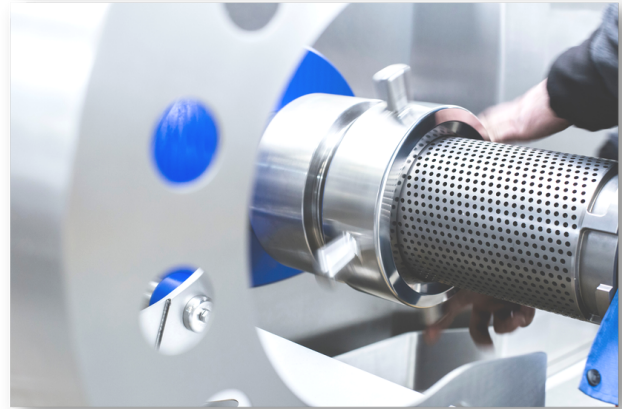


# Grinders and separators



## MODELS

### Automatic grinder

- WP-130

### Automatic angle grinders

- WW-130
- WW-160
- WW-200
- WW-280
- WW-300

### Separating heads Singriset

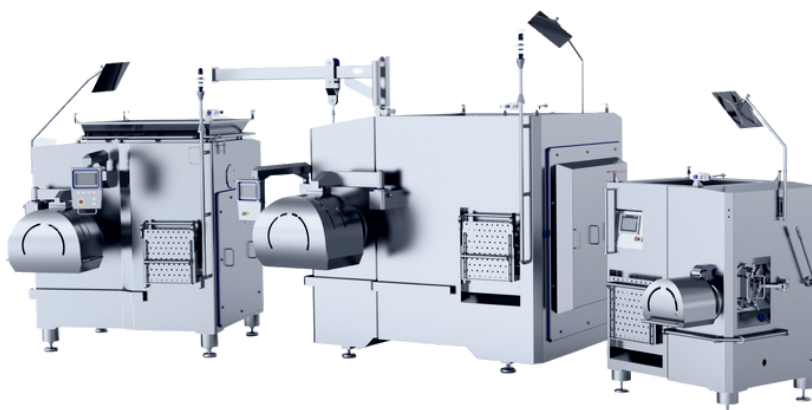
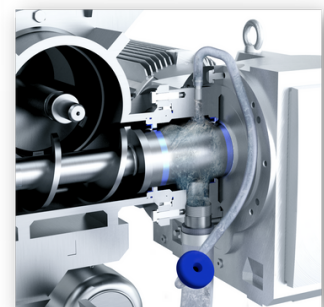
- S-1000
- S-2000
- S-5000
- S-7000

This is one of our most important product areas, intensively developed with many years of experience and innovation in the separation, crushing, grinding and cutting of fresh and frozen raw materials especially meat.

Ekomex-Pilśniak modern automatic grinders are universal, industrial machines for small, medium and large food processing plants for grinding, mincing, cutting into specified structure meat raw materials, fresh, chilled or frozen, depending on the machine model.

They also work well with other food raw materials in poultry, pet food and fish processing as well as during production of delicatessen, cheese and convenience food.

Appropriate construction of hopper, throat and screw housing as well as speed control ensure even flow of raw material and good compression in cutting tools, which provides proper structure of grinding.



**HYGIENE  
ERGONOMICS  
SAFETY**

Sealing systems with rinsing zones.  
Easy pull out screws.  
Covers and lids secured with limit switches

# Automatic grinder Model WP-130



PLC control with touch screen



Mixing arm BATMIX Series

## Technical data

Standard hopper capacity:	70 l
Cutting tools:	Ø 130 mm [E130]
Configuration of cutting tools:	2 ÷ 5 parts
Drive power:	motoreducer 7,5 kW
Standard operating panel:	analog with buttons
Screw ejector:	manual lever
Capacity:	up to 2000 kg/h*
Unloading height:	for 200 l bins
Screw housing:	CNC machined inner channels

