

NEW



DISPERMAT CV3evo

The new compact laboratory dissolver with electrical height adjustment and innovative process control for stirring, dispersing, homogenizing and fine grinding in the laboratory

www.vma-getzmann.com

The new, innovative all-rounder for the laboratory.
In ergonomic design with process control and electric height adjustment.

Versatile laboratory dissolver for stirring, dispersing, vacuum dispersing, homogenising and fine grinding.

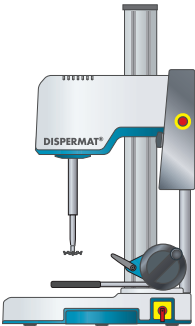
The DISPERMAT CV3evo is a completely redesigned laboratory dissolver and impresses with a particularly ergonomic and compact design. It is equipped with an electric height adjustment and can be used for versatile tasks in the laboratory.
The controller is situated in the new, high-quality stainless steel housing with an innovative glass panel and can be operated via the integrated, solvent-resistant membrane keyboard. The large colour screen shows all relevant process parameters.
Thus the new DISPERMAT CV3evo combines form and functionality in a new way.

The sturdy central clamping system offers further comfort. With the clamping arms the dispersion container is centrally located and secured safely under the dissolver shaft. The integrated safety package in accordance with the machine directive 2006/42/EC provides reliable protection during the dispersing process.

High grade design, certified quality and reliable technology characterise this all-rounder for the laboratory.

The DISPERMAT CV3evo dissolver is suitable for multiple tasks in the laboratory and pilot plant:

- Dispersing
- Fine grinding
- Stirring and mixing
- Homogenizing
- Dispersing under vacuum
- Dispersing high-viscosity substances
- Emulsifying
- Suspension
- Solving





PROCESS CONTROL TECHNOLOGY

Repeatable dispersion results



HEIGHT ADJUSTMENT ELECTRIC

Easy handling, functional design



ACCESSORIES APS, TM, CDS, SR

Flexible, Powerful, Innovative



MADE IN GERMANY SINCE 1972

Quality, precision and durable technology



DISPERWHEEL® SPEED ADJUSTMENT

with rotary pulse encoder



DISPERSAFE® TÜV CERTIFIED

Safety module (EN ISO 13849-1)



WORK SAFETY DIRECTIVE 2006/42/EC

Integrated safety equipment

DISPERMAT CV3evo	
Dimensions W x H x D	65 x 85 x 52 cm
Height adjustment	electric
Container capacity	0.125 – 10 litres
Container clamping range	Ø = 5 – 35 cm
Container height	3 – 38 cm
Weight	37 kg

Electric height adjustment of the drive motor



Flexible. Powerful. Innovative.
Modular dispersion and fine grinding systems for the dissolver DISPERMAT CV3evo

Height adjustable central container clamping device

Stainless steel working platform



Large colour screen

Control housing made of stainless steel with innovative glass panel and integrated solvent-resistant membrane keypad

Option: laboratory scale operated via the glass panel



DISPERMAT® type	Power kW	Speed rpm	Torque Nm	Product volume litre			+				
				low-viscosity	medium-viscosity	high-viscosity		APS speed 1 litre	TM basket 1 litre	CDS vacuum system litre	SR ultra-stir litre
CV3evo	0.75	0 – 20000	0.8	0.05 – 7	0.05 – 5	0.05 – 2.5		0.01 – 0.5	0.25 – 1.4	0.1 – 0.7	0.5 – 5
CVP3evo	0.75	0 – 12000	1.3	0.05 – 7	0.05 – 7	0.05 – 4		0.01 – 0.5	0.25 – 1.4	0.1 – 0.7	0.5 – 5

