

# DISPERMAT® TORUSMILL®



Innovative stirring, dispersing and fine grinding systems for laboratory, pilot plant and production.

# TORUSMILL®

## Basket mills for laboratory and pilot plant

NEW TECHNOLOGY  
MADE IN GERMANY

### SAVE TIME – 2 in 1: TORUSMILL® TML FAST. EFFICIENT. INNOVATIVE.

Fastest colour and Dissolver/Basket Mill change with the modular TORUSMILL® TML basket mill. The modular basket mill TORUSMILL® TML converts a DISPERMAT® dissolver into an extremely efficient immersion mill for fine grinding from 0.25 to 105 liters.

Mixing, dispersing and fine grinding with **one** machine.





## TML basket mill

Basket mill accessory for DISPERMAT® dissolvers

**Optional:** Nano, ceramic and vacuum design, scraping system



DISPERMAT® CV3evo with the modular basket mill TORUSMILL® TML 05

A DISPERMAT® dissolver can easily be converted into a basket mill by simply removing the dissolver shaft and replacing it with the TML basket mill accessory.

Double-walled milling basket for efficient cooling (from TML 1)

High throughput rates even for high-viscosity products due to integrated and patented impeller. This provides excellent milling results within the shortest time and narrow particles distribution.



Easy scale-up from the TML laboratory basket mill to the TORUSMILL® production machines

DISPERMAT® CA with the modular basket mill TORUSMILL® TML 1

### TML basket mill: highly efficient fine milling system for DISPERMAT® dissolvers

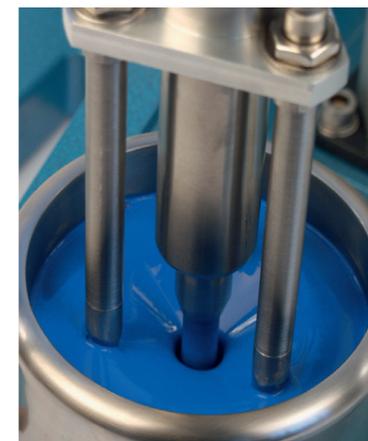
The modular TORUSMILL® TML basket mill accessory converts a DISPERMAT® dissolver into an extremely efficient batch bead milling system.

The dissolver shaft is easily replaced by the basket mill accessory without the need for any tool. Basket mills are highly efficient batch milling systems. An integral impeller pumping wheel agitates the beads and circulates the millbase through the basket.

The milling basket is double-walled for cooling and has a screen that retains the milling beads but allows the millbase to pass through. An efficient circulation of the millbase through the basket ensures excellent dispersion results in a short period of time.

#### Especially eco-friendly and efficient milling technology

- excellent dispersion results in a short time
- excellent product circulation due to dissolver disc and pump wheel
- highly repeatable dispersion results
- uniform average residence time
- narrow particle size distribution
- no dead areas due to effective mill base circulation
- no escape of milling beads during the dispersion
- dispersion in a closed system
- low energy requirement
- Simple cleaning and quick change of millbase
- Especially user-friendly milling system: very simple and safe handling



### The following TML basket mill designs are available:

#### TML basket mill

Standard design for using milling beads from 0,5 mm. Optional: vacuum, nano, scraper and ceramic option

#### TML-NANO basket mill

Nano basket mill for using small milling beads from 0,2 mm. Optional: vacuum, ceramic and scraper

