

ORBITGRINDER

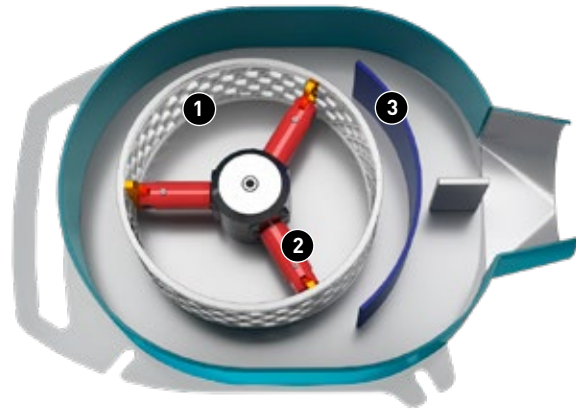
new



COMPACT AND POWERFUL THE ORBITGRINDER

The OrbitGrinder is a cutting basket macerator that shreds solids reliably. It is equipped with the Constant Cutting System. Thanks to this completely new macerating concept, OrbitGrinder consistently achieves efficient maceration for perfect results.

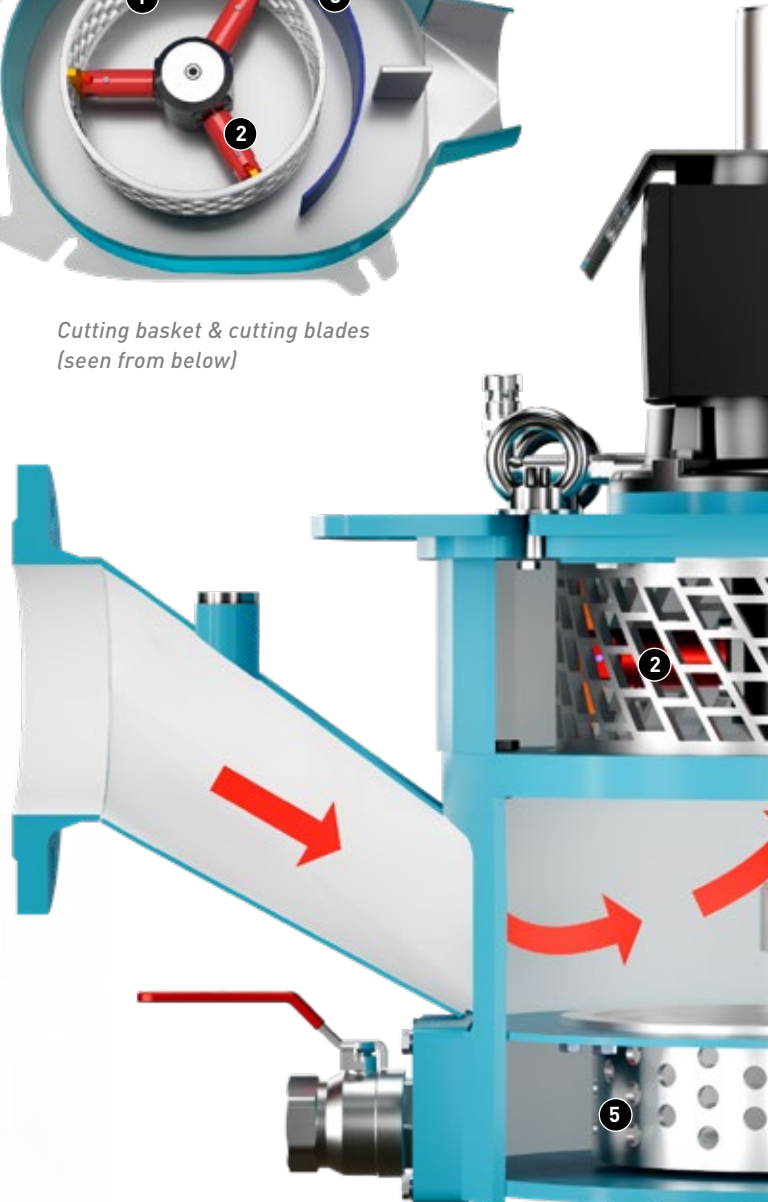
OrbitGrinder	
Flow rate	260 m³/h
Pressure max. (heavy duty)	2 bar (5 bar)
Temperature max.	120° C



Cutting basket & cutting blades
(seen from below)

