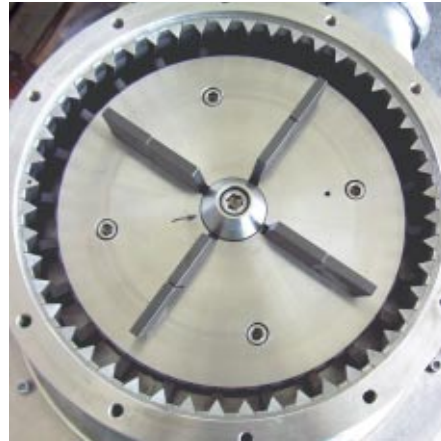


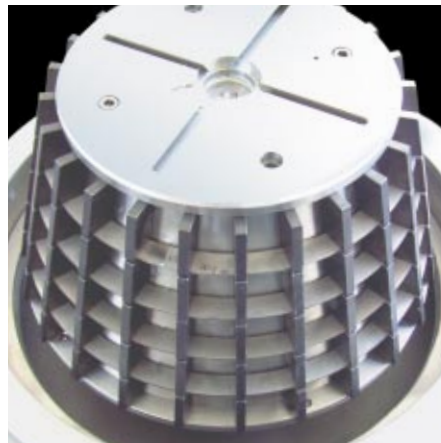
DEMINO® IMPACT JET MILL RANGE

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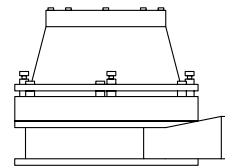


◀◀ DemiNo® 2500
GENERAL VIEW

◀ GRINDING TRACK
WITH IMPACT ELEMENTS
OPTIONALLY MADE OF
STAINLESS STEEL, CAST STEEL,
HARD METAL OR CERAMICS



◀ FAST AND FLEXIBLE IMPACT
ELEMENT CHANGE



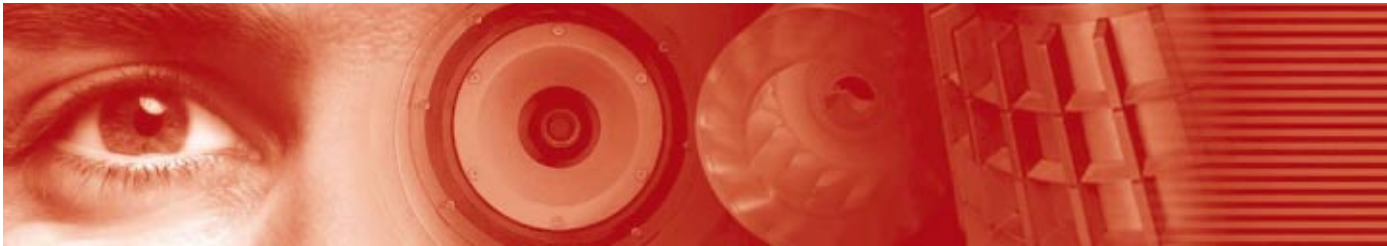
DemiNo® IS A MODERN INNOVATIVE IMPACT JET MILL USED FOR THE PRODUCTION OF VERY FINE POWDERS AND THE HOMOGENIZATION OF STICKY AND MIDDLE HARD MATERIALS, UP TO MOHS HARDNESS 5. THE IMPACT ELEMENTS OF THE VERTICAL SHAFT ROTOR AND STATOR ARE VERY EASILY ADAPTABLE TO PRODUCT OR PROCESS REQUIREMENTS. THE SYSTEM OUTPERFORMS IN THE HOMOGENIZATION OF RAW MATERIAL BLENDS, BY UTILISING A COMBINATION OF IMPACT, SHEAR AND FRICTIONAL FORCES. GRINDING CAPACITIES RANGE FROM 50 kg/h UP TO 14400 tons A YEAR.

- ▶ LOW SPECIFIC ENERGY CONSUMPTION
- ▶ LEFT AND RIGHT WAY MILLING
- ▶ CRYOGENIC MILLING
- ▶ FAST MODULAR CONSTRUCTION
- ▶ NO SCREW FIXATION

CONTACT:

NOLL PROCESSING TECHNOLOGY

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WORKING PRINCIPLE MILLING

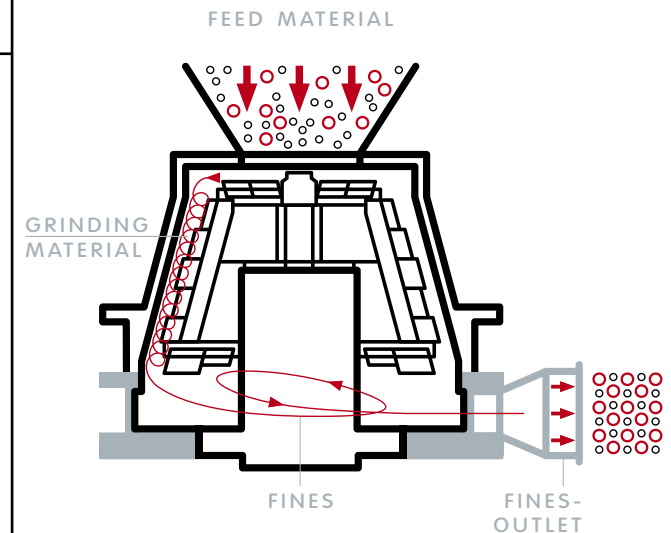
The starting material must be dosed into the DemiNo through a safety sieve or a hopper outlined with permanent magnets. Special elements on the top of the rotor insure that the material is equally delivered into the grinding track between the impact elements of the stator and rotor.

