



**DISPERMAT<sup>®</sup> AND TORUSMILL<sup>®</sup>**  
PRODUCTION  
PRODUCT OVERVIEW **2012/13**

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



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# DISPERMAT® AND TORUSMILL® IN THE PRODUCTION



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Product volumes are based on medium viscosity. The actual volume may differ depending on the flow behaviour, the density and the viscosity of the product.



## **VMA-GETZMANN**

### Research, development, production and service in one factory

Since the foundation of the company the name VMA-Getzmann has been synonymous with the production of high-quality and innovative dispersion systems. The integration of progressive technology with functional design as well as high quality, are characteristic of our products.

Of course our dispersion systems are equipped with integrated safety devices according to EC machinery directive 2006/42/EG.



A large, modern industrial building with a dark grey facade and large windows with orange frames. The building is situated on a green lawn with trees and a pond in the foreground. The sky is blue with scattered white clouds.

# **Innovative** dispersion and fine grinding systems for laboratory, pilot plant and production **made in Germany**

## **Our experience – your advantage**

Please visit us in our excellently equipped laboratory and pilot plant for a personal product demonstration with your own products. Our skilled engineers will be pleased to show you the impressive range of services of our patented dispersing and grinding systems DISPERMAT® and TORUSMILL®.

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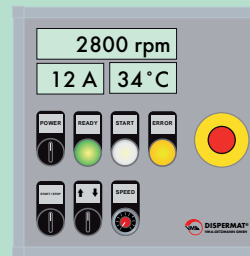
# DISPERMAT® SC

Multipurpose production dissolver for any container size

The production dissolver DISPERMAT® SC is a multipurpose production dissolver for product quantities from 35 - 1800 l. As an option the dissolver can be supplied in a vacuum or explosion proof design according to ATEX.

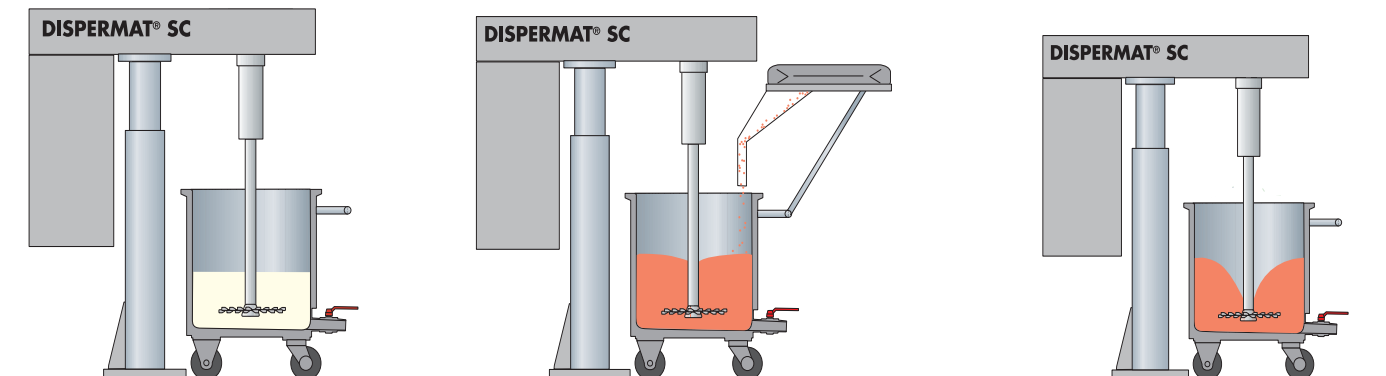
The production dissolver SC is designed for any container sizes up to 2.000 litres. The containers are fixed with a tension belt for safety. A central container clamping system is available upon request.

An integrated safety limit switch within the clamping device (according to the locking pressure) allows for operation of the dissolver, the dissolver can only be operated when the container is firmly clamped.



- Digital indication of speed, ampere and product temperature (as an option)
- Variable speed adjustment
- Height adjustment of the dispersion tool
- Pushbuttons and contactors for Power, Start, Stop and Emergency Stop

## The dispersion process with the Dissolver DISPERMAT® SC



### Options:

- Explosion proof according to ATEX
- Vacuum
- PLC control



DISPERMAT® type	Power kW	Container capacity litre
SC115	15	75 - 750
SC122	22	75 - 750
SC500	30 / 37	200 - 1250
SC1000	45 / 55	500 - 2000

DISPERMAT® SC122, ATEX

# DISPERMAT® RS

Fine grinding also for temperature sensitive products

## Bead mill DISPERMAT® RS for fine grinding for the pass and for circulation process

The DISPERMAT® RS is a horizontal operating bead mill. The compact, functional design ensures a very easy and safe handling and rapid assembly and disassembly of milling chamber and milling rotor. The bead mill RS can be operated in the pass as well as in the circulation process and guarantees for outstanding grinding results.