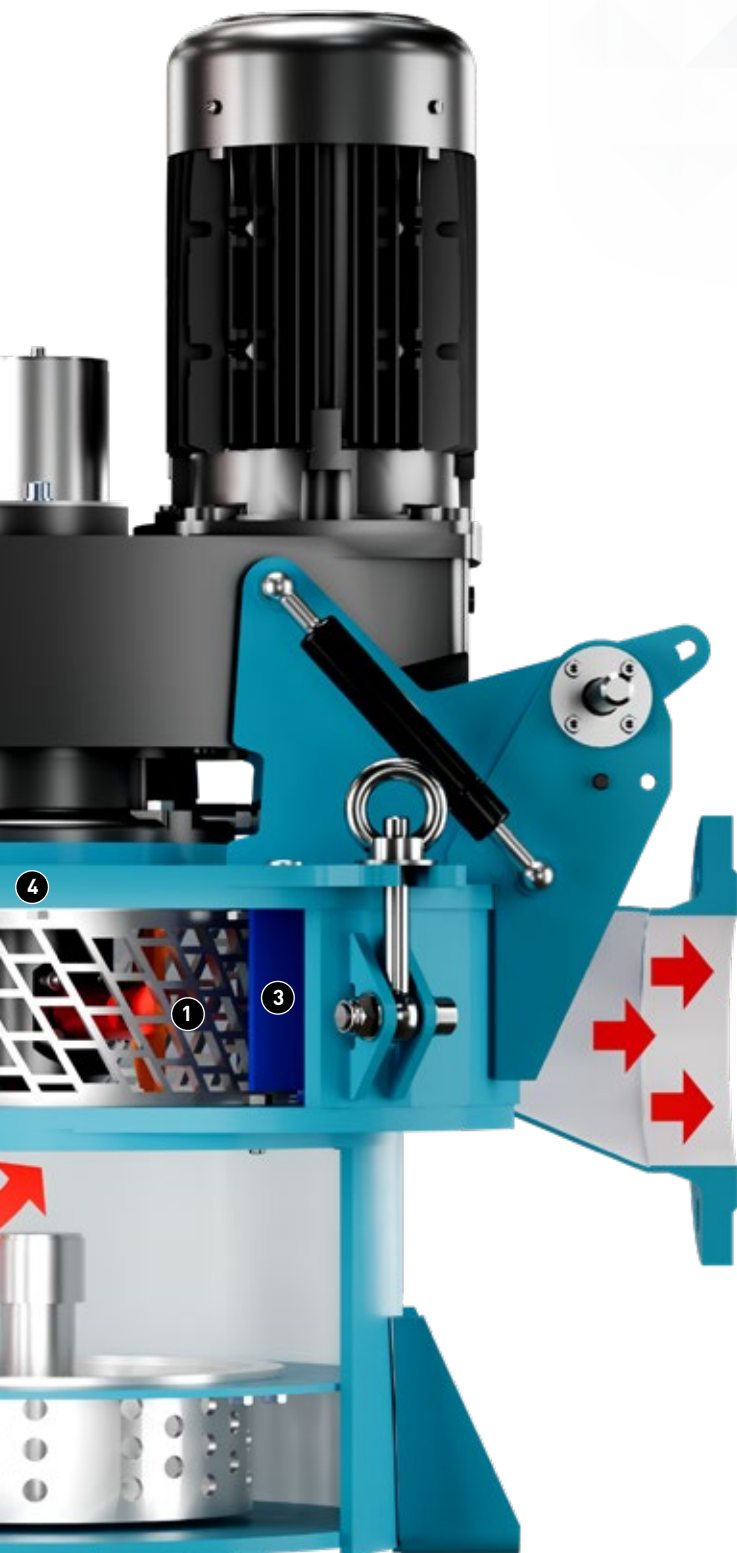
DESIGN AND FUNCTION

- 1 Cutting basket**
The fluid containing solids is supplied to the OrbitGrinder. The fluid and the solids are conveyed to the Constant Cutting System where they enter the round cutting basket.
- 2 Blade arm with cutting blades**
Inside the cutting basket, the cutting blades arranged in a star shape rotate over the surface of the cutting basket. The solids are shredded and flow radially through the cutting basket with the fluid.
- 3 Baffle plate**
The baffle plate ensures that the suction force of the pump is distributed evenly around the cutting basket. The flow through the cutting basket is homogeneous.
- 4 Quick-release cover**
For maintenance and to remove the debris collector, the gas strut assisted quick-release cover is simply opened from above.
- 5 Debris collector**
Impurities that cannot be shredded are collected in the debris collector.



