

DISPERMAT[®] SL

Horizontal bead mill for repeatable fine grinding for laboratory and pilot plant.

Option: Explosion-proof according to ATEX



Model	Moc	Obroty (rpm)	Objętość komory mielącej (l)	Objętość produktu (l)
Bead mill DISPERMAT® SL5	1.1	0 – 6000	0.05	0.05 – 0.75
Bead mill DISPERMAT® SL12	1.1	0 – 6000	0.125	0.15 – 0.75
Bead mill DISPERMAT® SL25	2.2	0 – 6000	0.25	0.3 – 2.5
Bead mill DISPERMAT® SL50	3	0 – 6000	0.5	0.5 – 10
Bead mill DISPERMAT® SL100	3	0 - 3000	1	1 – 20
Bead mill DISPERMAT® SL200	4	0 - 3000	2	2 – 50

Fine grinding in pass and circulation procedure

DISPERMAT® SL laboratory and pilot plant mills are closed, horizontal bead mills with high output and extremely low dead volumes in the mill base inlet and outlet pipes. During the dispersion process, the product is fed through the horizontal milling chamber and continuously dispersed. The DISPERMAT® SL bead mill can be used for the pass as well as for the re-circulation process. After dispersion, the integrated air pressure system presses the remaining mill base out of the milling chamber which allows a complete recovery of the dispersed material.

Due to minimised dead volumes even the smallest quantities can be dispersed with high yield. Thus, the DISPERMAT® SL is an ideal tool for research, development and quality control. Also, larger quantities can be processed within a very short period of time. In order to minimise the product loss, the mill base is transported directly from the supply vessel into the milling chamber. The dispersed product passes through the mill base separation (dynamic gap) and is recovered either in a vessel (pass method) or flows back into the supply vessel (re-circulation method).

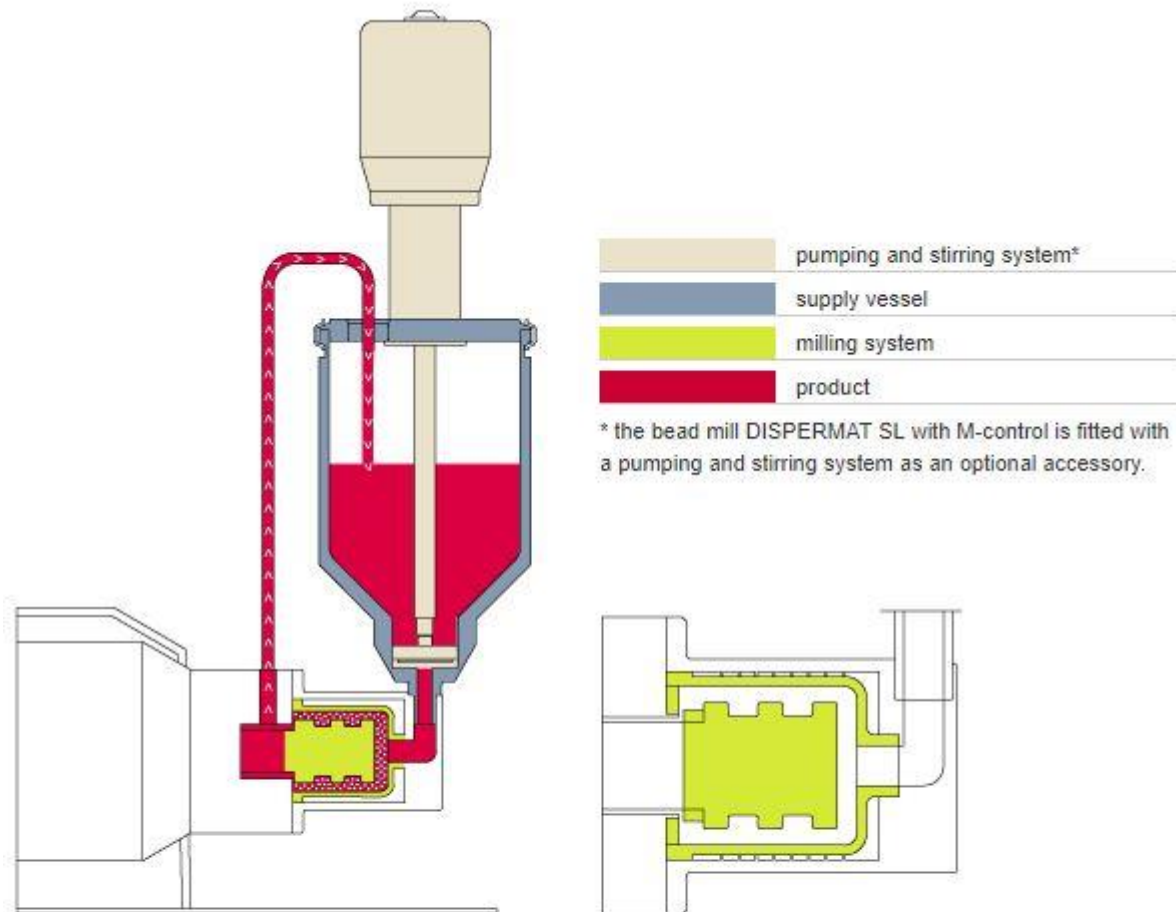
Wet milling from 50 ml to 50 l:

- Quick and cost-effective of new formulations due to exact repeatability of dispersions.
- Quick and reliable transfer of laboratory development into production because of quantitative knowledge of the required mechanical power input.
- Quality control and assurance of production.
- Efficient control of incoming raw materials by measuring product properties relevant for the application.

The multi-purpose bead mill DISPERMAT® SL:

- One-pass-procedure and continuous pass procedure
- Circulation procedure with integrated pumping- and stirring system
- Dispersion of flowing and non-flowing products
- High mechanical power input permits processing of difficult to disperse products.

Diagrammatic view of the bead mill DISPERMAT® SL:



The milling system is made of wear resisting, high-alloy special steel. As an option it is also available made of:

Zirconium oxide

- No metallic abrasion
- No colour deviation

Silicium carbide

- Very good caloric conductivity
- No metallic abrasion

Hard metal

- Good caloric conductivity
- Suitable for high abrasive media

For every task the suitable technology.

Available control technologies for the bead mill DISPERMAT® SL:

C and C-EX – technology



- **Graphic display**
indications of speed, torque, power, product temperature, timer and peripheral speed
- **Repeatability**
dispersion method: constant speed and constant power input for for an optimum repeatability

- **Data recording**
recording of the process parameters with graphical indication
- **Switch-off parameters**
Switch-off function for temperature, speed, torque and power
- **Database**
100 individual PRESET configurations for speed, timer, switch-off parameters etc.
- **Power compensation**
calibration of the net power
- **WINDISP 7©**
Data interface to WINDISP 7© software for documentation, analyses, research and development and quality control

WINDISP 7

M – technology



- **Graphic display**
indications of speed, torque, product temperature, timer and speed in % of max. speed

M-EX – technology



- Variable speed adjustment
- Digital speed indication
- Explosion-proof according to ATEX

Accessories for the bead mill DISPERMAT® SL

