MacroMedia.

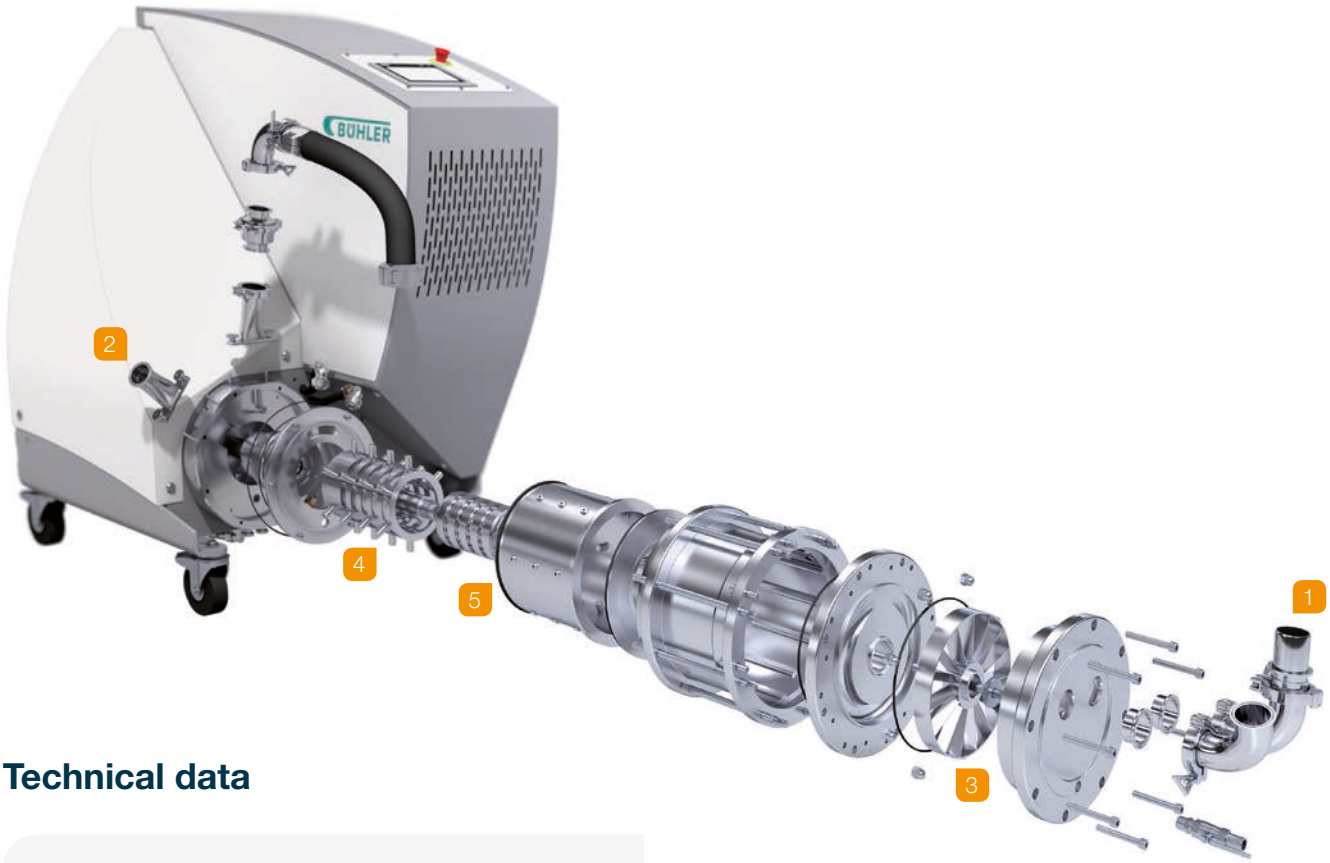
Revolutionary pre-dispersing solution.

Innovations for a **better world.**

BÜHLER

Small process unit – big impact.
Greater efficiency throughout the entire process.