A turbulent current is created within the grinding track through which the particles are transported and intensely mixed. The particle size reduction and de-agglomeration is a result of the **shear, frictional and impact forces** that act on the particles between the hardened steel or ceramic impact elements.

The milled and homogenized material exits the machine through a centrally positioned opening underneath the rotor. Product requirements such as particle size can be optimized through the adjustment of the rotational speed, milling gap width, product throughput, air throughput, and impact elements used.

The novel construction of the impact elements allows easy element changes by hand. Other designs require special tools as a result of the screw fixation. The design freedom achieved allows the use of ceramic impact elements, which are easy and inexpensive to produce.

Its modular design and construction can be easily tailored to the individual, specific needs of the project. Apart from the flexible rotor build up, the rotor can be operated **both clockwise and counter-clockwise**, reducing and dividing wear equally on both sides impact elements, while increasing service life.



PRODUCT-SPECIFIC MACHINERY CONFIGURATION:

CONTACT:

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ROTOR

- ▶ Steel
- ▶ Stainless steel
- ▶ Steel+polyurethane
- ▶ Steel+ceramic



INTERNAL LINING

- ▶ Steel
- ▶ Stainless steel
- ▶ Steel+polyurethane
- ▶ Steel+ceramic



IMPACT ELEMENTS

- ▶ Stainless steel
- ▶ Cast steel
- ▶ Hardened metal
- ▶ Ceramic

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FIGURES - DATA - FACTS

SERIES DemiNo®	2125	2250	2500	2700	2900	21150	21400	21600
GRINDING CAPACITY (t/h)	up to 0.2	up to 1.0	up to 2.5	up to 4.0	up to 6.0	up to 9.0	up to 12	up to 15
200 days/3 shifts (MT/year)	960	4800	12000	19200	28800	43200	57600	72000
START. MATERIAL SIZE (mm)	<2	<5	<10	<10	<15	<15	<20	<20
MICRONISATION Fineness	<25-1000	<30-1000	<35-1500	<40-1500	<40-1500	<45-1500	<45-1500	<45-1500
DEAGGLOMERATION D ₉₇ µm	<4-100	<5-100	<6-150	<8-150	<8-150	<10-200	<10-200	<10-200
ROTOR SIZE (Ø mm)	125	250	500	700	900	1150	1400	1.600
REVOLUTIONS MAX. (1/min)	1900	10000	4600	3300	2.600	2000	1700	1500
ROTATIONAL SPEED (m/s)	123	125	120	120	120	120	120	120
MILLING GAP WIDTH (mm)	0.3-1.5	0.5-2.0	0.8-3.0	1.0-3.0	1.5-5.0	1.5-5.0	2.0-6.0	2.0-6.0
MAX. AIRFLOW (m³/h)	300	900	2400	3600	5400	7200	8600	10000
ROTOR DRIVE (KW)	5.5	18.5/22	37/45	75/90	110/132	160/200	250/315	355/400
RADIAL FAN DRIVE (KW)	1.0	3.0	7.5	11.0	15.0	18.5	22.0	30.0
DIMENSIONS (approx. h/w/d m)	0.7×0.4×0.8	1×1.6×1.1	1.4×0.9×1.7	1.5×1.1×2.0	1.6×1.3×2.3	1.7×1.5×2.7	1.8×1.7×3.1	2×2×3.5
SURFACE IN PRODUCT CONTACT	stainless steel, cast steel, hardened metal, ceramics							



Earths and minerals - Muscovite (H₂KAl₃(SiO₄)₃, D₅₀ = 20 µm

APPLICATION EXAMPLES:

Raw materials, pigments and dyes, minerals, cosmetics, polymers, waxes, toners, powder coatings, chemicals, animal feed, food stuff etc.

OPERATING RANGE

FUNCTION

MODE

CONTACT:

APPLICATION RANGE raw material processing, micronisation of middle hard material

TEMPERATURE RANGE -120°C up to +200°C

PRODUCT HARDNESS RANGE
 Micronisation Mohs hardness 1 – 5
 Deagglomeration Mohs hardness 1 – 7

MICRONISATION/GRINDING CONTINUOUS

CRYOGENIC MILLING CONTINUOUS

COATING CONTINUOUS

DEAGGLOMERATION CONTINUOUS

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