

KALTENBACH

Applikations- und Verfahrenstechnik von Maschinenbau Kaltenbach GmbH



# Welcome at k-ma process

people for process





Applikations- und Verfahrenstechnik von Maschinenbau Kaltenbach GmbH



Wet Mills TYPE K-MT









## Mills portfolio

- > Toothed colloid mills
- > Corundum stone mills
- Mills with integrated feed pump
- Mustard lines
- > Tahina plants











## Toothed colloid mills

# Cutting / Grinding / Homogenising



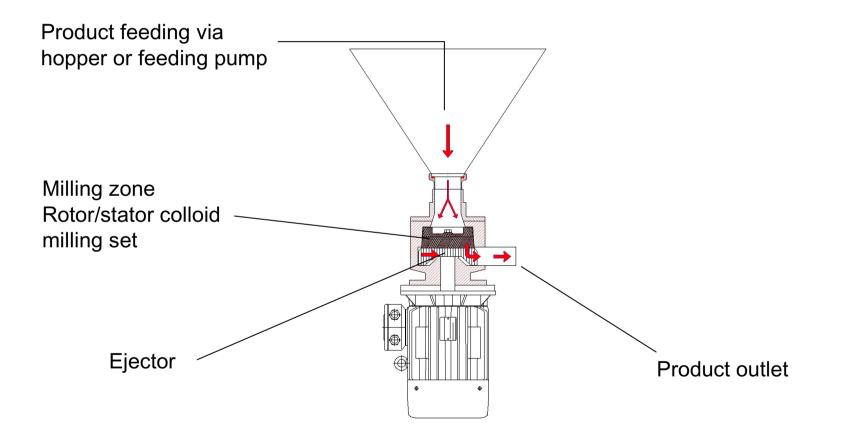








# Toothed colloid mills – Functional description







Toothed colloid mills – Available types

Mill type	Main drive kW	Capacity min. l/h	Capacity max. l/h	Product fineness in mµ*
K-MT 60	5.5	20	150	150
K-MT 120	11.0	500	2,000	150
K-MT 160	22.0	3,000	15,000	150

\* Depending on product





#### Toothed colloid mills - Features

- Vertical or horizontal design
- > Product feed via feeding hopper or feeding pump
- > Usable in closed pipe systems
- > High capacity on little space requirement
- > Different milling sets available, suited for your application
- > Continuously adjustable milling gap
- > 100% reproducibility
- > Easy integration into existing systems





## Toothed colloid mills – Applications in the food industry

- > Pre-grinding of mustard seed
- > Pre-grinding of chilli
- > Pre-grinding of nuts
- > Grinding of herb pastes
- > Pre-grinding of fruit pulp
- > Grinding of soya beans
- > Grinding of vegetables and fruits