The MacroMedia pre-dispersing solution is revolutionizing the wet grinding process. It improves the quality of the final product, speeds up processing and cuts costs. The MacroMedia is a profitable solution for companies of any size in a wide range of industries.



Technical data

Motor:	18.5 kW
Active milling chamber volume:	6 l
Cooling:	Stator
Product throughput rate:	Up to 15 m^3/h
Size of grinding media:	3 – 5 mm
Length:	1,250 mm
Width:	900 mm
Height:	1,400 mm
Weight:	approx. 800 kg

1 Product feed
2 Product outlet
3 Pumpwheel
4 Rotor
5 Multi-gap separation

Extremely versatile.
Flexible solution for a host of applications.

Liquid colors for offset printing and packaging printing

Inkjet colors for textiles and other applications

Chemicals, for example for agricultural applications

The MacroMedia achieves high throughput rates, homogeneous mix qualities and excellent particle size distribution using the minimum of space – providing the ideal basis for subsequent fine grinding, for example with a Bühler MicroMedia or Cenomic bead mill.

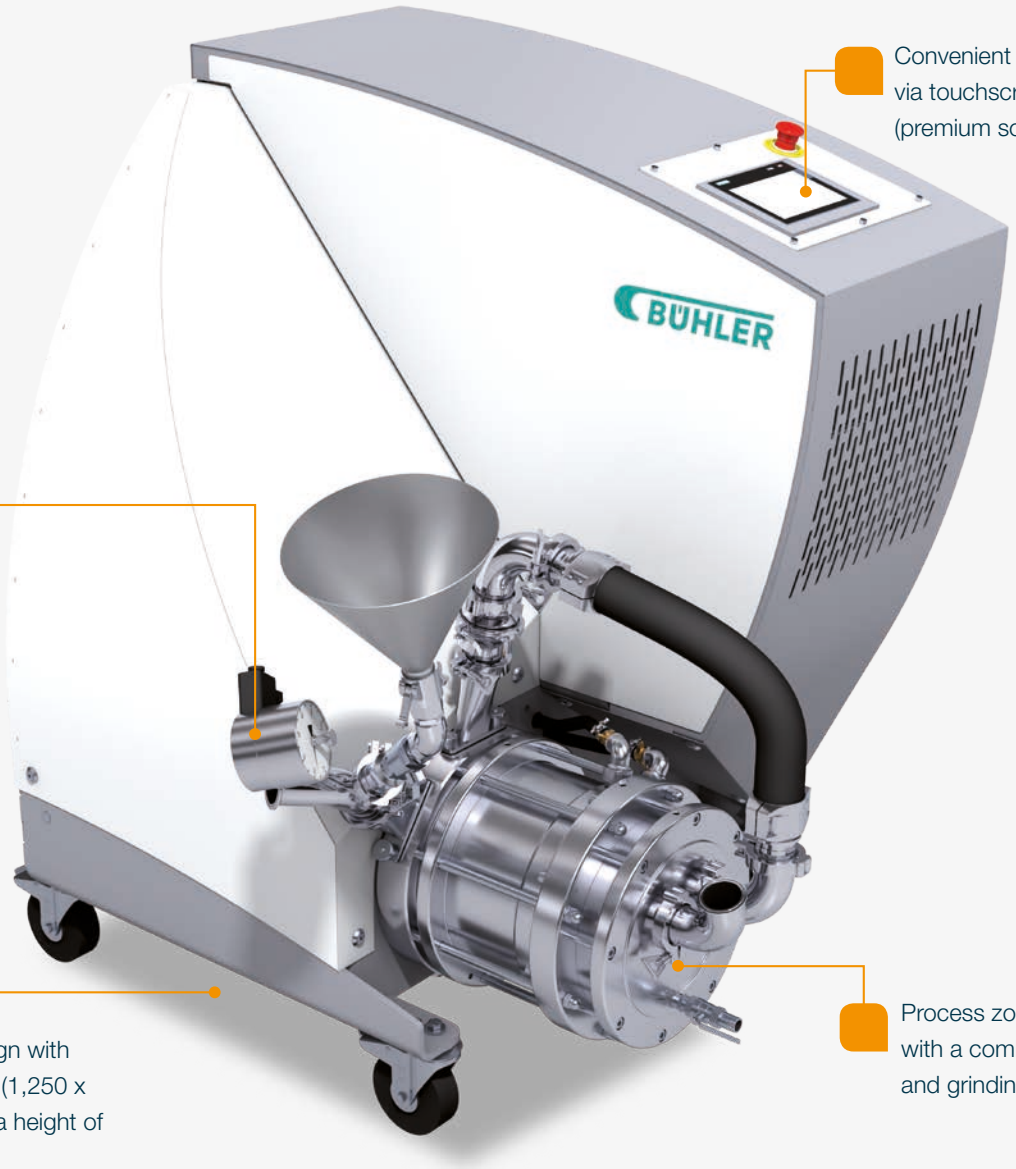
The combination of a high-performance pump and small-volume grinding unit makes the MacroMedia unique on the market. Thanks to improved process control in the pre-grinding stage, fluctuating raw-material qualities can be balanced out and uniform properties achieved for the pre-ground intermediate products. This produces optimum results in fine grinding and consequently increases the quality of the end product.

