# N.MAC<sup>TM</sup> Double Shaft Grinder

## Inline and Channel Constructions

Capable of fragmenting large and solid particles, the N.Mac<sup>™</sup> Double Shaft Grinder is the ideal equipment to suit different applications such as wastewater treatment, biomass substrate handling, food and fruit scraps. Its various housing designs in channel and inline version allow installation into effluent channels or flange assembly to prevent pipe clogging and to protect downstream equipment, such as pumps.

#### **Design Details**

- Housing for inline or channel installations
- Double shaft technology for reduction of solid particles
- Low power installation at 2,2 kW (and 3 kW)
- Low rotation of the cutters at high torque (1:29 reduction)
- Hexagonal shaft in hardened steel
- Standard cutter arrangement 7/7 teeth
- Optional control unit to reverse direction of rotation in case of blockage

#### Main Applications

- Biogas plants
- Agriculture
- Slaughterhouses and recycling plants
- Canning factories
- Industrial kitchens
- Sugar factories

### Your benefits

- Shock absorption system
- Mechanical seals with quench
- Modular design of cutting units
- Optional clearing comb for fibrous materials
- Efficiency increasing side rails (flow and cutting)
- Optional extended shaft for channel version



N.Mac<sup>™</sup> 150I



N.Mac<sup>™</sup> 50C

N.Mac<sup>™</sup> 120C



N.Mac<sup>™</sup> 400C

## **Cutters**

Specific cutter geometries for each type of solids facilitate the particle reduction process. To reach the required particle size the different cutters with 3 to 11 teeth may be combined accordingly.

#### Characteristics

The cutters are thermally hardened to increase resistance and sharpness assuring reliable grinding of the toughest solids.





7 Teeth







5 Teeth

9 Teeth

11 Teeth



Flange DN150 PN 10



Inline Version	Flow Rate (m <sup>3</sup> /h)	Pressure loss (bar)	Maximum Incoming Pressure (bar)	Weight (kg)	Di A	mensions B	s (mm) C
N.Mac <sup>™</sup> 150I	150	0,36	6.0	380	54	0 410	1489
Channel Version	Flow Rate (m³/h)	Load lo (mm)		Weight (kg)	Dime A	ensions (I B	mm) C
N.Mac <sup>™</sup> 50C	50	80		200	190	310	1191
N.Mac <sup>™</sup> 120C	120	214		230	190	310	1365
N.Mac™ 400C	400	750		350	190	310	2061



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