

NETZSCH

Proven Excellence.



MASTERMIX® Dissolver

Practical and well dispersed!

Business Unit
GRINDING & DISPERSING

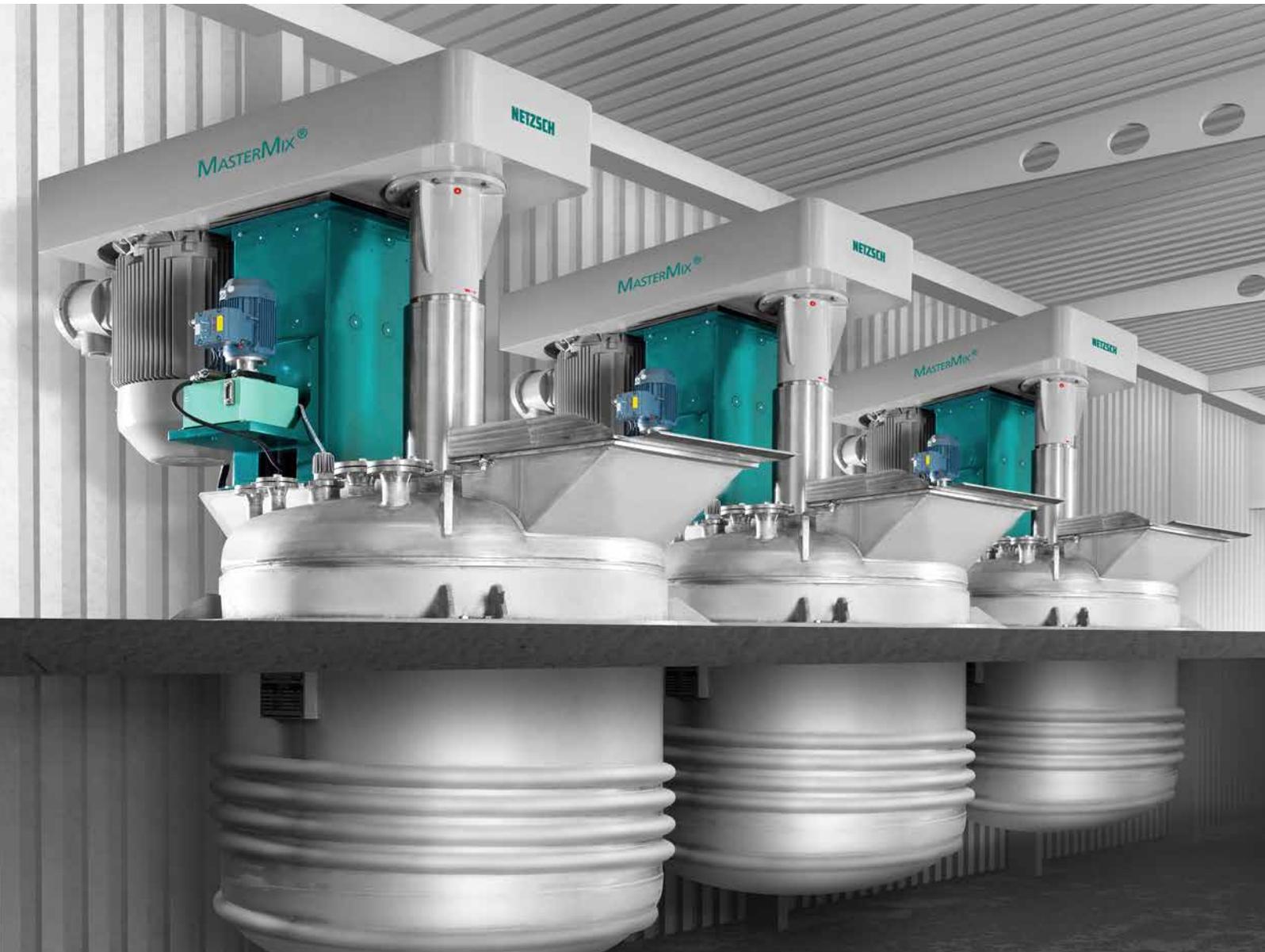
MASTERMIX[®] Dissolver

Proven Dispersing & Mixing Technology

Dissolvers are the most versatile and most frequently used machines in industry for the mixing of solids in liquids.

