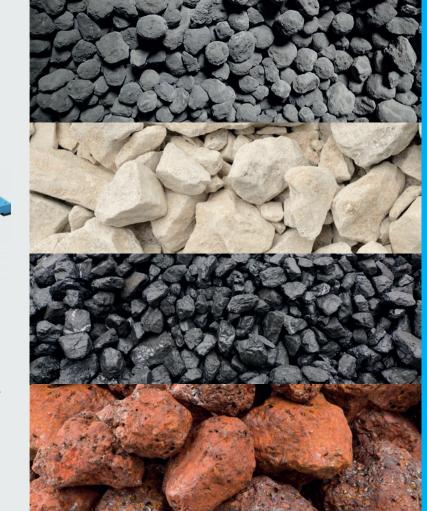


ROC **Industrial Minerals** 

Fine minerals For classifying industrial minerals down to  $d98 = 5 - 100 \mu m$ , e.g. calcium carbonate

U-ROC **Industrial Minerals** 

Very fine minerals For classifying industrial minerals down to d98 < 3 µm



Christian Pfeiffer high performance separator QDK has separator, expanded our product portfolio and increased the efficiency of our plant."

With the support of Christian Pfeiffer, we have converted our cement grinding plant from an open to a closed circuit. The addition of the QDK 143-Z high efficiency separator with cyclone separation in conjunction with our existing ball mill has made our cement production significantly more efficient. Furthermore, we are able to produce additional cement types because we achieve higher particle finenesses. To reach these results, the mill internals were also modernized. These project upgrades proved to be a worthwhile investment which paid for itself in a short period.

Due to their extensive process knowledge and many years of experience, Christian Pfeiffer was the right partner for us. The cooperation ran smoothly and reliably.

Akkermancement Gornozawodsk, Russia





# Separators for ball mills



Solit fuels

For separating moist ma-