

# 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.

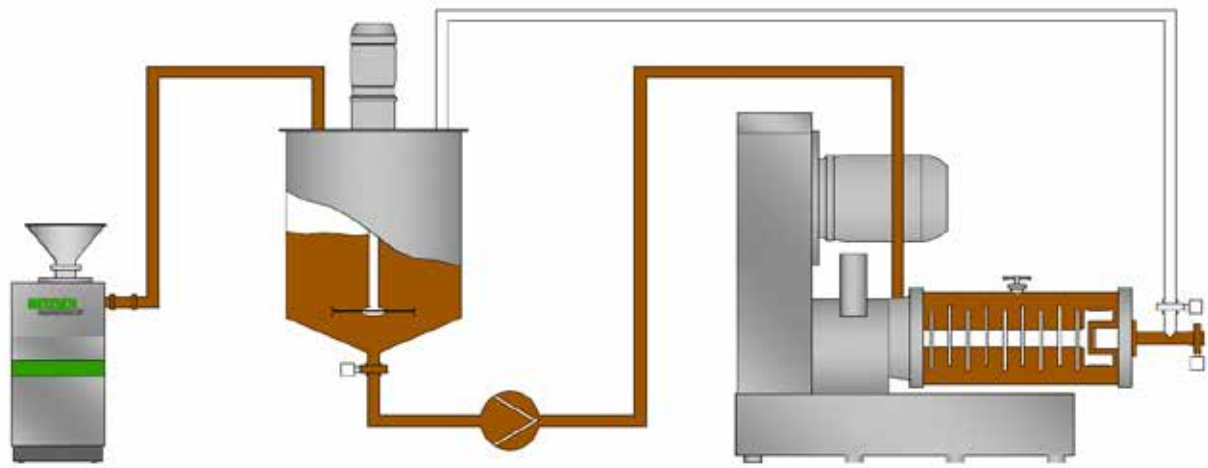
### Advantages

- 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)	1 200	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 mm.





Pre-refining of almonds  
30 mm to paste  
< 30 - 250  $\mu$ m



Pre-refining of whole  
hazelnuts 15 mm to paste  
< 50 - 250  $\mu$ m



Rework of sugar-coated  
candies or pralines

Product for rework  
200 mm to rework paste  
50 - 250  $\mu$ m



whole Coffee beans  
to coffee powder

$d_{90}$  < 450  $\mu$ 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  $\mu\text{m}$



whole Chillis to Chillisauce  
Fineness of  
approx 100 - 200  $\mu\text{m}$



Onions to Onionpaste  
Fineness of  
approx 100 - 200  $\mu\text{m}$



whole Garlic to paste  
Fineness of  
approx 100 - 200  $\mu\text{m}$



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

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The three Business Units – Analyzing & Testing, Grinding & Dispersing and Pumps & Systems – provide tailored solutions for highest-level needs. Over 3400 employees at 210 sales and production centers in 35 countries across the globe guarantee that expert service is never far from our customers.

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