



**Innovative dispersion systems
for production**

TORUSMILL® TM
Modular system of patented dispersion machines



TORUSMILL® TM 100

The TORUSMILL® TM is a completely new, patented dispersion system which enables a particularly economic and environmentally friendly dispersion of high quality products.

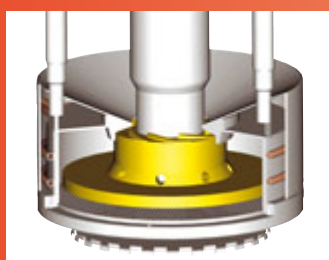


TORUSMILL® TM 500

With the TORUSMILL® TM a predispersion with a dissolver disc, followed by extremely fine grinding with an integrated basket mill, can be completed in one machine in a single container. The TORUSMILL® TM is available for product quantities up to 2400 litres. For the laboratory systems for mill base quantities from 0,5 to 16 litres are available.

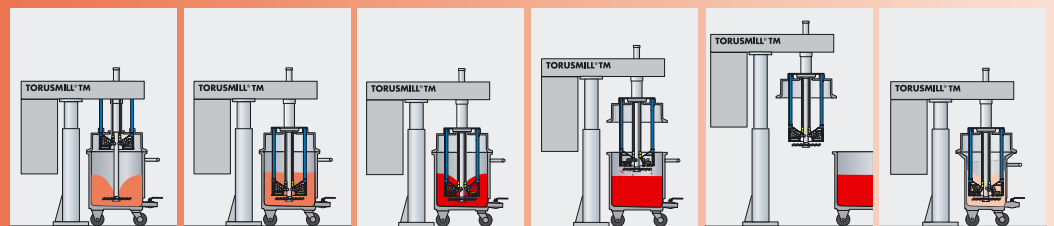


TORUSMILL® TM 3000



The unique, patented principle of operation

TORUSMILL® TM



■ The raw materials are dispersed with the dissolver disc in the classical manner.

■ After dispersion, the milling basket is lowered into the predispersed millbase.

■ The TORUSMILL® now starts the dispersion process for extremely fine grinding.

■ When the dissolver disc and the milling system are positioned above the product surface, product residue in the grinding basket is centrifuged out by briefly running the milling and dissolver discs.

■ The milling system is now completely raised and the container with the dispersed finished product is removed.

■ Cleaning the milling system is carried out in a separate conical container in order to minimise the required amount of cleaning fluid.

Type TORUSMILL®	power kW	vessel capacity (l)	millbase volume (l)
TM 10	4	6 - 20	2,5 - 16,0
TM 100	15	75 - 150	35 - 80
TM 500	30/37	250 - 500	110 - 400
TM 1000	55	750 - 1000	330 - 800
TM 3000	110	3000	1000 - 2400

Innovative dispersion systems for laboratory and pilot plant

Innovative dispersion systems for laboratory applications



DISPERMAT® LC 2

Power: 0,3 kW
Speed: 0 - 20000 rpm



DISPERMAT® CV 2

Power: 0,5 kW
Speed: 0 - 20000 rpm



DISPERMAT® TU

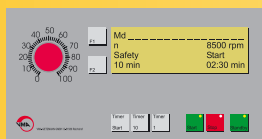
Power: 0,5 kW
Speed: 0 - 20000 rpm



DISPERMAT® CL 54

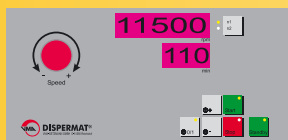
Power: 0,5 kw
Speed: 0 - 15000 rpm

The innovatives technologies for adjustment, automatic and process control of the DISPERMAT®



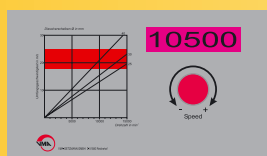
TU Technology

- digital speed indication
- torque indication
- timer
- controlled by frequency converter



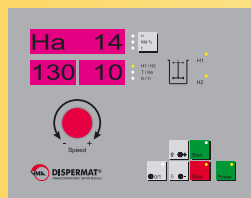
CV 2 Technology

- digital speed indication
- digital timer
- Adjustment to a second speed by a timer



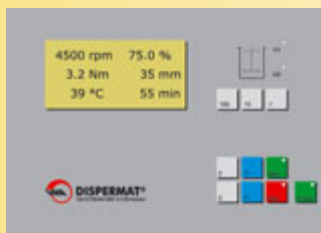
LC 2 Technology

- simple application
- single dial control
- digital speed indication
- controlled by frequency converter



