

A close-up, low-angle shot of a blue industrial grinding machine. Several grinding wheels with a fine mesh pattern are visible, arranged in a row. The lighting is dramatic, highlighting the metallic surfaces and the texture of the wheels against a dark background.

FLEXIBLE  
GRINDING  
SOLUTIONS  
FOR YOUR  
PRODUCTS

# EXPERTISE

## IN GOOD GRINDERS

Put a little coffee powder in a cup, pour on boiling water and leave it to settle. The connoisseur is welcomed by an aroma full of promise intimating the



prospect of a persuasive experience for the palate. After a short pause full of expectation, there follows that all-important first sip that decides whether the coffee earns the expert's favour. With a tradition that spans over 300 years,

this is the long-standing and authentic way to savour coffee and essentially the basis of standard practice to this day. Because although pod and capsule-based coffee products are currently very popular and will continue to be so in the future, the vast majority of coffee consumed worldwide is still sourced from the mass market of ground coffee for filter preparation. And coffee tastings to analyse aroma and flavour likewise still adhere to the traditional methods of preparing coffee.

Choosing the right, consistent coffee grind influences not only the sensory result and therefore the consummate enjoyment of the coffee, but also the quality and homogeneity of the ground coffee in industrial production. What's more, the grinder has a major part to play in the reproducibility of a product. The grinding process should treat the product and its delicate aromas carefully and ensure low ground coffee temperatures.



Our expertise in grinding rests on solid foundations – namely our love of coffee, our 140+ years of mechanical engineering and equipment manufacture, and decades of development work in conjunction with our international customers. These are the mainstays of our roaster solutions expertise, which is unique in the world, and the basis of our top-class grinding solutions, which have been installed more than 1,000 times worldwide.

#### **GRINDERS FOR ALL APPLICATIONS**

Whichever kind of ground coffee you produce – be it a coarse grind or filter coffee, espresso or a superfine grind, pods or capsules – we have just the right grinder for you. We offer a wide range of industrial grinding solutions, giving you maximum flexibility when choosing the right product. Our product range is modular and we can therefore cater for absolutely every need. Our compact grinders with one, two or three



stages are highly economical and achieve capacities of between 50 and 5,000 kg/h. Permanently lubricated backlash-free roller bearings, special protective mechanisms if foreign bodies get into the grinding gap, water-cooled grinding rolls and sound manufacturing result in trouble-free and low-wear permanent operation, a long life and low life cycle costs. Our computer-controlled grinders allow for convenient remote adjustment of settings such as the grinding gap, either via a touch panel or via the central plant control system.



More than anything else, modern grinders need to be flexible. Hardness and residual moisture vary depending on the different coffee products. The coffee industry therefore needs high-performance grinding solutions that can be used for different applications and recipes when processing heterogeneous coffee types and roasts.

#### **THE NEXT-GENERATION ROLLER MILL**

The next-generation grinder with an innovative drive concept is equipped with a variable number of independently driven grinding gears for maximum flexibility in ongoing operations. The driving force behind this trendsetting innovation was the customers' requests for greater individuality and quality. In the case of the model with separate drives for each grinding roll, the relative speeds of the rolls to one another can be controlled individually. It is therefore possible to accurately influence the particle size distribution. This grinder therefore

complies with the most specific requirements of coffee capsule production. In addition, the modular grinding design allows for the perfect adjustment of the number of stages to the specifications of the product. The variable performance of the densifier results in additional flexibility. In continuous operation the quality of the grinder is crucial to its life cycle, the reproducibility of the product, the capacity and the grinder's downtimes. And the new PROBAT grinder demonstrates its superiority not only in terms of functionality, but also with regard to its design. Top materials, excellent craftsmanship and the sealed, dust-tight design on the one hand and split bearing housings, a large number of carry-over parts and quick roll replacement on the other are just some of the many features that ensure uniform results, maximum process stability and highest availability. The new grinder is available with rolls of 300, 600, 900 and 1,200 mm in length.





**OTHER FEATURES AND  
ADVANTAGES OF PROBAT  
GRINDERS AT A GLANCE:**

- Constant, uniform feeding of the pre-crushing rolls thanks to frequency-controlled feeder
- Specially developed roll corrugation for ideal, uniform particle sizes
- Infinitely adjustable grinding gap for all possible grinding degrees
- Uniform, reproducible grinding results
- Permanently low ground coffee temperatures
- Maximum availability, low wear, low maintenance
- High processing performance, low energy consumption
- Uniform feeding and distribution
- Optimum density regulation
- Homogeneous intermixing and comminuting of chaff

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