#### TML-VACUUM basket mill

For dispersion under vacuum. Optional: nano and ceramic option

#### TML-CERAMIC basket mill

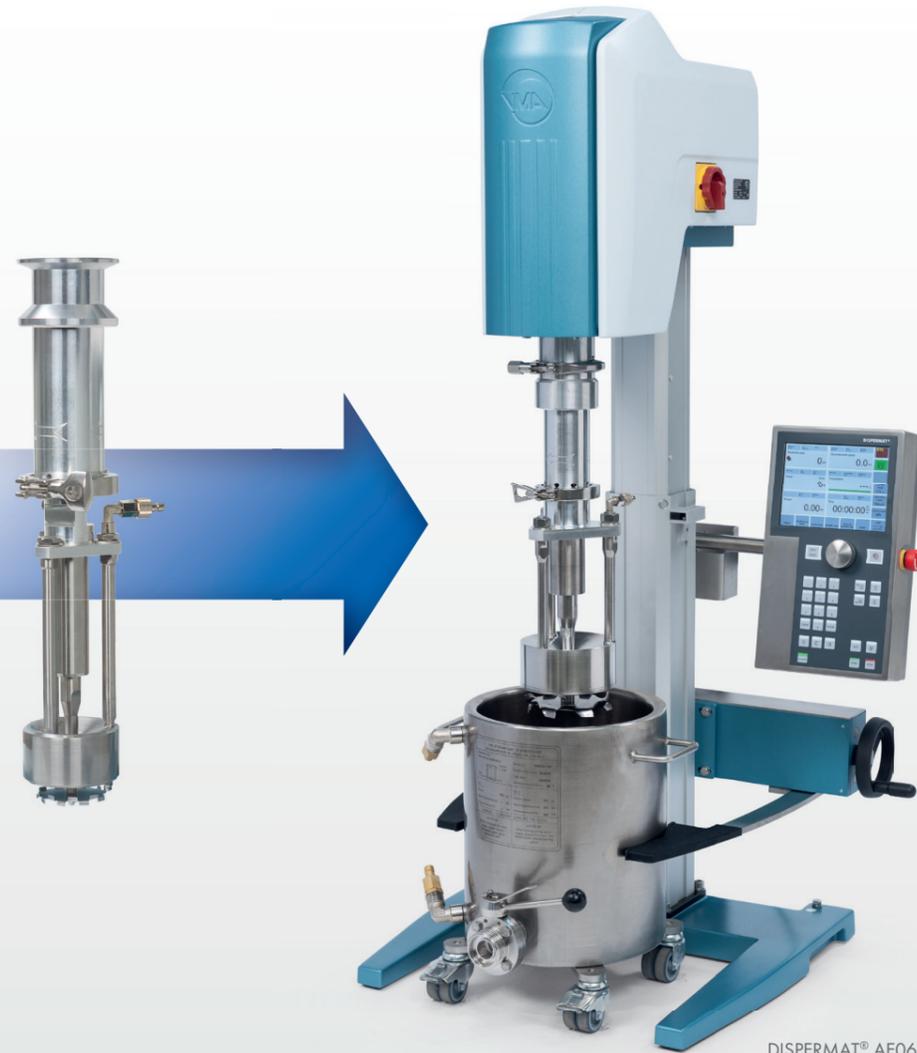
Milling chamber, milling disc, separation sieve and container can be supplied in SiSiC or ZrO<sub>2</sub>.

Optional: vacuum, scraper and nano option

#### TML-SCRAPER basket mill

with high-viscosity products the TML can be combined with the ASC modular scraper system.

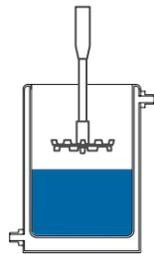
Refer to page 90 for further information.



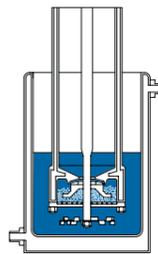
DISPERMAT® AE06 with the modular basket mill TORUSMILL® TML 5



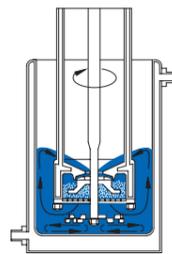
DISPERMAT® AE08 with the modular basket mill TORUSMILL® TML 10



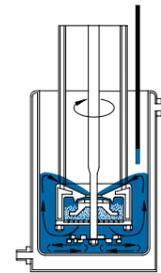
The product is first pre-dispersed with the dissolver disc. The dissolver shaft is then removed from the DISPERMAT® dissolver and replaced by the TORUSMILL® TML modular basket mill.



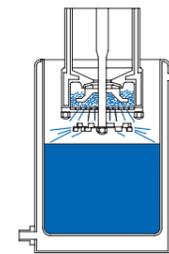
The double-walled milling basket filled with beads is lowered into the millbase and the fine grinding process begins. The TORUSMILL® TML basket mill achieves excellent grinding results in a very short time.



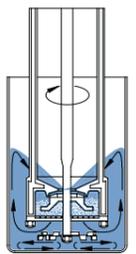
Intense circulation of the product is generated with the dissolver disc and integrated pump wheel.



For assessment of the milling process - during dispersion - a product sample can be taken at any time.



