



Business Field Pharma & Cosmetics

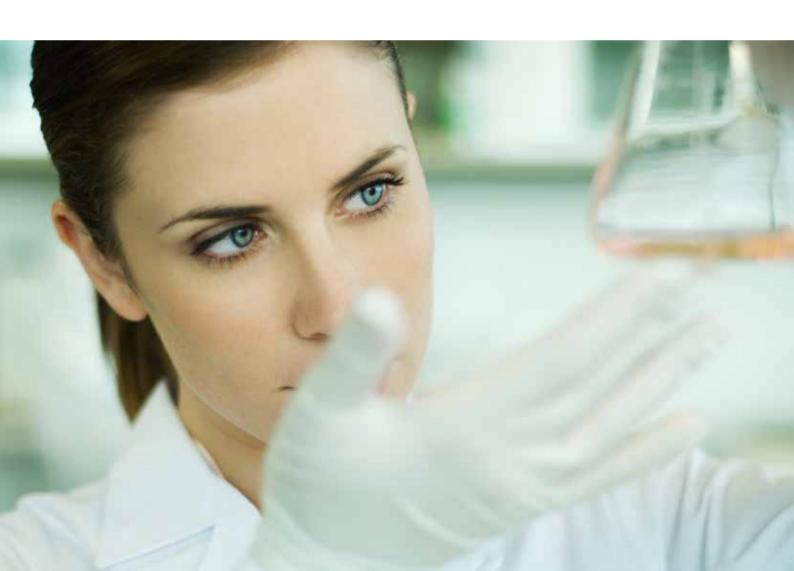
The comprehensive Machine Portfolio

Business Field Pharma & Cosmetics Your application — Our solutions

As a supplier of processing machines and systems for the cosmetics and pharmaceutical industries, NETZSCH has extensive experience in the areas of fine/ultrafine grinding, mixing, homogenization and dispersion.

Depending on the task, our comprehensive machine portfolio enables the customer to select from standardized machine models through to completely customized solutions, including the combination of different process technologies! Thus, NETZSCH provides the customer with the highest level of economic efficiency tailored to his specific needs, which means investment security for years to come.

To demonstrate the efficiency of our products, a variety of machine models is available for customer trials at our headquarters, as well as selected locations worldwide.



MIXING AND HOMOGENIZATION

KAPPAVITA® - Homogenizing Mixer

- Rotor/stator homogenizing mixer for liquid and semi-solid products
- Vacuum- and pressure-tight / vacuum-tight design
- Batch sizes from 2 l to 10 000 l, other sizes upon request

GAMMAVITA® - Premix Vessels

- Premix/phase mixers, melting vessel for low to medium viscosity products
- Pressure/vacuum-tight design
- Batch sizes from 10 l to 10 000 l, other sizes upon request

LambdaVITa® - Homogenizer

- Rotor/stator homogenizer
- Drive capacities from 5.5 kW to 210 kW
- Flow rates from 11 m³/h to 165 m³/h
- Stationary or mobile design

LambdaVita® Conti - Homogenizer

- System with built-in LAMBDAVITA® rotor/stator homogenizer for a continuous production process
- Dosing of any number of formulation components
- Production output of 0.3 m³/h to 15 m³/h

Омеда® Vita - Economic Dispersionizer

- High-pressure homogenizer up to 700 bar for the dispersion of fluid to highly-viscous suspensions and (nano)emulsions
- Batch sizes from 0.15 | to 10000 |











ULTRAFINE AND WET GRINDING



DeltaVita® - Agitator Bead Mill

- Agitator bead mill for the fine grinding of active ingredient suspensions into the nanometer range for pharmaceutical applications
- Batch sizes from 0.15 l to 4000 l



VACUUM DEAERATION

DEAERATOR - Vacuum Deaerator

- Deaeration of fluid to highly-viscous products
- Deaeration according to the VTR Principle (Vacuum-Thin film-Rotation procedure)
- Throughput from 20 kg/h to 4000 kg/h



DRY GRINDING

CONDUX® VITA - Impact Mill

- Impact mill for the grinding of solids
- Interchangeable grinding elements, e.g. pin discs, for versatility

