

# SEPAX™ SEPARATOR

FLEXIBLE AND EFFICIENT SEPARATION

# EFFICIENT, COST-EFFECTIVE AND VERSATILE

With its smart, simple, space-saving design, the high-efficiency SEPAX separator improves mill performance and ensures required product fineness – all with reduced maintenance and low initial costs.

## KEY BENEFITS

**High-efficiency  
separation**

**Effective nibs  
extraction**

**Low-OPEX**

**Flexible and  
versatile design**

**Low  
maintenance**

# A SMART, SIMPLE, SPACE-SAVING DESIGN

With decades of experience in designing and installing high-efficiency separators, we understand what it takes to achieve separator success. With its low initial costs, versatile design, and low maintenance requirement, the SEPAX separator ticks all the boxes.

## An economical investment

The simple and space-saving design of the SEPAX makes it a smart investment.

The separator itself is fitted within a self-supporting shell structure. While the entire separator unit with cyclones is supported by just one ring-shaped support. The reducer and motor are placed in line with the bearing housing to form a compact and rigid drive-line unit.

Finally, the SEPAX has one low-level feed point. This minimises the height of the separator feed elevator, further simplifying the layout.

All this combines to create a separator with low initial costs and easy installation. But one that still offers superior separating capability. Meaning overgrinding is avoided, coarse and fine particles are efficiently separated, and the required product fineness is achieved.

## The SEPAX at a glance

Low initial costs:

- Self-supporting structure
- Standard range drive parts
- One feed point in low position



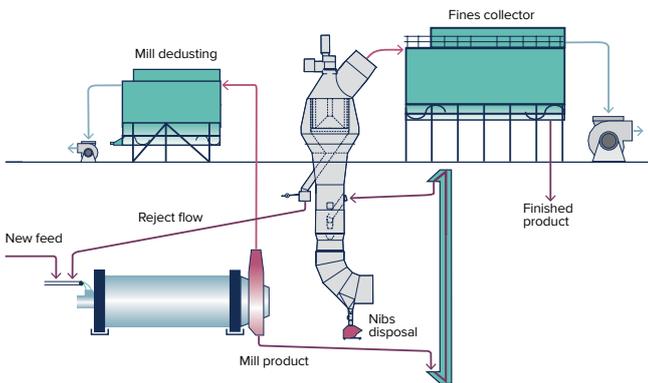
THE SIMPLE AND SPACE-SAVING DESIGN OF THE SEPAX MAKES IT A COST-EFFECTIVE INVESTMENT.

Flexible and versatile:

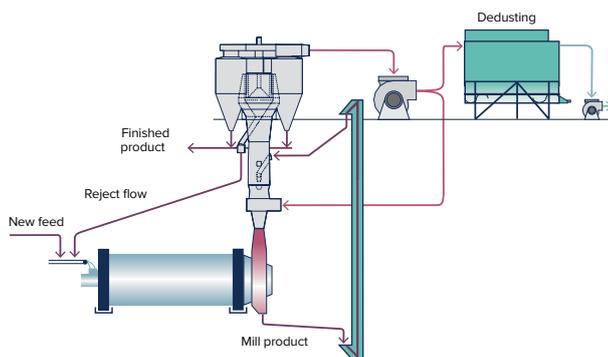
- Applicable to all cement grinding ball mill systems, including fully or semi air-swept raw grinding ball mills and flash driers

Low maintenance costs:

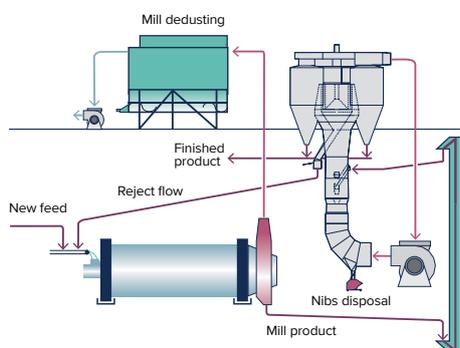
- Optimum wear protection
- Automatic grease lubrication system
- Easy access for maintenance



**SEPAX system with bag filter for collection of fines:** This system ensures maximum product cooling.



**SEPAX system for raw grinding installation** suitably integrated into the mill vent line.



**SEPAX system with cyclones for collection of fines:** Lowest initial and operating costs. Recuperation of heat enhances drying of wet slag, puzzolana or other additives.