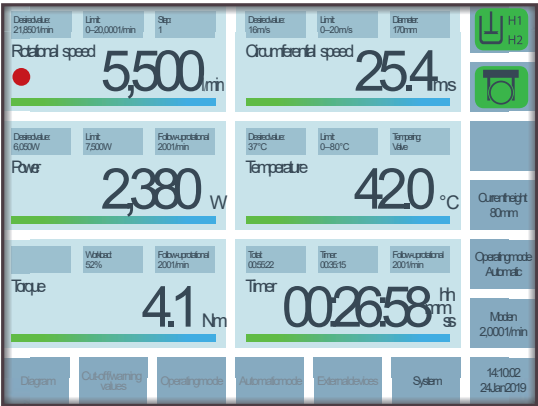


- GLASSPANEL
High-quality glass front with a large colour display and an integrated, solvent-resistant, backlit membrane keypad.
- COLOURDISPLAY
Extra large colour display with indication of speed, torque, power input, product temperature, timer, peripheral speed, height of dispersing tool, status bar with safety indicators, working heights, operating mode, etc.
- TIMER
Timer function with display of the pre-selected time as well as the elapsed time. Timer controlled switch over to second speed.
- HEIGHT MEASUREMENT
Adjustable working range for different container sizes. (HA, H1, H2)

- DISPERWHEEL
Speed adjustment infinitely variable speed adjustment with rotary pulse encoder.
- DISPERSAFE
TÜV-certified safety module enables the use of different container sizes without additional limit switches or mechanical devices.
- HEIGHT MEASUREMENT
Adjustable working range for different container sizes. (HA, H1, H2)

Additional options

- LEDLAMP
Switching of a high performance LED lamp to fully illuminate the dispersion process inside the container.
- 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 H1, H2, speed, time, switch off parameters, ramp function, etc.
- POWERCOMPENSATION
Net power calibration.
- USER ADMINISTRATION
Create and manage different users.
- SCALE
Option to connect an external precision scale.
- WINDISP®
USB data interface for WINDISP software for documentation, analysis, research, development and quality control.



Large color display

The innovative and easy-to-operate control system allows extensive process control, showing all relevant data in the display. The figure shows the most important indications of the graphic display.

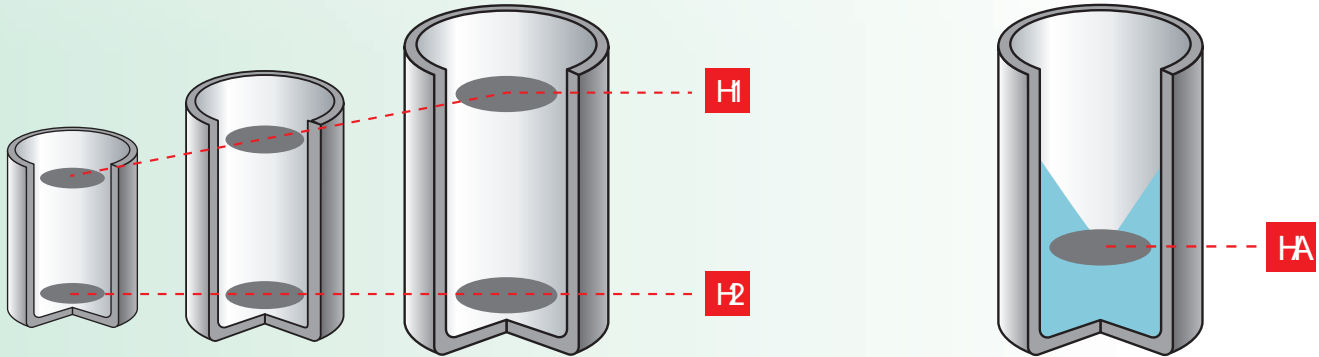
- Speed
- Power input
- Product temperature
- Timer, operating time
- Circumferential velocity of the dispersion tool
- Torque
- Current height of the dispersion tool

Different containers have different working ranges. Therefore, the CV technology makes an individual adjustment of them possible. Thus, the dissolver disc can be prevented from having a contact with the container bottom or operating outside the working range. The current distance of the dissolver disc H2 is permanently shown in the display. This unique function provides support for all dispersion tasks and facilitates your work.

H1: When the rotating dissolver disc switches to position H1 during acceleration, the lifting motor is deactivated.

H2: When the rotating dissolver disc switches to position H2 during deceleration, the lifting motor is deactivated. The difference between H1 and H2 is the working range.

HA: The position of the dissolver disc is permanently displayed digitally so that the distance between H2 and dissolver disc can be adjusted exactly and reproducibly.





APSbead mill

Bead mill accessory for DISPERMAT[®] dissolvers

Optional: Nano, ceramic, pressure and vacuum design



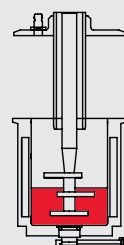
Dispersing and fine grinding with one device: the APSbead mill accessory

In combination with an APSmilling system, a DISPERMAT[®] laboratory dissolver changes into a closed batch bead mill. The system is easily adapted to the corresponding dissolver via the dissolver shaft or the adapter flange.