The NETZSCH *MASTERMIX*[®] High Speed Mixer is suitable for processing batches of up to 1,500 l in exchangeable tanks. For larger batches of up to about 10,000 l our mezzanine-mounted units with stationary tanks can be used.

The speed of the shaft with the dispersing tool can be adjusted over a wide range, depending on the product and application, mixing, stirring, dispersing. In addition, the height of the mixing tool in the mixing tank can be adjusted via the hydraulically operated lifting column, so that good product circulation and flow for efficient solids intake is always guaranteed. For high-viscosity products, the machine can optionally be equipped with wall and floor scrapers to improve the mixing and dispersing efficiency.



Features

- Wide range of speeds for all mixing and dispersing tasks
- Frequency-controlled, energy-efficient drives
- High efficiency
- Speed adjustment via rotary switch
- Digital speed display
- Automatic speed reduction system
- Hydraulic lifting/lowering device
- Stroke adjustment via rotary switch
- Clamps for holding the tank in place
- Spindle made of high-strength, chemical-resistant stainless steel
- Various application-specific dispersion disks



MASTERMix® 15 Dissolver

Advantages at a glance

- Compact yet robust design - minimal footprint
- Simple, logically-structured operating concept reduces costs and saves time
- We offer customized solutions
- A wide range of equipment options for the greatest process reliability
- Various, quickly and easily exchangeable dispersion tools to increase efficiency
- Optional vacuum model facilitates dispersion and deaeration in one step and prevents any exposure to fumes and dust
- Temperature measurement via sensor in a wand, in the agitator shaft or in the tank to increase production reliability
- Optimal positioning of the dispersion tools via hydraulic lifting/lowering device
- Safety equipment in accordance with the latest guidelines and for the protection of your employees
- Optimal operator protection through ...
 - 2-hand operation for raising/lowering in model with tank lid
 - Automatic shutdown if the toothed disc is raised above the level of the tank
 - Contact protection for rotating shaft
 - Bellows as dust protection for shaft



MASTERMix® 37 Dissolver in vacuum design with tank wall scraper, scale platform, PLC control system

The Machine Equipment

Summary of Dispersing and Mixing Tools

Type HS Fine-toothed Disk

standard dispersion disk for medium-viscosity products, e.g. from the paint and ink industry



NElast disk (yellow)

for abrasive mineral and ceramic products



High-performance Dispersion Disk

creates an additional axial flow for mixing and dispersing higher viscosity products



Type HF Coarse-toothed Disk

for gentle shear stress with increased turbulent circulation of temperature-sensitive products with a high solids content



Double-suction Disk

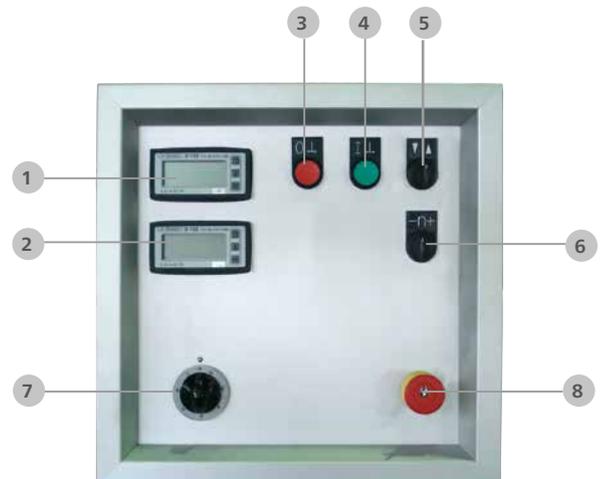
for high dispersion performance when solids are fed rapidly and wetting times are short - used for high-viscosity and hard-to-wet products



Of course, other mixing tools not listed here, such as propeller, butterfly, dissolving basket, etc. are available.

