

TORUSMILL® TM

2 in 1: patented basket mill with integrated dissolver in a new trend-setting design from 15 to 55 kW.

Options: ATEX zone 0/1/2, vacuum, PLC-control, ceramic version



Model	Moc	Objętość produktu	Zbiorniki
Basket mill TORUSMILL® TM100	15 / 22	35 – 200	75 – 500
Basket mill TORUSMILL® TM537	37	100 – 1000	200 – 1250
Basket mill TORUSMILL® TM1000	45 / 55	250 - 1600	500 – 2000

Trend of technology TORUSMILL® TM.

Highly efficient combination of dissolver and basket mill.

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.

The process control of the basket mill TORUSMILL® TM



- 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

The TORUSMILL® TM can also be fitted with the PLC-control. The graphic display allows for an indication of the operational parameters such as speed, power output, peripheral speed of the milling tool, torque and product temperature. The combination of a graphic display and the standardized PLC-control allows for an extension as well as for an adaptation of the control system to further process control applications at any time.

Basket mill TORUSMILL® SK optional with scraper system and cover for vacuum operation

- Without cover:
With solvent free products the dissolver TORUSMILL® TM can be operated with an open container.
- Cover with lamp, opening and scraper system as an option:

- However, due to safety reasons the TORUSMILL® TM can be equipped with a simple cover. During the milling process the cover lies tight on the container due to an intelligent feature; when raising the basket the cover is dragged with it. The diameter of the cover is selected in such a way that containers with different diameters can be covered safely. The cover can be fitted with container illumination, a locking opening for adding the product respectively for sucking off dust and fume and with a scraper system.
- Leakproof cover:
For vacuum operation or for solvent based products using a completely closed cover is essential.

TORUSMILL® TM : Dispersion and fine grinding in one machine

<p>The container with the liquid component is moved into position under the TORUSMILL® TM and the dissolver disc is lowered down into the liquid.</p> <p>For now the milling basket is "parked" underneath the container cover.</p>	<p>The powdered component is fed into the liquid phase at low speed, wetted and premixed.</p> <p>The premixed product is dispersed with the dissolver disc in the classical manner.</p>	<p>After dispersion the milling basket is lowered into the pre dispersed mill base within the closed container. The TORUSMILL® TM now starts the actual dispersion process for extremely fine grinding. The patented dispersion system reaches excellent dispersion results and a narrow particle size distribution in a very short time.</p>	<p>The fine grinding process is now successfully finished.</p> <p>Cleaning the milling system is carried out in a separate conical container in order to minimise the required amount of cleaning fluid.</p>

Trend of technology TORUSMILL® TM. Highly efficient combination of dissolver and basket mill.

- Predispersion and fine grinding in a closed system
- Particularly robust and functional design
- High circulation rates even with highly viscous products due to the patented pump wheel
- Excellent milling results in a very short time as well as a narrow particle size distribution
- Easy scale-up from the laboratory system TML to the production machine TM
- Customers can use their own containers
- Double walled milling basket with restraint-guided cooling system allows for temperature regulation
- Space-saving: 2 procedures – 1 machine
- System related easy to clean allowing for quick product changes
- Options: ATEX zone 0/1/2, vacuum, PLC-control, ceramic version