## A versatile solution

The SEPAX is designed to fit a wide range of needs and applications. Drive options range from low power for raw meal grinding to powerful drives for fine grinding – all while still utilising the full design air flow. This ensures maximum efficiency, regardless of what end product quality is specified.

Cyclones can be supported by the separator or stand-alone.

The feed concept is based on the material being suspended in the vertical air flow through the riser duct. This makes the SEPAX adaptable to various raw grinding applications. And it means that the separator can be integrated into the mill venting system (for fully or semi air-swept mills) or installed on top of a flash dryer that forms the riser duct leading to the SEPAX.

## Optimising operations

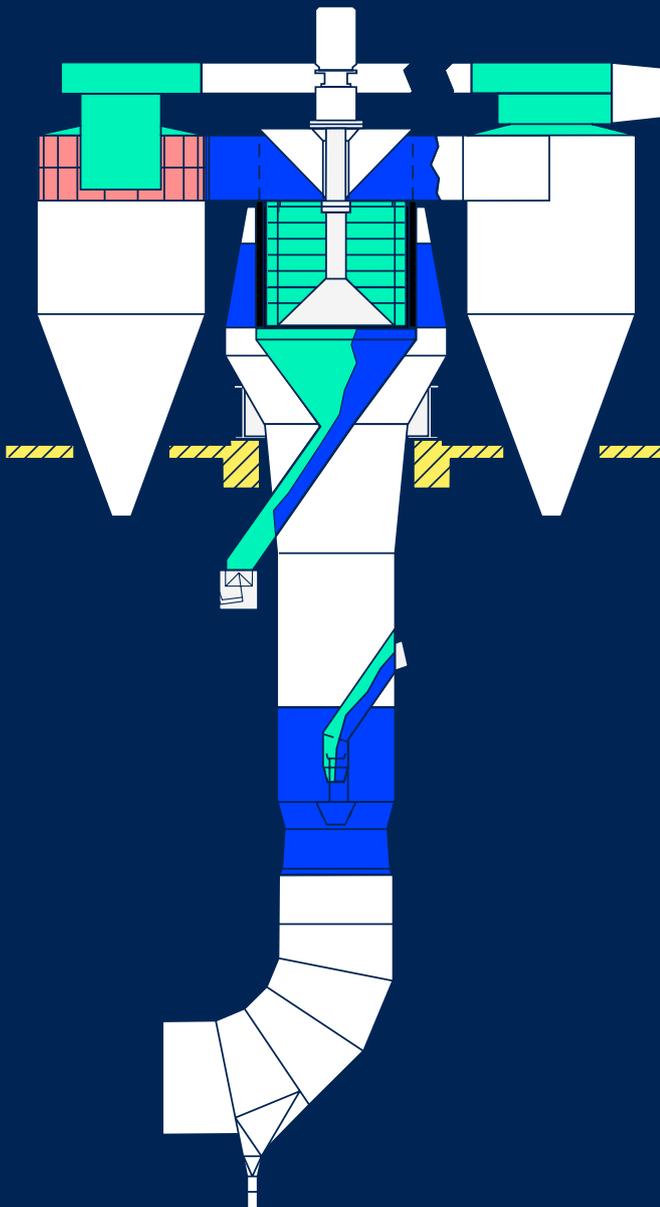
The efficiency of the SEPAX also has a beneficial impact on mill operations in general, cutting specific energy consumption, while maintaining maximum output.

It includes a highly-effective system for removing worn grinding media from the mill discharge area. This results in less clogging of the diaphragm – which in turn allows longer continuous operation. Meaning you get more from you mill.

Finally, the SEPAX is designed for easy maintenance. In addition to easy nib removal - which helps reduce wear on the critical separator parts – wear parts are easily accessible. The bearing unit can also easily be replaced.

# WEAR PROTECTION

The selection of wear materials is not a one-size-fits-all approach. Different parts experience different types of wear – and so need tailored wear solutions. We understand this and have selected our wear protection to ensure long-lasting and effective service life.