NETZSCH BASE Control Panel

- 1 Power display in KW for the main drive motor
- 2 Speed indicator for the dispersing shaft
- 3 Agitator OFF key
- 4 Agitator ON key
- 5 Agitator LIFT/LOWER rotary switch
- 6 Agitator FASTER/SLOWER rotary switch
- 7 Timer for preselection of the batch duration
- 8 EMERGENCY OFF



Options

- Customized tank cover design
- Vacuum design
- Scraper units, depending on size and application, one-armed, two-armed, as a cage with wall and floor scrapers
- Temperature probe via wand, shaft, or tank
- Digital timer
- Mezzanine design with swivel-mounted machine head, optionally motor-driven
- ATEX-compliant models up to and including Zone 0 (gas and dust) in the mixing tank, with tank design and special shaft feed-through as zone separation
- Tank clamping device, optionally with electric drive
- PLC controls with customer-specific functions and integration into a higher-level control system
- Use of various mixing tools possible
- Sight glass with light
- Alternative drive concepts upon request
- All stainless steel design for cosmetic and pharmaceutical applications



Flat tank cover



Separately driven wall scraper



Vacuum tank cover with scraper drive



Vacuum cover with feed opening as bag support

Applications

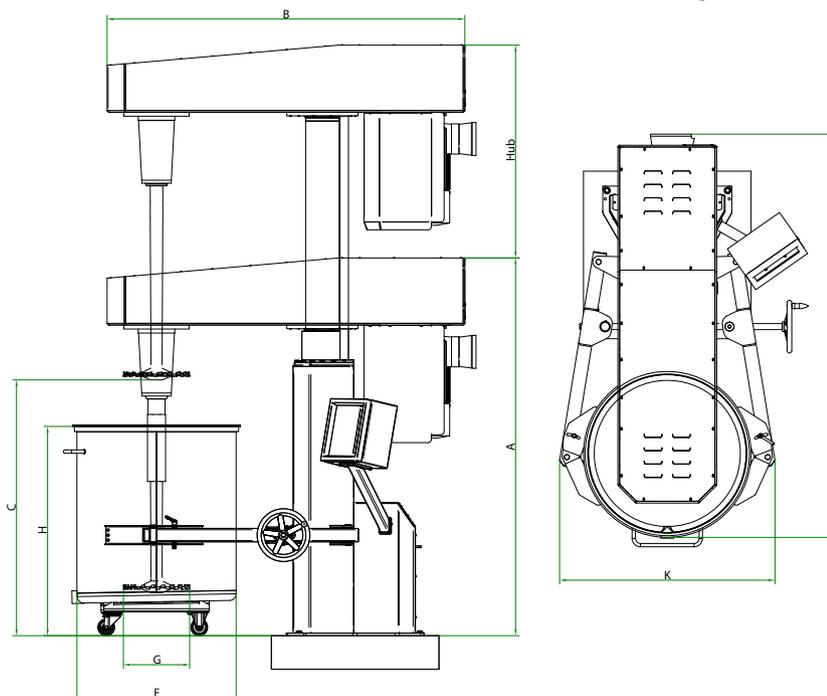
- Paints
 - Industrial paints
 - Architectural paints
 - Automotive paints
- Printing inks
 - Offset printing inks
 - Liquid printing inks
- Pigments and dyestuffs
- Sealants
- Adhesives
- Plastisols
- Binding agents
- Pharmaceuticals
- Cosmetics
- Minerals
- Confectionery and food industry

Technical data

Type	Drive [kW]	Weight [kg]	Speed [min ⁻¹]	Typical batch size [l]
MASTERMIX® 4	4	600	300 - 5,000	50
MASTERMIX® 5	5	600	300 - 5,000	100
MASTERMIX® 8	8	750	200 - 3,000	100
MASTERMIX® 11	11	750	200 - 3,000	200
MASTERMIX® 15	15	1,450	170 - 2,600	400
MASTERMIX® 18	18.5	1,450	130 - 2,000	600
MASTERMIX® 22	22	1,450	120 - 1,800	800
MASTERMIX® 30	30	2,100	100 - 1,500	1 000
MASTERMIX® 37	37	2,100	90 - 1,350	1 200
MASTERMIX® 45	45	2,100	90 - 1,350	1 300
MASTERMIX® 55	55	3,050	90 - 1,300	1 800
MASTERMIX® 75	75	3,050	70 - 1,000	2 500
MASTERMIX® 90	90	3,050	70 - 1,000	2 800
MASTERMIX® 110	110	3,500	60 - 850	5 000
MASTERMIX® 132	132	3,500	55 - 800	8 000
MASTERMIX® 160	160	5,000	50 - 700	10 000

