

Dispermill Discovery[®]

The solution for your R&D projects.

Dispermill[®] is proud to announce their latest and most innovative laboratory dissolver series so far, the Dispermill Discovery[®]. This innovative line of dissolvers has both fine grinding and vacuum options.

The revolutionary design of this laboratory dissolver is more compact than ever and provides enhanced ease of operation. The Dispermill Discovery[®] offers an electronically adjustable frame and the stainless steel design is chemical resistant and easy to clean.

With many improved features such as an optimized control system, compact solvent resistant tempered glass touch screen and a multi jog LED interface knob that provides you much faster control on the menu. The Dispermill Discovery[®] is the machine to upgrade your research and development processes.

FEATURES

- ✓ Optimized Control System
- ✓ Compact solvent resistant touch screen
- ✓ LED Interface knob
- ✓ Adjustable timer with automatic stop
- ✓ Readout of kW, tip speed and temperature
- ✓ Reduced noise level
- ✓ Programmable temperature alarm

WHO ARE WE?

In a fast-changing world, manufacturers demand reliable equipment to lift their research and development projects to a higher level. We understand these needs and supply high quality dispersing, mixing and milling dissolvers for the chemical industry. Dispermill commits to be revolutionary in mechanical innovation as well as to be unique in design.

QUALITY

Dispermill monitors the production of each machine constantly. Every machine that is produced meets a standard of excellence you'll be proud to work with. On all Dispermill machines, you get a one-year warranty.



Dispermill[®]

Laboratory and Pilot Plant Dissolvers, Mixers and Mills

IMMERSION MILL

Model	Batch range	Power	Bead charge	Screen	
Micromill	750 ml - 2 litre	0,75 kW	1.0 HP	50 ml	0.27 / 50 mm
Quartermill	4 litre - 8 litre	2,2 kW	3.0 HP	180 ml	0.27 / 50 mm

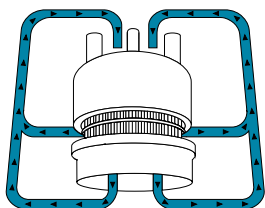
With its innovative technology, the Immersion mill combines mixing and milling achieving optimum particle size distribution, increasing production efficiency, and producing extraordinary quality. Immersion milling is a revolution processing technology that defies comparison. Its unique design and method of operation surpass all other systems, enabling the entire milling process to take place within a single milling chamber.

PATENTED TECHNOLOGY

Traditional milling is slow due to the low velocity of the feedstock passing through the shear zone. To increase velocity, the intensity of the shear zone must be decreased. Immersion milling works in an entirely different way. Products are passed through an aggressive shear zone at very high velocity: as fast as 50 passes per hour. This produces very narrow particle size distributions and decreases the bead to product ratio necessary for efficient milling.

MEDIA SELECTION

All kinds of milling media are applicable from 0,5 up to 2,0 mm in diameter but should be taken with care. The selection and matching of the media choice are still important. Our recommended beads are good for 10.000 milling hours.



Flow Pattern

This patented system uses circulation milling technology by rapidly pumping the slurry through the media field.



Dispermill Discovery 100[®]
with Immersion mill

VACUUM KIT

The Dispermill[®] Vacuum kit is developed to enable a perfect dispersion process in a closed system under vacuum. The system prevents the formation of air bubbles in your viscous product during mixing or dissolving whether you are producing sealants, glues, gels or colourants. The vacuum kit includes a lid that is made of high-quality aluminium, a vacuum meter and vacuum valve. The lid contains one porthole for the product inlet and two inspection windows to monitor the dispersion process.



Dispermill Discovery 100[®]
with Vacuum kit

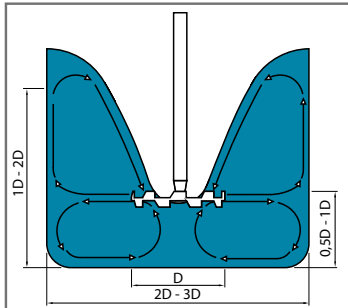
Dispermill[®] Laboratory & Pilot Plant Dissolvers

Model	Vessel size	Power	Adjustable speed	Dispersing disc incl.	Speed readout	Torque	Supply	Dimensions (D x W x H)	Weight	
Orange-line	0,25 - 2 litre	0,3 kW	0.4 HP	0 - 10.000 RPM	40 mm	Yes	0.5 Nm	230 V, 50/60 Hz	330 x 698 x 675	25 KG
Discovery 100	0,5 - 10 litre	0,75 kW	1.0 HP	0 - 12.000 RPM	70 mm	Yes	1.3 Nm	230 V, 50/60 Hz	485 x 501 x 991	55 KG
Discovery 200	1 - 25 litre	1,5 kW	2.0 HP	0 - 10.000 RPM	90 mm	Yes	2.7 Nm	400 V, 50/60 Hz	515 x 517 x 1276	80 KG
Discovery 300	1 - 25 litre	2,2 kW	3.0 HP	0 - 4.500 RPM	100 mm	Yes	7.6 Nm	400 V, 50/60 Hz	515 x 517 x 1276	80 KG
Pilot Dissolver	50 - 150 litre	2,20 / 4,0 / 5,5kW	3.0 - 7.0 HP	250 - 4.500 RPM	125 mm	Yes	7.6 Nm	400 V, 50/60 Hz	710 x 1520 x 2036	170 KG

CORRECT USE OF THE DISSOLVER

Best results will be achieved by following the guide dimensions as shown in the illustration. The peripheral speed (tip speed) of the disc should reach 18 - 22 m/sec. The shaft speed and tip speed is shown on the display. After premixing raw materials, increase the shaft speed till no product is left on the vessel wall and the top of the dissolver disc is visible in the "Doughnut-flow pattern".