\*depending on raw material, its temperature and cutting tools

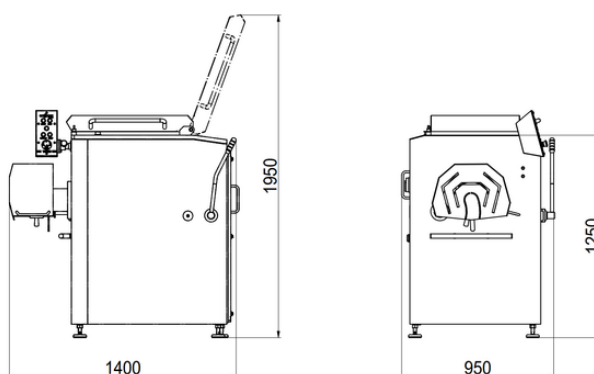
## Options

- Smooth adjustment of screw speed
- PLC control
- SINGRISET head
- Manual loading
- Mixing arm BATMIX Series



Manual loading for euro containers

## Dimensions



## Separating head SINGRISET S-1000

EKOMEX angle grinder with SINGRISET head becomes very effective machine for knife-less grinding, mincing vegetables, cheese and meat with simultaneous sinews removal, separation of gristles etc.

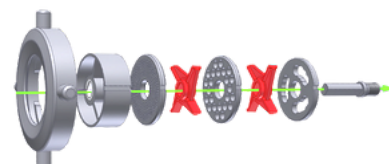


**SINGRISET**  
Separating innovation

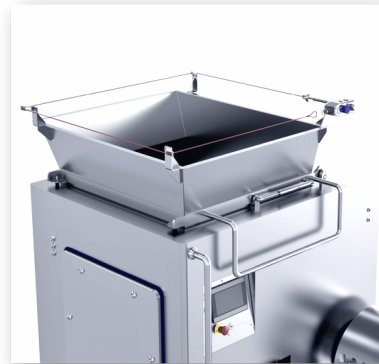
Read more about Singriset on page 12

## Standard cutting sets

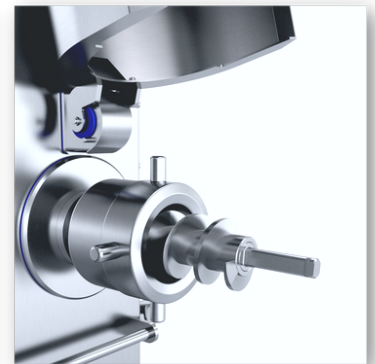
Cutting tools type E130 (pre-cutters, knives, hole plates, distance rings) in various configurations of 2, 3, 4 or 5 parts.



# Automatic angle grinder Model WW-130N



Hopper extension



Quick-locking nut  
Cover opening vertically

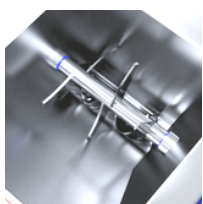
## Technical data

Standard hopper capacity:	350 l / 500l
Cutting tools:	Ø 130 mm [E130]
Configuration of cutting tools:	2 ÷ 5 parts
Feeding screw drive power:	2,6/3,1 kW
Main screw drive power:	1st gear 13 kW 2nd gear 17 kW
PLC control:	touch screen
Tool removal lever	manual
Capacity:	up to 3000 kg/h*
Unloading height:	for 200 l bins
Multi-stage screw sealing:	rinsing channel
Screw housing:	CNC machined inner channels

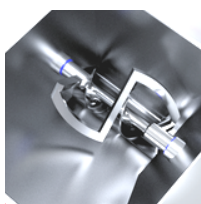
\*depending on raw material, its temperature and cutting tools

## Options

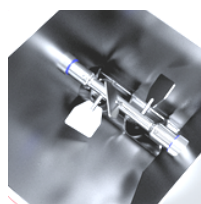
- Smooth adjustment of the screws speeds
- Block pre-cutter VERTICUT Series
- Z-arm or paddle mixing shaft VERTIMIX series
- Column loading device for 200 l bins or type ZM-600 for big-box containers
- Individual unloading height
- Singriset head