CN Technology

- digital speed and torque indication
- timer
- digital product temperature indication
- controlled by frequency converter
- H1, H2, Ha stand (see also red box below)



M Technology

- digital speed and torque indication
- timer
- serial Interface
- controlled by frequency converter
- H1, H2, Ha stand (see also red box below)



C Technology

- digital speed, torque and product temperature indication
- timer
- peripheral speed of the stirring tool
- controlled by frequency converter
- serial Interface
- documentation for QC with WIN-DISP Pro Software (optional)
- H1, H2, Ha stand (see also red box below)

Safety directives state that the motor cannot operate when the dispersion tool is outside the dispersion container.

The innovation of the CN, M- and C-technology permits operation without safety limit switches and enables the operator to select the required switch points directly via the key pad. This is realized by a height measuring system which is integrated in the H2L stand. This system continuously measures the height of the dissolver disc and displays the results. The height measuring system is permanently checked and is adjusted if required.

- H1 = Dissolver disc is inside the container
- H2 = prevents accidental contact of dissolver disc with the bottom of the container
- Ha = current height position of the dissolver disc

**High power dispersers
for laboratory and pilot plant applications**



DISPERMAT® CA

Power: 0,55 - 4 kW
Speed: 0 - 20000 rpm
M + C technology



DISPERMAT® AE

Power: 0,55 - 4 kW
Speed: 0 - 3000/6000 rpm
0 - 10000 rpm
M + C technology



DISPERMAT® AE Ex

Power: 0,55 - 4 kW
Speed: 0 - 3000/6000 rpm
0 - 10000 rpm



DISPERMAT® CD-C

for viscous non flowing substances
Power: 2,2 kW
Speed: 0 - 6000 rpm
0 - 10000 rpm



DISPERMAT® FM

FM 10: 1,1 kW, 0-11000 rpm
FM 20: 2,2 kW, 0-11000 rpm
FM 30: 1,1 kW, 0-5500 rpm
FM 40: 2,2 kW, 0-5500 rpm



DISPERMAT® CN

CN 10: 1,1 kW, 0-11000 rpm
CN 20: 2,2 kW, 0-11000 rpm
CN 30: 1,1 kW, 0-5500 rpm
CN 40: 2,2 kW, 0-5500 rpm

**For more information
please ask for our
complete catalogue.**

**Dispersion technology can be applied
to many different areas**

**Industrial paints and
coatings**



**Sun filter
cream**



**Technical
ceramics**



**Waterbased
colour toner**



Vacuum dissolver, milling systems and accessories for laboratory dissolvers

NEW



DISPERMAT® VL

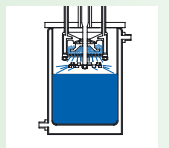
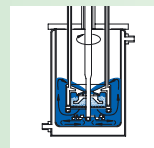
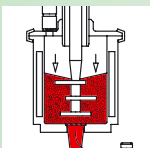
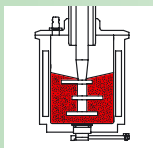
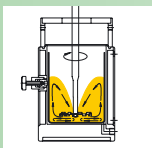
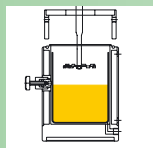
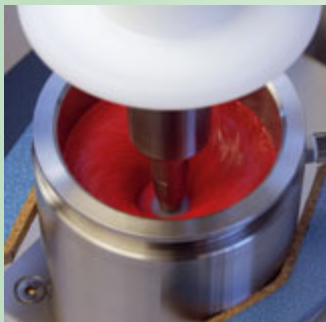
Vacuum dissolver
Power: 2,2 - 4 kW
Speed: 0 - 3000/6000 rpm
Container size: 1 - 60 l

DISPERMAT® LH

Vacuum dissolver
Power: 2,2 / 3 kW
Speed: 0 - 1500 rpm
Container size: 5 / 10 l

DISPERMAT® VE

Vacuum dissolver for variable product volumes
VE 25 • 4 kW • Container size: 3 - 25 l
VE 100 • 25 kW • Container size: 10 - 100 l



DISPERMAT®

+ modular dispersion and milling systems

+ CDS

dispersion under vacuum in single wall stainless steel containers (capacity: 250 – 5000 ml); container holders single or double walled (temperature equalisation).