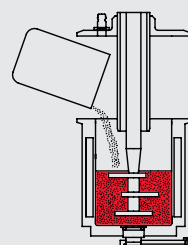
The DISPERMAT[®] can be used as a dissolver or as well as a bead mill.

Bead mill APS: environmentally friendly and efficient milling technology

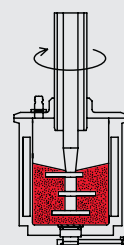
- easy to use milling systems
- dispersion in a closed system
- low energy consumption
- simple and secure handling
- fast change of milling beads
- very easy-to-clean



The APSmilling system can easily be fitted to the DISPERMAT[®] laboratory dissolver. It is filled with the appropriate quantity of millbase. The milling tool is lowered. The milling beads are introduced whilst the milling rotor slowly rotates.



The sliding cover is lowered to seal the milling container. The millbase is then dispersed. The cover can be easily raised for taking samples during the dispersion process.



On completion of the dispersion process, the sieve sealing plug is removed and the milling container is discharged with assistance of compressed air. The milling container is flushed with a suitable cleaning fluid.



APS30 - 1000 BEADMILL

Container capacity	Product volume
30 – 1000 ml	8 – 500 ml



SCANME



TORUSMILL □ TMLbasket mill

Basket mill accessory for DISPERMAT □ dissolvers

Optional: Nano, ceramic and vacuum design, scraping system



TMLbasket mill: highly efficient fine milling system for DISPERMAT □ dissolvers

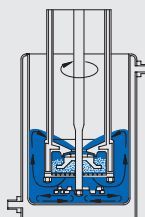
The modular TORUSMILL □ TMLbasket mill accessory converts a DISPERMAT □ dissolver into an extremely efficient batch bead milling system.

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.

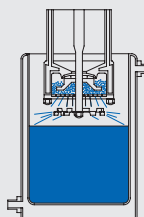
The milling basket is double-walled for cooling and has a screen that retains the milling beads but allows the millbase to pass through. An efficient circulation of the millbase through the basket ensures excellent dispersion results in a short period of time.

Especially eco-friendly and efficient milling technology

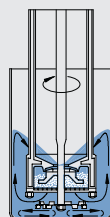
- excellent dispersion results in a short time
- excellent product circulation due to dissolver disc and pump wheel
- highly repeatable dispersion results
- uniform average residence time
- narrow particle size distribution
- no dead areas due to effective mill base circulation
- no escape of milling 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 double-walled milling basket filled with beads is lowered into the millbase. 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.



TORUSMILL □ TML05 BASKETMILL

Container capacity	Product volume
500 – 2000 ml	250 – 1200 ml

Illustration: DISPERMAT □
CV3evo with working
platform made of NBR.



SCAN ME



CDSvacuum dispersion system

Modular vacuum system for DISPERMAT[®] dissolvers

Option: single-walled or double-walled containerholder

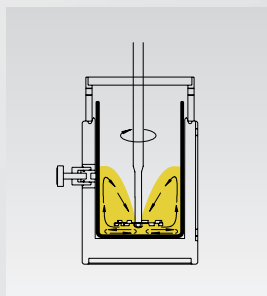
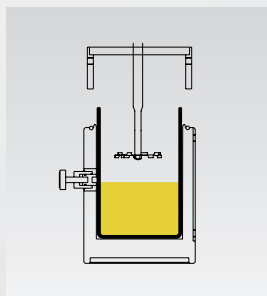
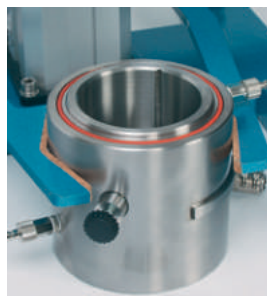


Dispersion under vacuum with the modular CDSdispersion system

The CDS dispersion system enables the dispersion process to be carried out in single-walled containers in a closed system under vacuum. These single-walled containers are placed into the container holder and secured in place. If the dispersion process needs to be cooled a double-walled container holder is available. After the liquid and powder components have been added, the glass cover can be lowered onto the container holder over the vacuum shaft guide tube. The actual dispersion process can now be run and the product is set into a turbulence free rolling motion.

