MacroMedia™. Revolutionary pre-dispersing solution.
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.

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**Technical data**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor</td>
<td>18.5 kW</td>
</tr>
<tr>
<td>Active milling chamber volume</td>
<td>6 l</td>
</tr>
<tr>
<td>Cooling</td>
<td>Stator</td>
</tr>
<tr>
<td>Product throughput rate</td>
<td>Up to 15 m³/h</td>
</tr>
<tr>
<td>Size of grinding media</td>
<td>3 – 5 mm</td>
</tr>
<tr>
<td>Length</td>
<td>1,250 mm</td>
</tr>
<tr>
<td>Width</td>
<td>900 mm</td>
</tr>
<tr>
<td>Height</td>
<td>1,400 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 800 kg</td>
</tr>
</tbody>
</table>

1. Product feed
2. Product outlet
3. Pumpwheel
4. Rotor
5. Multi-gap separation
Extremely versatile.
Flexible solution for a host of applications.

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

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.
Technology to drive your company forward.

**MacroMedia™ – innovation with a small footprint.**

- Compact design with small footprint (1,250 x 900 mm) and a height of just 1,400 mm
- Convenient operation via touchscreen panel (premium solution)
- Process zone with a combined pump and grinding chamber
- Temperature monitoring
With its combination of pump and cooled rotor/stator unit, the MacroMedia™ offers a completely new operating principle.

Control options

Convenient solution with manual operation:
The machine is controlled entirely by a turnkey with the machine status displayed on signal lamps. Depending on the process, the rotor speed can be selected.

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™):
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.
MacroMedia™. Revolutionary pre-dispersing solution.

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™ and the recirculation tank
5. Transfer from the recirculation tank to the let-down tank via MicroMedia™
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™.**

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**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

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**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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Images and additional text related to “Examples from industrial practice. Improved processes thanks to MacroMedia™.”