Dispersing of solid particles into fluids. Dispersing is a process to move and separate an agglomerate particle into smaller particles. The object is to disperse the agglomerate particles into their primary particle size.



Vortex or Doughnut pattern

- Guide dimensions for good dispersion results.
- Peripheral velocity or tip speed must be 20 m/sec.

Controls of Dispermill®, detail of functions:

- Digital read out of speed
- Digital read out of time
- Countdown timer
- Automatic stop
- On/Off light buttons
- Adjustable speed starting at 0 RPM

GLOBALLY REPRESENTED

With a global network of distributors in more than 25 countries, Dispermill® can provide you locally:

- Personal advice on processing techniques that suits you best.
- Test and demonstration possibilities.
- Fast delivery.
- Excellent after-sale service for all our products.
- Worldwide warranty.

For carrying out of trials or demonstrations with your product we always have several test machines available. Please contact your local Dispermill® agent for advice, or give us a call.

APPLICATION FIELDS

Paints, floor coatings, ceramics, colourants, automotive coatings, inks, sealants, PVC liquids, aerospace coatings, industrial coatings, resin, putties, decorative coatings, textile, additives, wood coatings, plasters, stucco/wall and adhesives.



Dispermill Discovery 100®
with Rotor-Stator



Dispermill Orange-line®



Dispermill X-Proof FR®



Dispermill Pilot Dissolver®

Dispermill® X-Proof (ATEX) with frequency inverter

Model	Vessel size	Power		Adjustable speed	Dispersing disc incl.	Speed readout	Torque	Supply	Dimensions (D x W x H)	Weight
X-Proof FR075	0,25 - 8 litre	0,75 kW	1.0 HP	250 - 5.200 RPM	70 mm	Yes	1.3 Nm	400 V, 50/60 Hz	502 x 768 x 1119	65 KG
X-Proof FR150	0,25 - 25 litre	1,5 kW	2.0 HP	250 - 4.000 RPM	90 mm	Yes	2.7 Nm	400 V, 50/60 Hz	518 x 836 x 1509	75 KG
X-Proof FR220	0,25 - 25 litre	2,2 kW	3.0 HP	250 - 4.000 RPM	100 mm	Yes	7.6 Nm	400 V, 50/60 Hz	518 x 836 x 1509	80 KG
X-Proof FR400	0,25 - 25 litre	4,0 kW	5.0 HP	250 - 4.000 RPM	125 mm	Yes	7.6 Nm	400 V, 50/60 Hz	518 x 836 x 1509	85 KG
X-Proof HX-220/400	15 - 150 litre	2,2 kW 4,0 kW	3.0 HP 5.0 HP	0 - 4.000 RPM	125 mm	Yes	7.6 Nm	400 V, 50/60 Hz	746 x 1520 x 2036 799 x 1520 x 2075	200 KG



Dispermill Discovery 100*



Central Clamping System

Stainless Steel Dissolver Discs

Diameter

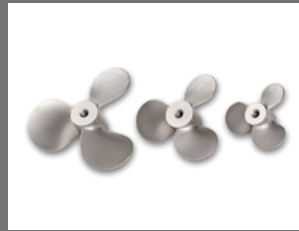
20 mm	30 mm
40 mm	50 mm
60 mm	70 mm
80 mm	90 mm
100 mm	125 mm



Stainless Steel Marine Propeller

Diameter

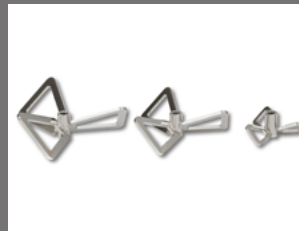
40 mm	60 mm
80 mm	100 mm
120 mm	140 mm



Stainless Steel Butterfly Propeller

Diameter

40 mm	60 mm
80 mm	100 mm
120 mm	



PP Grinding discs (Single or Double)

Diameter

30 mm	40 mm
60 mm	80 mm
100 mm	



Stainless Steel Single Walled Vessels

Volume	Diameter	Height
0,5 litre	80 mm	100 mm
1 litre	100 mm	148 mm
2 litre	130 mm	168 mm
3 litre	160 mm	183 mm
5 litre	180 mm	223 mm
8 litre	210 mm	273 mm
10 litre	237 mm	258 mm
12 litre	240 mm	290 mm
15 litre	270 mm	290 mm
20 litre	270 mm	390 mm



Stainless Steel Jacketed Vessels

(From 5 litre with ball valve outlet)

Volume	Diameter	Height
0,5 litre	85 mm	114 mm
1 litre	100 mm	138 mm
2 litre	125 mm	178 mm
3 litre	150 mm	174 mm
5 litre	175 mm	216 mm
8 litre	225 mm	281 mm
15 litre	250 mm	360 mm
20 litre	265 mm	376 mm
50 litre	400 mm	450 mm



* larger vessel sizes available

iTec
swiss

Ingtec Technik AG

Ingtec Technik AG
Römerstrasse 14
4314 Zeiningen

T: +41 (0)61 - 8168080
E: info@ingtec-techik.ch
www.ingtec.swiss