If vacuum is required the vacuum pump can be switched on. The impeller height can easily be raised or lowered during the dispersion process even under vacuum. The dispersion process can be observed clearly through the large glass cover.

The CDS system can be equipped with a particularly bright LED light as well as an integrated infrared temperature measurement system.



CDS250 - 1000 VACUUMSYSTEM

Container capacity	Product volume
250 / 500 / 1000 ml	100 – 700 ml



SCAN ME



SRHomogenizer

Modular rotor–stator dispersion system
for DISPERMAT□dissolvers



Modular rotor–stator systems

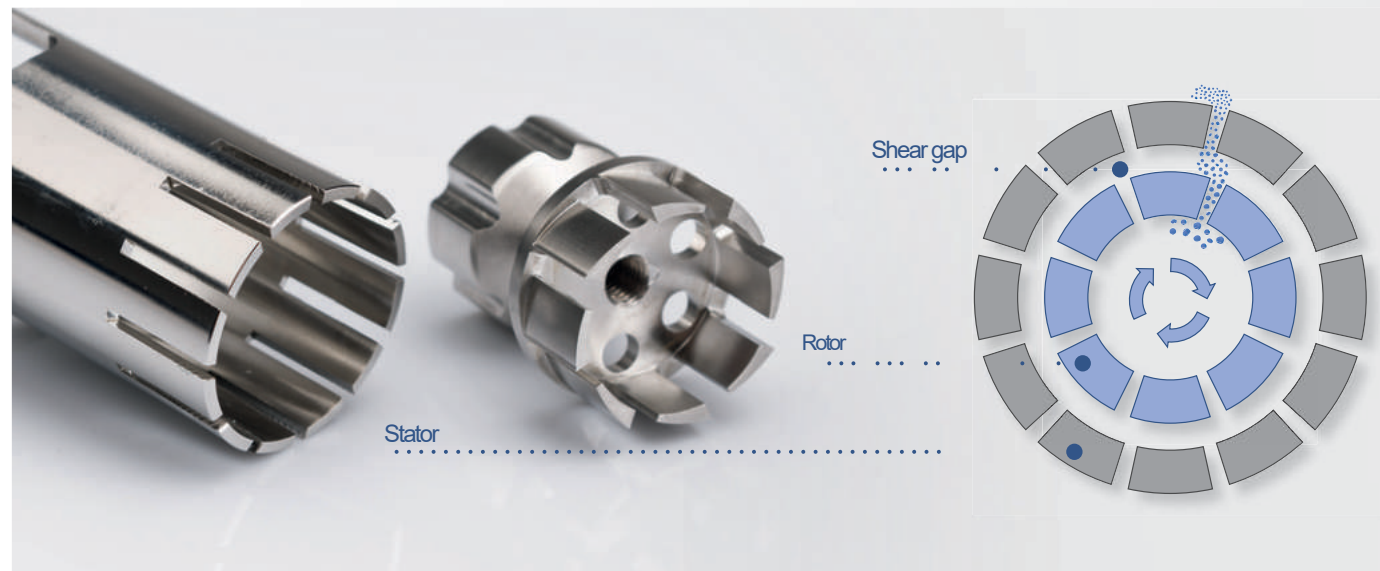
The rotor–stator systems SR03 and SR17 can be easily adapted with a quick coupling. The DISPERMAT□CV3evohas a powerful actuation with 0.75 kW. The high speed of 20,000 min⁻¹ generates the shear forces and impact effects required for the rapid homogenization of a medium.

This short processing time makes sure that the product is not stressed excessively.

The infinitely adjustable drive speed from 0 allows convenient work.

The bearing between the rotor and stator consists of especially high grade ceramic materials. The systems can be removed easily, cleaned simply and sterilized, if required.

In addition, the proven SR03 and SR04 bearing free rotor–stator systems are available.



SR03 / SR17 ROTOR-STATOR

Container capacity	Product volume
0.5 – 10 litres	0.25 – 5 litres



SCAN ME

Innovative stirring, dispersing and fine grinding technology.



Innovative dissolvers, basket mills, bead mills, rotor-stator homogenizers and stirrers for laboratory, pilot plant and production. Our experienced engineers will be pleased to provide you with personal advice.

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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.

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