- = Grinding finenesses from d_{50} 20 μ m to 500 μ m = $(d_{99}$ 30 μ m to 800 μ m) = Throughput from approx. 0.1 kg/h to approx. 660 kg/h



LABORATORY MACHINES



DFITAVITA® 15 - 300

- Laboratory agitator bead mill for the fine grinding of active ingredient suspensions into the nanometer range for pharmaceutical applications
- Batch sizes from 0.15 l to 1 l
- Grinding chamber sizes of 15 ml, 50 ml, 150 ml and 300 ml available



DELTAVITA® MINI

- Laboratory agitator bead mill for the fine grinding of active ingredient suspensions into the nanometer range for pharmaceutical and cosmetics applications
- Batch sizes from 0.15 l to 0.5 l
- Grinding chamber sizes of 15 ml, 50 ml and 150 ml available



OMEGA® LAB

- Laboratory high-pressure homogenizer to 700 bar for the dispersion of fluid to highly-viscous suspensions and (nano) emulsions
- Batch sizes from 0.15 l to 10 l



KAPPAVITA® HM 2 - HM 10

- Kappa Vita® model HM 2/5/10 laboratory/pilot plant mixer
- Batch sizes from 0.8 l to 10 l

NETZSCH PLANT ENGINEERING

NETZSCH is an ISO 9001:2000 certified manufacturer. We work in accordance with the cGMP (Current Good Manufacturing Practice) guidelines of the FDA and build our systems in accordance with the current GAMP (Good Automated Manufacturing Practice). The NETZSCH machines designed for pharmaceuticals and cosmetics are constructed of special materials and comply with the strict requirements of the pharma sector and cosmetics industry. Every machine is subjected to rigorous testing, checked for compliance with the specifications and fully documented. Your success is very important to us. We take the utmost care in every phase – from machine design through production to individual customer service. NETZSCH offers integrated technical solutions to improve the productivity of the entire production process.

System VITA®

At the heart of System VITA® plants are the KAPPAVITA®, DELTAVITA® or OMEGAVITA® dispersion machines, depending on the task at hand. They are supplemented by GAMMAVITA® premix vessels as pre-dispersion and/or charging tanks. Tailored to your application, this results in individual combinations of different technologies and machine types.



System Vita*, consisting of a KappaVita* production tank and two GammaVita* pre-phase tanks



System Vita®, comprising a DeltaVita® agitator bead mill and a GammaVita® premix vessel

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

NETZSCH-Feinmahltechnik GmbH Selb, Germany

NETZSCH Lohnmahltechnik GmbH Bobingen, Germany

NETZSCH Premier Technologies, LLC. Exton PA, USA

NETZSCH Indústria e Comércio de Equipamentos de Moagem Ltda. Pomerode, Brazil

NETZSCH Technologies India Private Ltd. Chennai, India NETZSCH Trockenmahltechnik GmbH Hanau, Germany

NETZSCH España, S.A.U. Terrassa/Barcelona, Spain

NETZSCH Mastermix Ltd. Lichfield, Great Britain

NETZSCH (Shanghai) Machinery and Instruments Co., Ltd. Shanghai, China

NETZSCH FRÈRES S.A.R.L. Arpajon, France NETZSCH Vakumix GmbH Weyhe-Dreye, Germany

AO NETZSCH Tula Tula, Russia

NETZSCH Korea Co., Ltd. Goyang, Korea

NETZSCH Makine Sanayi ve Ticaret Ltd. Sti. Izmir, Turkey

ECUTEC S.L. Barcelona, Spain

The NETZSCH Group is a mid-sized, family-owned German company engaging in the manufacture of machinery and instrumentation with worldwide production, sales, and service branches.

The three Business Units – Analyzing & Testing, Grinding & Dispersing and Pumps & Systems – provide tailored solutions for highest-level needs. Over 3 400 employees at 210 sales and production centers in 35 countries across the globe guarantee that expert service is never far from our customers.

NETZSCH Vakumix GmbH Zeppelinstraße 1 28844 Weyhe-Dreye Germany

Tel.: +49 421 8 49 56 0 Fax: +49 421 8 49 56 90 info.nvm@netzsch.com

