

NETZSCH

Proven Excellence.



NETZSCH *MASTERCREAM*

Pre-Cutting-System – Flexibility and Quality for Raw Materials and Rework

NETZSCH *MASTERCREAM*

The flexible Pre-Cutting-System

The *MASTERCREAM* system is developed for the pre-grinding of raw materials such as almonds, walnuts, nuts, hazelnuts, as well as reprocessing of confectionery industry products such as chocolate, wafer, dragées, filled products and others. This equipment also finds application in other food industries such as meat, spices and animal feed. Whether integrated into NETZSCH lines as *SALSA*®, *RUMBA*®, *MAMBO*® or as a stand-alone machine – the NETZSCH *MASTERCREAM* is an optimal complement to your production.

Integration into Production Lines

The pre-ground paste or rework is directly transported to a process tank for further processing. For short distances between the *MASTERCREAM* and tank, no additional pump is needed.

The integrated *MASTERCREAM* unit allows self-cleaning of the machine in circulation with flushing liquid. This leads to easy product change and flexibility during production. The combination of the pre-cutting unit and the horizontal agitator bead mill for fine grinding allows the production of premium products like nut creams or rework pastes.

Reduced and closed machinery components, equipped with optimized grinding technology, lead to low processing temperatures and high throughput rates.

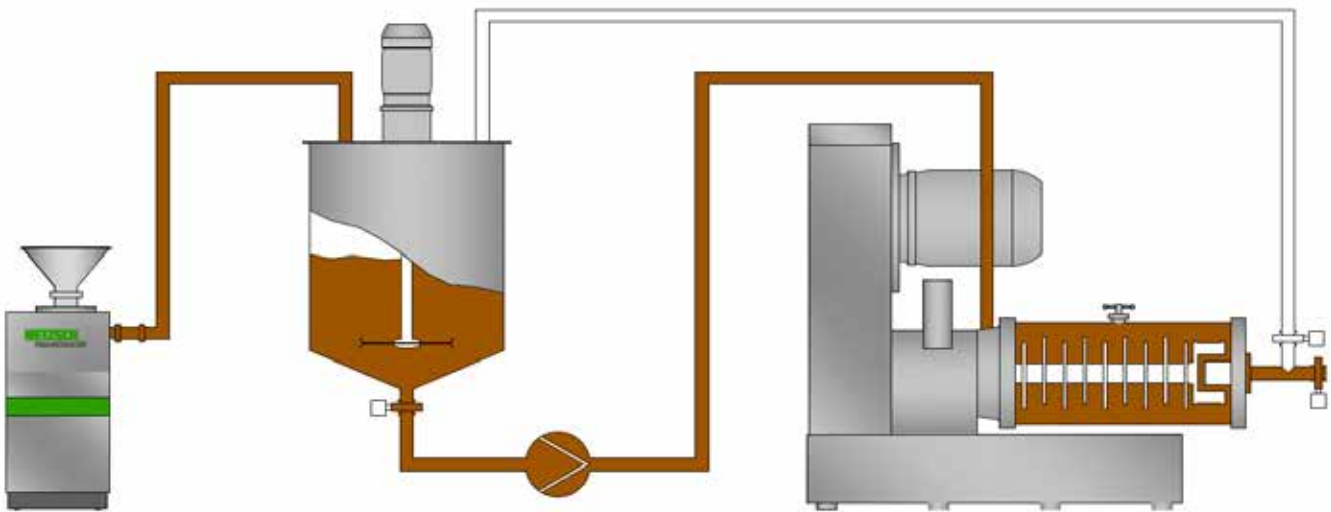
Advantages

- Flexible composition of the cutting tools
- Powerful grinding performance
- Variable speed
- Low temperature processing
- Short residence time of product
- Compact and cleanable design



Compact Plant *SALSA*® with *MASTERCREAM* 20

Example of Processing Line with *MASTERCREAM*



<i>MASTERCREAM</i>		MC10-H	MC10-V	MC20-H	MC20-V
Main drive power	(kW)	15	15	30	30
Speed range	(rpm)	1,000 - 4,800	1,000 - 4,800	500 - 2,500	500 - 2,500
Configuration	H/V	Horizontal	Vertical	Horizontal	Vertical
Length	(mm)	1,	1,200	1,400	1,400
Width	(mm)	600	600	600	600
Height	(mm)	1,050	1,350	1,150	1,500
Weight approx.	(kg)	600	600	700	700

Applications for the Confectionery Industry

Application Examples

Pre-grinding of:

- Hazelnuts
- Peanut
- Almonds
- Walnuts
- Cashewnuts
- Sesame
- Cocoa nibs

Rework of:

- Chocolate products
- Pralines
- Bars
- Filled wafer
- Wafer
- Cookies
- Dragées

Nut Grinding

The transition from whole or granulated nuts to a liquid paste ($< 100 \mu\text{m}$) is performed in continuous operation. The optimum capacity of the *MASTERCREAM* unit is dependent on fat content and allowed maximum temperature of the nuts to be ground. Due to an easy speed and tool setting, the grinding can be adjusted for a wide range of nut types.

Rework processing

Rework up to 30 mm in size, such as pralines, bars, filled wafers or sugar-coated candies with nuts can be processed into a flowable paste. Wafer pieces can also be ground to granules of $< 1 \text{ mm}$.





Pre-refining of almonds
30 mm to paste
< 30 - 250 μ m



Pre-refining of whole
hazelnuts 15 mm to paste
< 50 - 250 μ m



Rework of sugar-coated
candies or pralines

Product for rework
200 mm to rework paste
50 - 250 μ m



whole Coffee beans
to coffee powder

d_{90} < 450 μ m
Temperature < 50°C

Applications for the Food Industry

The *MASTERCREAM* offers the widest range of application options for the food industry.

Examples

- Roasted Soybeans
- Meat for Sausage
- Pet food
- Sauces
- Spice pastes
- Vegetable pastes
- Baby food
- Beverages

Integration into Production Lines

The *MASTERCREAM* can be used as a stand-alone machine or as an integrated module in production lines.

The pre-ground paste is directly transported to a process tank for further processing. For short distances between the *MASTERCREAM* and tank, no additional pump is needed.

The integrated *MASTERCREAM* unit allows self-cleaning of the machine in circulation with flushing liquid. This leads to easy product change and flexibility during production. The combination of the pre-cutting unit and the horizontal agitator bead mill for fine grinding allows the production of premium products.

Reduced and closed machinery components, equipped with optimized grinding technology, lead to low processing temperatures and high throughput rates.

Potential applications can be found in the production of sauces and vegetable pastes as well as in the beverage industry.





Pork meat to paste
Fineness of
approx 100 - 200 μm



whole Chillis to Chillisauce
Fineness of
approx 100 - 200 μm




Onions to Onionpaste
Fineness of
approx 100 - 200 μm



whole Garlic to paste
Fineness of
approx 100 - 200 μm





The NETZSCH Group is an owner-managed, international technology company with headquarters in Germany. The Business Units Analyzing & Testing, Grinding & Dispersing and Pumps & Systems represent customized solutions at the highest level. More than 3,800 employees in 36 countries and a worldwide sales and service network ensure customer proximity and competent service.

Our performance standards are high. We promise our customers Proven Excellence – exceptional performance in everything we do, proven time and again since 1873.

Proven Excellence. ■

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

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