At the same time, the system reduces production costs due to an improved material yield and optimized energy efficiency compared with other pre-grinding solutions. The MacroMedia is also extremely compact and can easily be integrated into existing plants. A further advantage is that minimized deposits in the piping and good cleaning options reduce downtimes and increase the productivity of the entire plant.

Benefits of the MacroMedia

- Improved process control
- Reduced downtimes, greater process safety
- Increased plant capacity when upsizing
- Better material yield means more profit

Technology to drive your company forward.
MacroMedia– innovation with a small footprint.



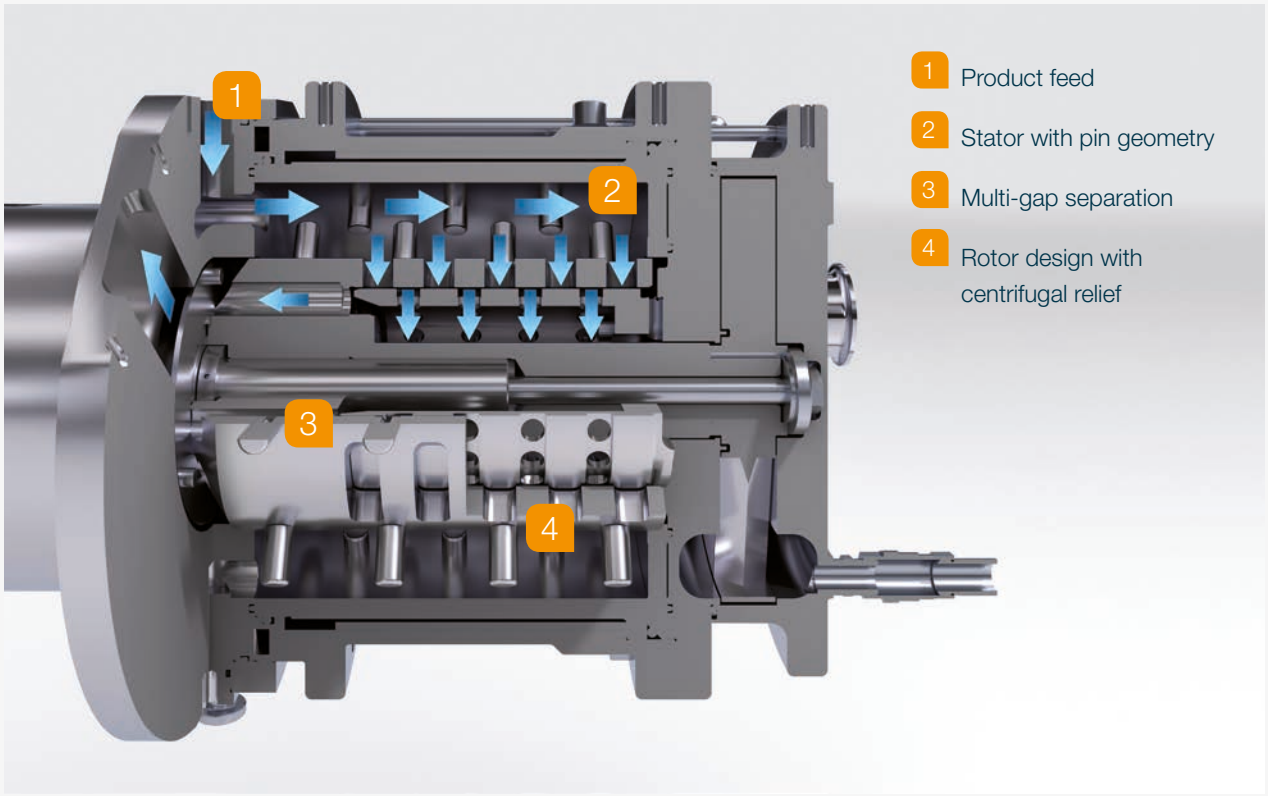
Convenient operation via touchscreen panel (premium solution)