+ APS

The APS milling system is a vertical closed bead mill (8 container sizes from 30 ml up to 5000 ml) with high material yield due to pneumatic press-out-system

+ TML

The milling system TML is a patented basket mill using the patented TORUSMILL principle
Optional: vacuum

TML1: millbase quantity 500 ml up to 3.000 ml

TML5: millbase quantity 2.000 up to 10.000 ml

Flexographic printing inks



Scratch resistant UV varnishes for furniture



Cosmetics e.g. Eyeliner and Lipstick



Aqueous glue





Laboratory and pilot plant bead mills stirrer, test equipment and accessories



DISPERMAT® SL
Power: 1,1 - 4 kW
Milling chamber volume: 50-2000ml
Millbase quantity: 50 ml – 50 l
M + C Technology



DISPERMAT® SL-C Ex
Power: 1,1 - 4 kW
Milling chamber volume: 50-2000ml
Millbase quantity: 50 ml – 50 l
C Technology



DISPERMAT® RS 5
Power: 15 kW
Speed: 0 - 2000 rpm
Milling chamber volume: 5 l
Millbase quantity: 10 - 300 l



DISPERMAT® AS
In-Line Stator-Rotor System
Power: 1,1 kW
Speed: 0 - 6000 rpm
C + M Technology



DISPERMAT® R11
Stirrer
Power: 1,1 kW
Speed: 0 - 2000 rpm
CN Technology



DISPERMAT® CC
Test equipment for Coil-Coatings
64000 shearing/min



Double wall containers
Made of stainless steel for cooling or heating the product
Container volume:
30 ml up to 65 l

Surface coatings
for truck tarpaulins



Solvent based laquer
Solvent free
laquer



Ceramic
printing inks



Resistor paste
... and much more



TORUSMILL® SK

The TORUSMILL® SK is a basket mill where the milling basket, filled with beads, is lowered into a pre-dispersed millbase. It is designed as a milling system that will grind the millbase with extremely high efficiency.

The action of the special milling tool agitates the beads within the basket resulting in extremely fine grinding of the millbase. The separation of the beads/millbase is ensured by a sieve located in the bottom of the milling basket.

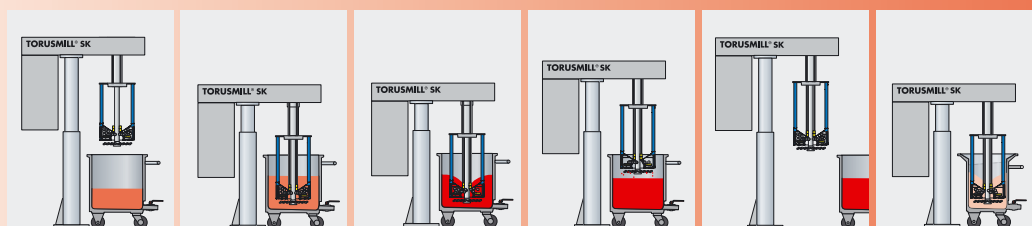
The dissolver disc and in particular the specially designed milling tool, which is built into the milling basket, ensure exceptional circulation of the millbase which leads to excellent dispersion results in a very short time period.

Even high viscous and thixotrope products can be dispersed in this way.



TORUSMILL® SK 100

TORUSMILL® SK 1000



■ The container with the millbase component is moved into position under the TORUSMILL® SK.

■ The dissolver disc is lowered down into the liquid.

■ The TORUSMILL® SK now starts the

actual dispersion process for extremely fine grinding.

■ With the dissolver disc and the milling system positioned above the product surface, product residue in the grinding basket is centrifuged out by briefly running the milling and dissolver discs.

■ The milling system is now completely raised and the container with the ground finished product is removed.

■ Cleaning the milling system is carried out in a separate conical container in order to minimise the required amount of cleaning fluid.



The unique, patented principle of operation

TORUSMILL® SK

Type TORUSMILL®	power kW	vessel capacity (l)	millbase volume (l)
SK 10	4	6 - 20	2,5 - 16
SK 100	15	75 - 370	35 - 300
SK 500	30/37	200 - 1000	90 - 800
SK 1000	55	500 - 1600	225 - 1300
SK 3000	110	2000 - 3000	900 - 2400



Technical modifications reserved

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