

Combining pre-dispersing and fine grinding for maximum efficiency.

The combination of the MacroMedia pre-dispersing unit and the MicroMedia Invicta high-performance bead mill provides the perfect solution for a productive and sustainable process for a wide range of applications in the wet grinding industry.

Increased productivity

Starting with an enhanced pre-dispersing step, the quality of the pre-mix can be improved, in turn allowing for the usage of smaller beads in the subsequent fine-grinding step. This combination increases productivity by 175 % per line.

Sustainability considerations

Combining the MacroMedia pre-dispersing unit with the MicroMedia Invicta can significantly lower your energy consumption. Compared to a standard process using a high-speed disperser and a MicroMedia+ bead mill, the MacroMedia and MicroMedia Invicta duo saves up to 270 kWh or 200 kg CO₂e per ton of ink (solvent-based liquid ink, CO₂e calculation based on the average global electricity grid).

User-friendly control system

The integrated Premium Plus control system offers an intuitive design for easy handling. The control of machines, tanks and peripherals can be integrated in one control unit.

Benefit from

- Increased productivity by combining pre-dispersing and fine grinding in one module
- Energy efficiency by saving up to 270 kWh or 200 kg CO₂e per ton of ink
- Ease of use with intuitive integrated control system



The color of the MacroMedia and MicroMedia Invicta can be customized





MacroMedia

The MacroMedia pre-dispersing unit uses beads which, compared to conventional mixing technologies, are much more effective at breaking down particles and agglomerates, including hard aggregates and even crystals. For standard inks and coatings it achieves significantly finer particle sizes. This technology is key in enabling smaller beads to be used in the subsequent fine-grinding step.

MicroMedia Invicta

Using smaller beads, higher flow rates and the most productive milling technology are the key factors for an efficient production of the desired quality for your product. Bead size in particular has a high leverage; for example, reducing the bead size from 0.8 mm to 0.3 mm enables a 40 to 50 % lower energy consumption.

Pre-designed process skid for small footprint, quick installation and commissioning

The skid includes dosing of solid and liquid materials, the MacroMedia pre-dispersing unit, recirculation tanks, the MicroMedia Invicta and a let-down tank. The smart design is perfect for a cost-efficient and flexible production solution on a smallest possible footprint. Thanks to the pre-designed module, the installation and commissioning time will be reduced to a minimum.



Bühler AG

CH-9240 Uzwil, Switzerland

T +41 71 955 11 11 F +41 71 955 31 49

grinding.dispersing@buhlergroup.combuhlergroup.com/grinding_dispersing