AT A GLANCE

- + Perfect macerating result thanks to the Constant Cutting System
- + Adjustable particle size maceration
- + Large selection of component materials available
- + Compact design, macerator can be retrofitted into every system
- + ATEX-compliant design upon request
- + Long service life
- + Ease of maintenance thanks to MIP®
- + Energy efficient



ADJUSTABLE MACERATION

Cutting baskets with different hole patterns can be used in the OrbitGrinder. In combination with flow and rotational speed the maceration can be adjusted.

The conical geometry of the cutting holes improves the flow of particles. The hole edges of the cutting basket are constantly sharpened by the cutting blades. They remain sharp and guarantee a consistently excellent cutting result.

A HOLISTIC DESIGN CONCEPT PERFECTLY INTEGRATED AND EASY TO MAINTAIN



VERY SIMPLE INTEGRATION INTO YOUR SYSTEM

The OrbitGrinder can be integrated perfectly in almost any existing system. The in- and outlet can be positioned to each other at different angles.

The top and bottom parts of the OrbitGrinder are connected by screws. In order to change the angle between the inlet and outlet, the bottom part of the OrbitGrinder is disconnected from the top part and screwed on again in the desired position.

Installation examples



PERFECTLY MATCHED CONTROL TECHNOLOGY

Upon request, we also deliver the suitable control technology for the OrbitGrinder. The control unit is manufactured and programmed by us. We will implement your requirements and wishes 100 percent.



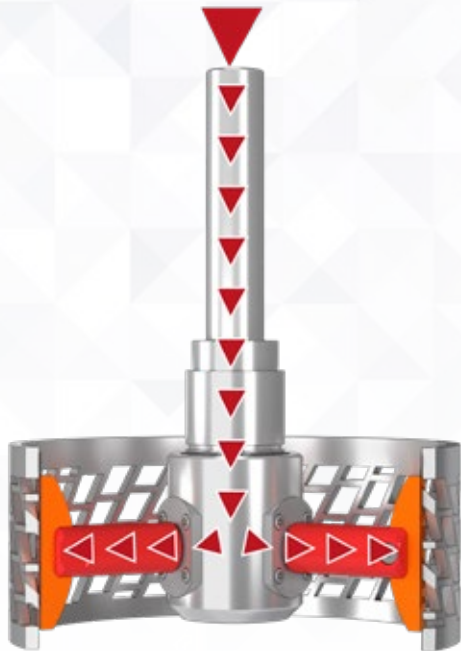
EASY MAINTENANCE IN A MATTER OF MINUTES

The OrbitGrinder is designed according to the Maintenance in Place (MIP®) principle. All maintenance work can be done easily and quickly at the installation site of the device. It is not necessary to remove the OrbitGrinder from the pipeline.

Only the quick-release cover, which is supported by a gas strut, is folded upwards. All wear parts can be accessed easily and replaced within a few minutes. The debris collector is removed and emptied. Any escape of liquid during maintenance work is prevented.

CONSTANT CUTTING SYSTEM

PERFECT CUTTING RESULT



With an even circumferential speed, automatic blade adjustment and pivoted cutting blades, the **CONSTANT CUTTING SYSTEM** ensures a consistently outstanding macerating result.

CONSISTENTLY BEST CUTTING QUALITY THANKS TO AUTOMATIC BLADE ADJUSTMENT

The contact pressure can be readjusted individually for each blade. This is done completely automatically by a central adjustment unit which applies a constant pressure on the blades.

The blades lie perfectly on the surface, the cutting force remains constantly high for each blade and the cutting result is consistently good.

- + Optimum cutting result
- + Constant cutting force in all points
- + Long service life

EVEN CIRCUMFERENTIAL SPEED ENSURES OPTIMUM MACERATION

As opposed to round perforated disks, the circumferential speed of the blades is the same in every cutting point. This way, a uniform cutting result is achieved in every point.

Conventional perforated disk macerators operate with a cutting plate on which blades rotate. The disadvantage here are the different circumferential speeds. At the outer edge of the cutting plate **[A]** the circumferential speed is significantly higher than in the center **[B]**. This results in excessive wear.

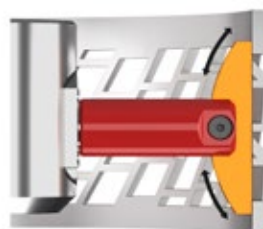
The OrbitGrinder has identical circumferential speeds at every point of its blades which achieves excellent macerating results and unprecedented service lives.



*Conventional
perforated disk macerator*



OrbitGrinder



PIVOTED CUTTING BLADES

The blades are pivot-mounted using a single-point suspension. They lie perfectly onto the surface of the cutting basket.



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