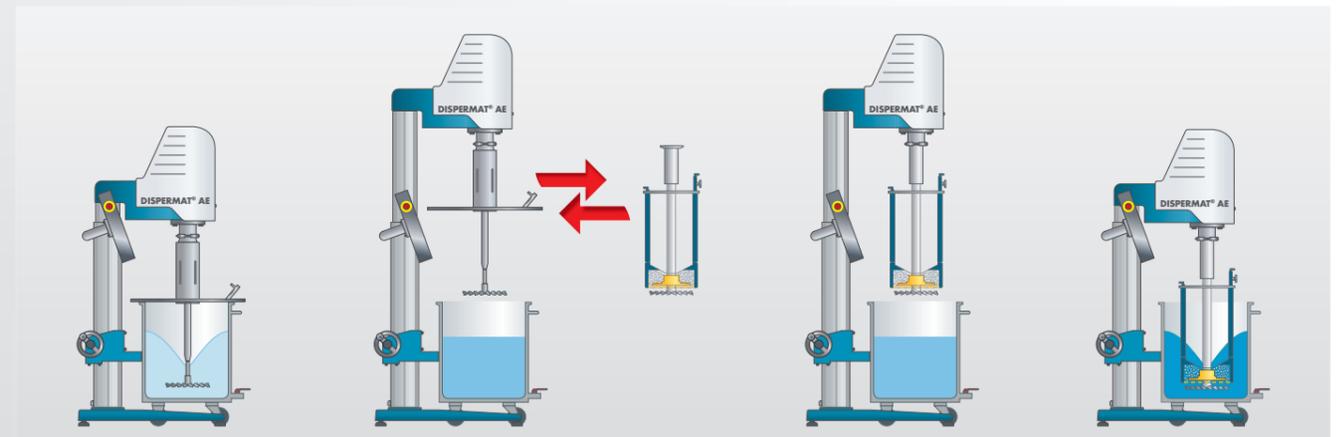
When the milling process is complete, the grinding basket is raised. Product residue in the milling basket is centrifuged out by briefly running the milling and the dissolver discs.



Cleaning the milling system is carried out with a suitable cleaning fluid in a separate container.



DISPERMAT® AE12 with the modular basket mill TORUSMILL® TML 50



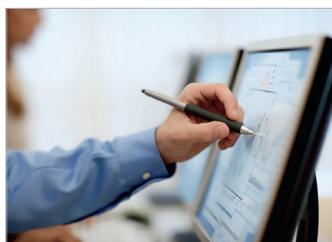
| TML basket mill      | Container capacity   | Product volume                          | Milling chamber volume | Recommended DISPERMAT® dissolvers  |
|----------------------|--|---|------------------------|--|
| TORUSMILL®<br>TML 05 | 0.5, 1.2 litres<br>16.9 oz, 1.3 qt                           | 0.25 - 1.4 litres<br>8.5 oz - 1.5 qt    | 43 ml<br>1.5 oz        | LC55 - LC110-12, LC220-12   CV3evo   CN10 - CN20   CA<br>AE03 - AE04   LC55-EX - LC75-EX   AE03-EX - AE04-EX |
| TORUSMILL®<br>TML 1  | 1, 2, 3, 4, 5 litres<br>1.1, 2.1 3.2 qt,<br>1.1, 1.3 gallons | 0.5 - 3.5 litres<br>16.9 oz - 3.7 qt    | 65 ml<br>2.2 oz        | LC110-12 - LC220-6   CN10 - CN40   CA40<br>AE03 - AE06   AE03-EX - AE06-EX                                   |
| TORUSMILL®<br>TML 5  | 5, 7, 10, 15 litres<br>1.3, 1.8, 2.6, 4 gallons              | 2.5 - 11 litres<br>2.6 qt - 2.9 gallons | 185 ml<br>6.3 oz       | LC220-12 - LC400   CN20 - CN40   AE04 - AE14<br>AE04-EX - AE13-EX  |
| TORUSMILL®<br>TML 10 | 10, 15, 20, 25, 35 litres<br>2.6, 4, 5.3, 9.2 gallons        | 5 - 25 litres<br>1.3 - 6.6 gallons      | 390 ml<br>13.2 oz      | CN80 - CN120   AE08 - AE14   AE08-EX - AE13-EX   |
| TORUSMILL®<br>TML 50 | 35, 50, 75, 150 litres<br>9.2, 13.2, 19.8, 39.6 gallons      | 18 - 105 litres<br>4.8 - 28 gallons     | 2100 ml<br>2.2 qt      | CN120   AE14   AE13-EX   |

# Quality and precision made in Germany

## DISPERMAT® TORUSMILL®

Our experience, your advantage: Please visit us in our highly equipped laboratory and pilot plant for a personal product demonstration with your own materials. Our skilled engineers will be pleased to show you the impressive capabilities of our patented DISPERMAT® and TORUSMILL® dispersing and fine grinding systems. We are looking forward to your visit.

Please contact us: **+49 2296 8030**



VMA-GETZMANN GMBH  
Eulerhammerstraße 13  
51580 Reichshof, Germany

Phone +49 2296 8030  
Fax +49 2296 80333  
E-Mail [info@vma-getzmann.de](mailto:info@vma-getzmann.de)

### DISPERMAT® TORUSMILL®

Innovative mixing, dispersing and fine grinding systems for laboratory, pilot plant and production. Made in Germany.

[www.vma-getzmann.com](http://www.vma-getzmann.com)



Subject to technical modifications