Corundum stone mills

# Fine grinding

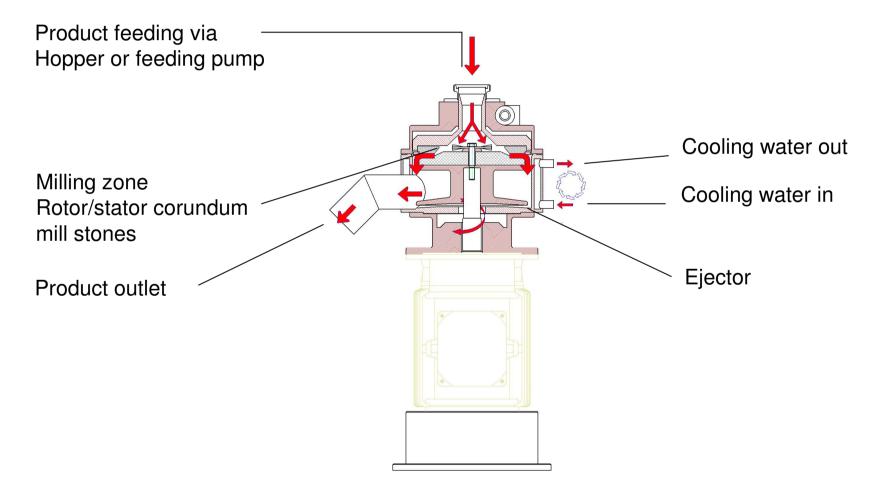








#### Corundum stone mills – Functional description







Corundum stone mills – Available types

Mill type	Main drive kW	Capacity min./max. approx. kg/h Pre-grinding mode	Capacity min./max. approx. kg/h Fine grinding mode	Product fineness in mµ*
К-МТ 3	15.0	100 - 900	120 - 300	30
K-MT 4	22.0	300 - 2,000	300 - 600	30
K-MT 5	37.0	800 - 10,000	600 - 1,800	30

\* depending on product and fineness of pre-ground product





#### **Corundum stone mills – Features**

- > Vertical and horizontal design
- > Product feed via feeding hopper or feeding pump
- > Different grit sizes for individual applications
- > Easy milling zone adjustment via manual hand wheel
- > Automatic milling zone adjustment on option
- > Best reproducibility
- > Easy integration into existing systems





## Corundum stone mills – Applications in the food industry

- > Mustard fine grinding
- > Nuts and almonds
- > Fruits and fruit pulp
- > Vegetables
- > Chilli
- > Soya beans
- Cacao beans
- > Herbal pastes
- > Fish pastes
- > Jam









Corundum stone mills with integrated feed pump







## Corundum stone mills with integrated feed pump – Available types

Mill type	Mill drive in KW	Feed pump drive in kW	Pump speed rpm.	Capacity min./max. approx. kg/h*
K-MT 3P	15.0	0.75	60 - 300	120 – 300
K-MT 4P	22.0	1.1	60 - 300	300 - 600
K-MT 5P	37.0	2.2	60 - 300	600 – 1,800

\* depending on product and fineness grade





### Corundum stone mills with integrated feed pump – Features

- > Product feed via an eccentric screw pump
- > High throughput on little space
- > Various mill stone grits for your individual application
- > Easy manual milling zone adjustment by hand wheel
- > Optional automatic milling zone adjustment
- > Best reproducibility





## Corundum stone mills with integrated feed pump – Applications in the food industry

- Mustard
- > Fruit pulp
- > Jam







Mustard lines – Short description

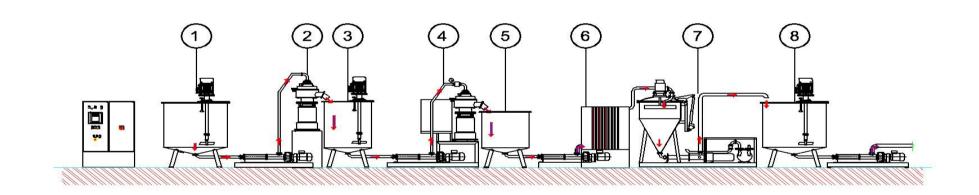
#### Main components of a mustard line

- 1. 2 pre-mix vessels for mustard mash, with propeller mixer and discharge pump
- 2. Colloid mill as a pre-grinding mill for mustard mash
- 3. Buffer container for pre-ground mustard mash, with propeller agitator
- 4. Corundum stone mill with integrated feed pump for fine grinding
- 5. Buffer vessel for fine ground mustard
- 6. Cooling unit: heat plate exchanger with feeding pumps
- 7. Vacuum de-aerator with discharge pump
- 8. Storage tank with discharge pump





Mustard line







Mustard lines – Available types

Line type	Pre-grinding mill	Fine grinding mill	Cooling unit	Vacuum de-aerator	Capacity min./max. approx. kg/h
K-SL 400	1 x K-MT 120	1 x K-MT 4P	K3	K-VE 2	150-400
K-SL 600	1 x K-MT 120	1 x K-MT 5P	K5	K-VE 3	450-900
K-SL 1200	1 x K-MT 160	2 x K-MT 5P	K10	K-VE 4	1,000-1,800





## Our references



Our machines and plants are used worldwide in international wellknown groups and firms.