Type	Dimensions [mm]								
	A	A _{max}	B	C	E	F _{min/max}	G	H _{max*}	K _{max}
MASTERMIX® 4	1,305	1,955	1,145	715	1,250	290 - 500	100 - 150	650	1,300
MASTERMIX® 5	1,305	1,955	1,145	715	1,250	290 - 500	125 - 200	650	1,300
MASTERMIX® 8	1,525	2,320	1,320	945	1,150	350 - 600	175 - 250	900	850
MASTERMIX® 11	1,524	2,319	1,342	945	1,550	400 - 550	200 - 250	900	850
MASTERMIX® 15	2,100	3,200	2,140	1,315	2,700	400 - 1,350	250 - 380	1,270	1,900
MASTERMIX® 18	2,100	3,200	2,140	1,315	2,700	400 - 1,350	250 - 380	1,270	1,900
MASTERMIX® 22	2,100	3,200	2,140	1,315	2,700	400 - 1,350	300 - 500	1,270	1,900
MASTERMIX® 30	2,270	3,540	2,140	1,520	2,700	400 - 1,350	325 - 500	1,400	1,900
MASTERMIX® 37	2,270	3,540	2,140	1,520	2,700	400 - 1,350	325 - 500	1,400	1,900
MASTERMIX® 45	2,270	3,540	2,140	1,520	2,700	400 - 1,350	325 - 500	1,400	1,900
MASTERMIX® 55	2,790	2,290	2,750	1,790	3,300	600 - 1,550	450 - 550	1,700	2,100
MASTERMIX® 75	2,790	4,290	2,750	1,790	3,300	600 - 1,550	550 - 625	1,700	2,100
MASTERMIX® 90	2,790	4,290	2,750	1,790	3,300	600 - 1,550	625 - 700	1,700	2,100
MASTERMIX® 110	3,180	4,980	3,200	2,050	4,000	1,200 - 2,400	600 - 850	1,950	2,500
MASTERMIX® 132	3,180	4,980	3,200	2,050	4,000	1,200 - 2,400	600 - 850	1,950	2,500
MASTERMIX® 160	3,180	4,980	3,200	2,050	4,000	1,200 - 2,400	600 - 850	1,950	2,500

*) max. height - moveable and flat cover without scraper



*Further machine models and special designs are available upon request.
Kindly contact us for more information.*

The owner-managed NETZSCH Group is a leading global technology company specializing in mechanical, plant and instrument engineering.

Under the management of Erich NETZSCH B.V. & Co. Holding KG, the company consists of the three business units Analyzing & Testing, Grinding & Dispersing and Pumps & Systems, which are geared towards specific industries and products. A worldwide sales and service network has guaranteed customer proximity and competent service since 1873.

Proven Excellence.

Business Unit Grinding & Dispersing – The World’s Leading Grinding Technology

NETZSCH-Feinmahltechnik | Germany
NETZSCH Trockenmahltechnik | Germany
NETZSCH Vakumix | Germany
NETZSCH Lohnmahltechnik | Germany
NETZSCH Feinmahltechnik Polska | Poland
NETZSCH Mastermix | Great Britain
NETZSCH Broyage | France

NETZSCH España | Spain
NETZSCH Machinery and Instruments | China
NETZSCH India Grinding & Dispersing | India
NETZSCH Tula | Russia
NETZSCH Makine Sanayi ve Ticaret | Turkey
NETZSCH Premier Technologies | USA
NETZSCH Equipamentos de Moagem | Brazil

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