## ■ Densit Wearcast 2000

A 30 mm thick cement-bound composition containing 55% hard (9 Mohs) grains of corundum (Al<sub>2</sub>O<sub>3</sub>), Densit Wearcast is easy to install and repair. In tests, it has been shown to outlast basalt by a factor of 1.3 when exposed to sandblasting at various inclinations.

## ■ Hardox 400

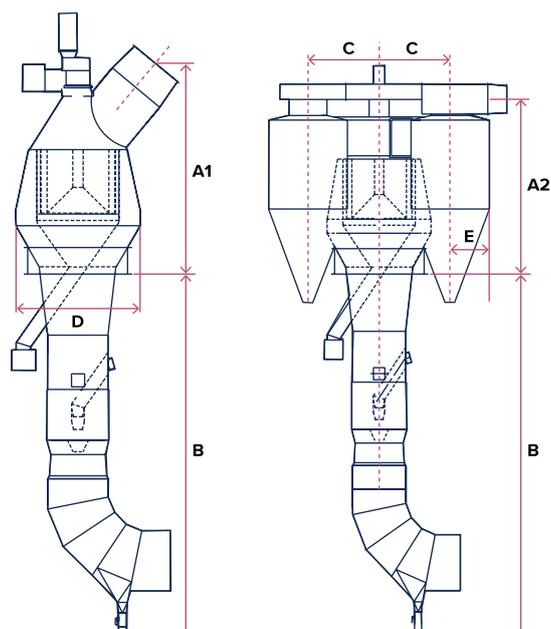
A widely-recognised, abrasion-resistant, weldable steel plate, Hardox 400 is through-hardened to more than 360 HB and is recognised for its superior abrasion-resistant properties.

## ■ Chromium compound wear plate

This material is a mild steel plate with a thickness of 4 to 8 mm, onto which a 4 - 5 mm layer of hardfacing is welded. The hardfacing consists of primary chromium carbides in a eutectic matrix with eutectic chromium carbides. The hardness of the matrix reaches 600-750 HV, the grains 1400 HV. The temperature limit is 400°C.

## ■ High carbon steel

This is a low-cost and highly versatile material, used in places where moderate wear occurs.



| Size | Air flow m <sup>3</sup> /s | A1 mm | A2 mm | B mm  | C mm | D mm | E mm |
|------|----------------------------|-------|-------|-------|------|------|------|
| 190  | 7.3                        | 3108  | N.A.  | 5704  | N.A. | 1900 | N.A. |
| 212  | 10                         | 3500  | N.A.  | 6467  | N.A. | 2120 | N.A. |
| 236  | 13.5                       | 3933  | N.A.  | 7296  | N.A. | 2360 | N.A. |
| 250  | 15.7                       | 4189  | 3754  | 7772  | 3040 | 2500 | 840  |
| 265  | 18.3                       | 4460  | 4004  | 8285  | 3258 | 2650 | 900  |
| 280  | 21.1                       | 4736  | 4262  | 8792  | 3492 | 2800 | 965  |
| 300  | 25.1                       | 5102  | 4608  | 9468  | 3800 | 3000 | 1050 |
| 315  | 28.3                       | 5376  | 4862  | 9975  | 4036 | 3150 | 1115 |
| 335  | 32.8                       | 5746  | 5213  | 10647 | 4344 | 3350 | 1200 |
| 355  | 37.7                       | 6115  | 5558  | 11319 | 4668 | 3550 | 1290 |
| 375  | 42.9                       | 6485  | 5907  | 11989 | 4976 | 3750 | 1375 |
| 400  | 49.9                       | 6947  | 6342  | 12822 | 5374 | 4000 | 1485 |
| 425  | 57.4                       | 7412  | 6781  | 13656 | 5772 | 4250 | 1595 |
| 450  | 65.4                       | 7876  | 7217  | 14488 | 6154 | 4500 | 1700 |
| 475  | 73.9                       | 8341  | 7652  | 15321 | 6552 | 4750 | 1810 |
| 500  | 83                         | 8807  | 8088  | 16152 | 6932 | 5000 | 1915 |
| 530  | 94.9                       | 9365  | 8611  | 17148 | 7402 | 5300 | 2045 |
| 560  | 106.8                      | 9923  | 9130  | 18145 | 7872 | 5600 | 2175 |

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