

RAPID OBJECT CLASSIFIER

High-performance to reach 5,0 μm



ROC - EXPERT FOR VERY FINE PRODUCTS

Higher material purity, top cuts of $d_{98}=5-100\mu\text{m}$, greater performance, low energy consumption and affordability: Industrial minerals are a demanding market.

Taking advantage of 100 years tradition in grinding and separation technology and process optimization, Christian Pfeiffer developed a classifier that meets all these requirements of the very individual needs of this industry.

Technical details

The ROC is a high-efficiency classifier working mainly in closed circuit with a ball mill or pin mill respectively in the grinding or in the coating plant, and occasionally as a stand-alone system. The ROC can achieve up to $98\% < 5,0\mu\text{m}$, depending on machine size and material, while keeping highest performance: The efficiency that this classifier delivers is outstanding, processing capacities from $1.200\text{ m}^3/\text{h}$ till $55.000\text{ m}^3/\text{h}$ even running at speeds above 9000rpm . The main fineness variation factor is the rotor speed adjustment via frequency converter, having other parameters to play with, such as secondary air flow.

WHAT IS MORE:

The dual fines discharge present in biggest classifier sizes achieves equal classification air speed across the whole rotor length with minimal drop in pressure. The material is fed pneumatically directly into the separation area, creating maximum dispersion for a more homogeneous classification.

A secondary air inlet allows for process optimization by the reclassification of rejects, increasing efficiency. The rotor gap sealing air, allows to achieve a clean top-cut (5ppm at $25\mu\text{m}$) and a maintenance free operation.



Highest fineness classification results for industrial minerals:

- Calcium Carbonate → Magnesite
- Talc → Zeolite
- Bentonite → Barite
- Kaolin → more

The fineness of the material is determined by product's functionality, which requires a sharp classification and clean top cut. To guarantee a perfect result a precise analysis beforehand is crucial.



Taking this into account Christian Pfeiffer has built one of the most modern technical centers in Europe for tests and simulation in semi-industrial scale: The Christian Pfeiffer Competence Center consists of a pilot plant and a laboratory where your material is fully analyzed by our team members with long experience in this field. For precise simulations and design the latest technology finite-element-analysis and computational fluid dynamics simulations is applied.

Let us discuss your needs, and how we can work together to maximize the efficiency of your plant. We operate around the globe, so visit our website to identify your local contact:

christianpfeiffer.com/en/contact/