Temperature monitoring

Compact design with small footprint (1,250 x 900 mm) and a height of just 1,400 mm

Process zone with a combined pump and grinding chamber

With its combination of pump and cooled rotor/stator unit, the MacroMedia offers a completely new operating principle.

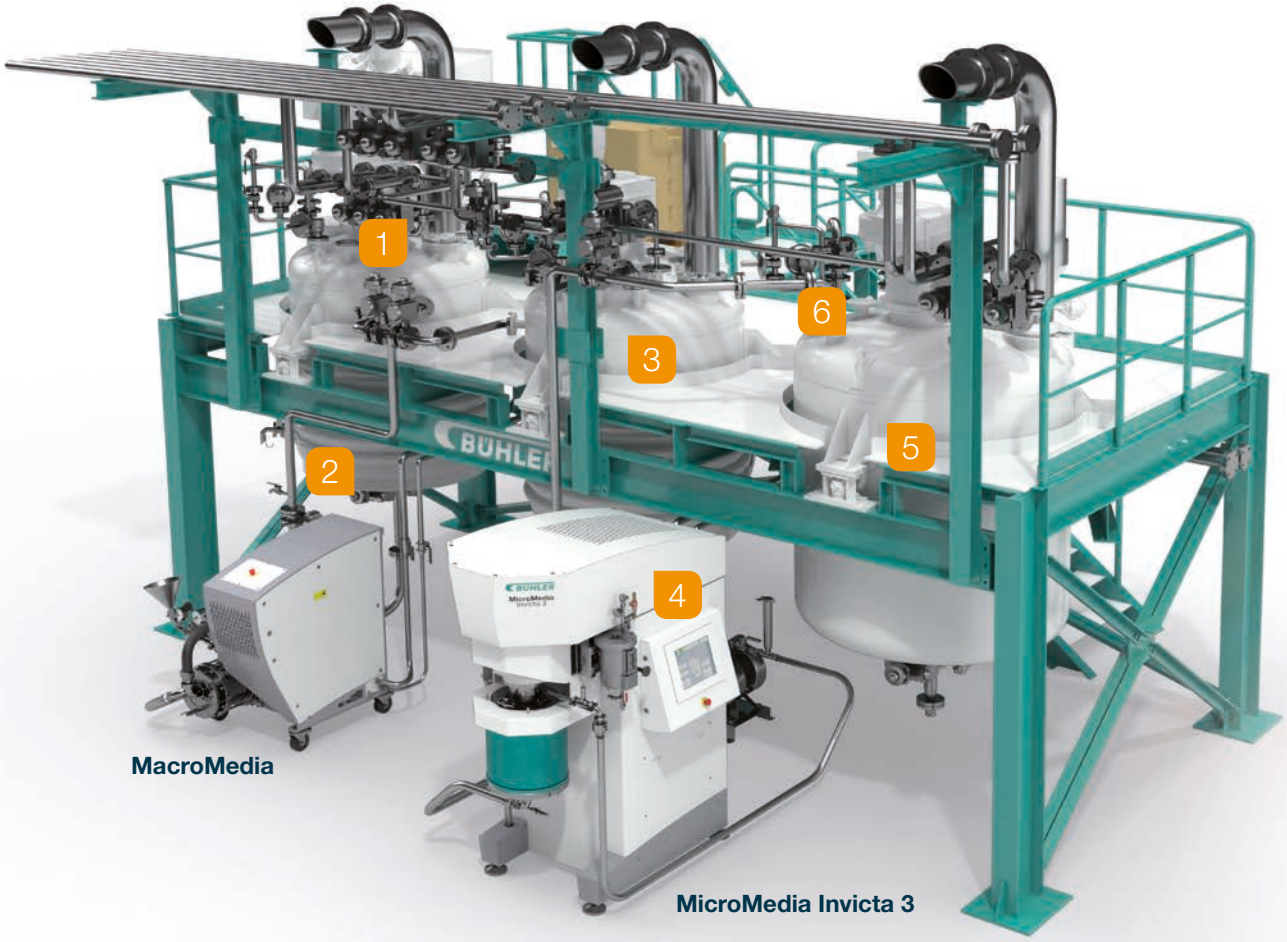


Control options

Premium solution with PLC and touchscreen:
This new user interface allows easy and intuitive operation of the machine. The order-related analysis and diagnosis of the operating data informs the operator about the machine status.

Integrated into the fine grinding mill controls (MicroMedia Invicta):
An additional function of the premium solution is the option to integrate the control into the operation of the fine grinding mill. In this case, the machine is operated externally.

Compact design saves space and cuts costs. **Pre-grinding and fine grinding in a single plant.**



1. Dosing of solid and liquid materials in the mixing tanks
2. Circulation between MacroMedia and the mixing tank
3. Transfer from the mixing tank to the recirculation tank via MacroMedia
4. Circulation between MicroMedia Invicta and the recirculation tank
5. Transfer from the recirculation tank to the let-down tank via MicroMedia Invicta
6. Addition of liquid components and transfer to the next production step

Process and plant engineering by Bühler

- Maximum availability, reliability and cost efficiency
- Supply of complete solutions
- Installation and commissioning worldwide
- Full support throughout the entire lifecycle of a plant

Examples from industrial practice.