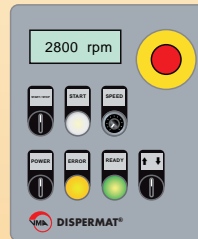
Since the heat generated during the milling process is dissipated through a highly efficient cooling circuit in the rotor, heat-sensitive products can also be very easily finely ground.

- Stirring shaft with double bearing
- Dynamic gap bead separation system
- Complete safety device
- Pressure control by manometer with electrical contact
- Slewable milling chamber cover
- Mechanical seal system with integrated cooled thermosiphon container for lubrication liquid and safety pressure valve

## For every challenge the suitable process control

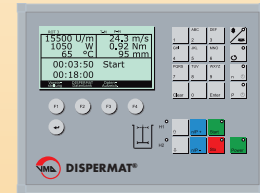
The DISPERMAT® RS can be equipped with different control systems. For example:

### M-EX technology



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

### C and C-EX technology



- Graphic display with indication of speed, torque, power, product temperature, timer and peripheral speed
- Data recording with graphical indication
- Switch-off function for parameters as temperature, speed, power, etc.
- 100 individual PRESET configurations
- Data interface to WINDISP-Pro Software

**WINDISP-Pro**





DISPERMAT® RS5 with C-Technology

DISPERMAT® RS10, ATEX,  
with the M-EX - Technology

### Options:

- Milling system (milling chamber and milling rotor) made of ceramic
- PLC control
- Explosion proof according to ATEX

DISPERMAT® type	Power kW	Product volume litre/hour	Milling chamber litre	Speed rpm
RS5	15	25 - 250	5	0 - 2600
RS10	37	50 - 450	10	0 - 2100
RS20	45	100 - 600	20	0 - 1900

# TORUSMILL® SK

High-efficient milling system in functional and compact design up to 55 kW

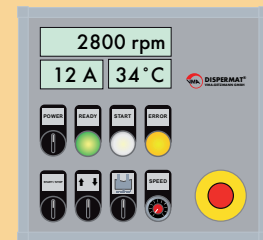
## Innovative basket mill for any container from 50 to 2000 litre

The TORUSMILL® SK are high-efficient basket mills with which excellent grinding results can be achieved in very short time. The TORUSMILL® SK is available in versions from 15 kW upto 55 kW drive power for processing low and medium viscous products.

The TORUSMILL® clamping device is suitable for container volumes upto 2000 l. The rapid circulation of the mill base through the grinding basket is achieved through an integrated, patented pump wheel. This provides a high number of passes, and a narrow particle size.

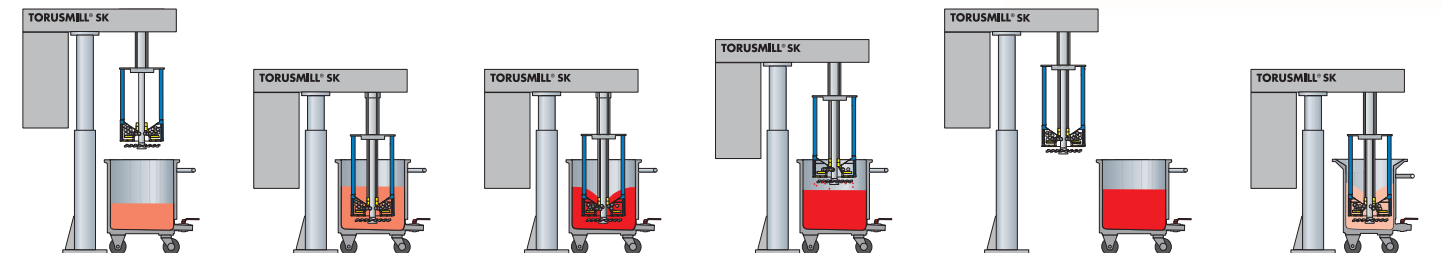
The dissolver disc mounted below the milling basket ensures a milling of the millbase within the milling container with minimal dead volumes.