Improved processes thanks to MacroMedia.

Packaging inks: increased productivity

This case study demonstrates how integrating the MacroMedia can result in significantly increased productivity.

Previous process
– Particle size with pre-mixing using disperser: 300–500 µm
– Followed by fine grinding using the MicroMedia high-performance mill with a bead size of 0.8 mm and a gap size of 0.35 mm.
– Previous energy consumption for production: 350 kWh/t for a fineness of <5 µm

Benefits of production with integrated MacroMedia
– Pre-dispersion using MacroMedia with a bead size of 3.0 mm, achieving a fineness of <100 µm
– Fine-dispersion using MicroMedia with a bead size of 0.3 mm
– Overall energy consumption is reduced to 200 kWh/t while plant capacity is increased by 75 % with no change in the quality level

Pigment concentrates: increased process reliability

Another case study illustrates the improved process reliability. Thanks to the MacroMedia, production is much more flexible and stable.

Previous process
– Production in a batch process with mobile containers
– Preparation of raw materials using a conventional mixing system
– Immediate and therefore inflexible subsequent processing required to avoid sedimentation of the precursor

Benefits of production with integrated MacroMedia
– Production of a stable suspension
– Sedimentation is minimized, resulting in flexible production processes
– The bead mill does not become blocked
– Increased process reliability and overall efficiency of the plant

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