- Double walled milling basket, suitable for cooling and heating systems. The heat generated during the milling process is dissipated effectively by the spirally guided cooling liquid
- Excellent circulation of the mill base by the patented pump wheel and dissolver disc
- Easy scale-up from the laboratory instrument TML to the production machine TORUSMILL® SK
- Standard usage of customers existing vessels, also with different volumes
- Variable speed adjustment by modern frequency converters



- Digital indication of speed, ampere and product temperature
- Variable speed adjustment
- Pushbuttons and contactors for Power, Start, Stop, separate height adjustment of the stand and basket, drain off milling basket and Emergency Stop

## The fine grinding process with the basket mill TORUSMILL® SK





TORUSMILL® SK500 - SK 1000

### Options:

- Milling system (milling chamber and milling rotor) made of ceramic
- PLC control
- Vacuum
- Explosion proof according to ATEX

TORUSMILL® type	Power kW	Standard product volume litre	Container capacity litre
SK115	15	35 - 400	75 - 500
SK122	22	35 - 400	75 - 500
SK500	30 / 37	100 - 1000	200 - 1250
SK1000	45 / 55	250 - 1600	500 - 2000



TORUSMILL® SK115 - SK122

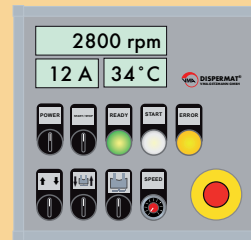
# TORUSMILL® TM

2 in 1: patented basket mill with integrated dissolver  
from 15 up to 55 kW

## Efficient combination of dissolver and basket mill Dispersing and fine grinding in one instrument

The TORUSMILL® TM is a patented dispersion system which allows for a particularly economic and environmental dispersion of high quality products. With the TORUSMILL® a predispersion with a dissolver disc and afterwards the extremely fine grinding with an integrated basket mill can be made in one process and one container.

This innovation intelligently combines proven high speed dispersion technology with a basket mill system. In operation, the TORUSMILL® is first used to predisperse the product with a dissolver disc. During predispersion the torus shaped basket is "parked" in the upper part of the machine. After predispersion the milling basket containing the milling beads and the milling tool is lowered into the mill base and the fine milling process can begin. The fast circulation of the millbase within the milling basket is generated by the dissolver disc and integrated pump wheel; because of this excellent dispersion results and a very narrow particle size distribution can be achieved very quickly. Due to the fact that no pumps, pipes, valves and additional containers are necessary, the cleaning is very easy and a quick change of the millbase is possible.

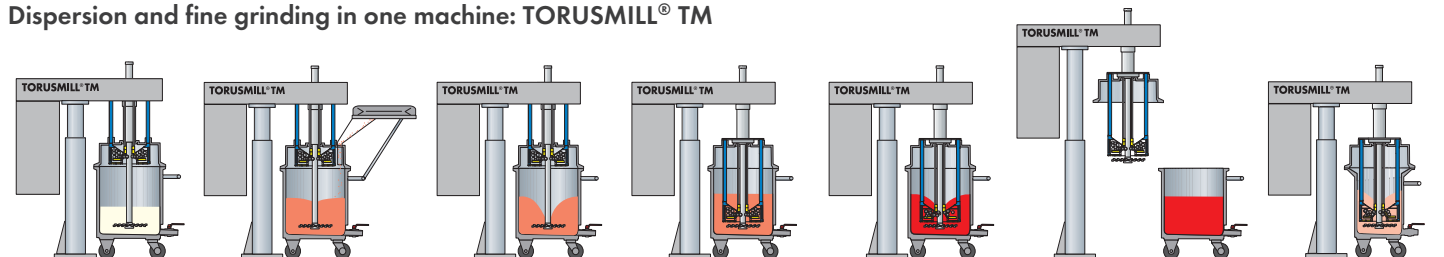


- Digital indication of speed, ampere and product temperature
- Variable speed adjustment
- Pushbuttons and contactors for Power, Start, separate height adjustment of the stand, dissolver disc and basket, drain off milling basket and Emergency Stop

### Options:

- Milling system (milling chamber and milling rotor) made of ceramic
- PLC control
- Vacuum
- Explosion proof according to ATEX

## Dispersion and fine grinding in one machine: TORUSMILL® TM





TORUSMILL® type	Power kW	Standard product volume litre	Container capacity litre
TM100	15 / 22	35 - 250	75 - 300
TM500	30 / 37	125 - 1000	250 - 1250
TM1000	45 / 55	250 - 1600	500 - 2000







**You are interested in our high quality and innovative dispersion and fine grinding systems for laboratory and pilot plant?**

Please contact us! We will be pleased to send you our new catalogue.

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