VERTICUT

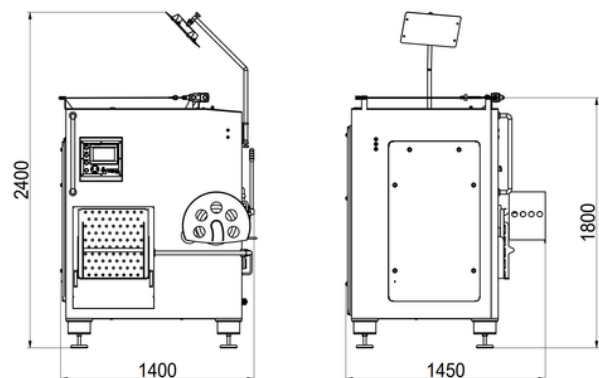


VERTIMIX Z



VERTIMIX paddle  
mixing shaft

## Dimensions



## Separating head SINGRISET S-2000

EKOMEX angle grinder with SINGRISET head becomes very effective machine for knife-less grinding, mincing vegetables, cheese and meat with simultaneous sinews removal, separation of gristles etc.

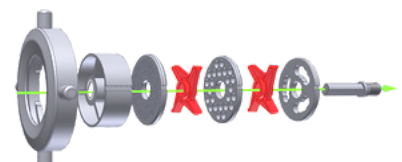


**SINGRISET**  
Separating innovation

Read more about Singriset on page 12

## Standard cutting sets

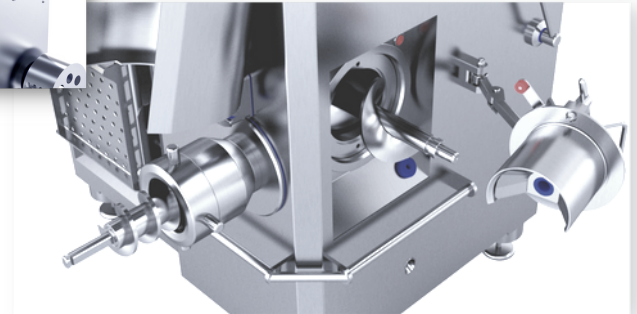
Cutting tools type E130 (pre-cutters, knives, hole plates, distance rings) in various configurations of 2, 3, 4 or 5 parts.



# Automatic angle grinder Model WW-160N



Hopper extension



Opened zone passing and compressing raw material

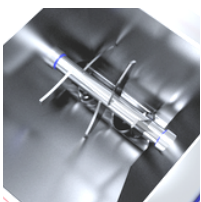
## Technical data

Standard hopper capacity:	350 / 500 l
Cutting tools:	Ø 160 mm [G160]
Configuration of cutting tools:	2 ÷ 5 parts
Feeding screw drive power:	2,2 kW
Main screw drive power	37 kW
PLC control:	touch screen
Tool removal lever	manual
Capacity:	up to 5000 kg/h*
Unloading height:	for 200 l bins
Multi-stage screw sealing:	rinsing channel
Screw housing:	CNC machined inner channels

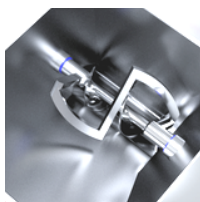
\*depending on raw material, its temperature and cutting tools

## Options

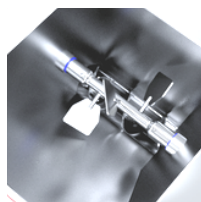
- Smooth adjustment of the speeds of screw
- Block pre-cutter VERTICUT Series
- Z-arm or paddle mixing shaft, VERTIMIX series
- Column loading ZM200 for 200 l bins or, or ZM-600 loader for BIGBOX containers
- Individually made discharge height
- Singriset head



VERTICUT

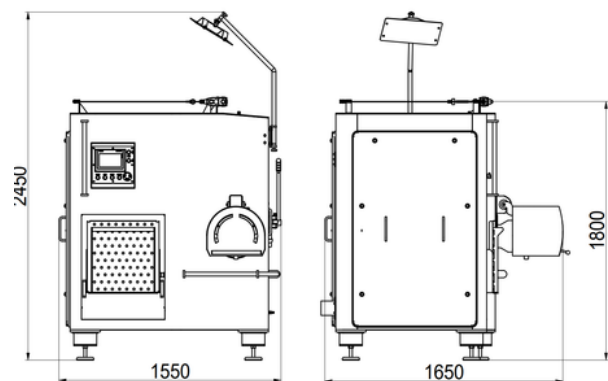


VERTIMIX Z



VERTIMIX paddle mixing shaft

## Dimensions



## Separating head SINGRISET S-5000

EKOMEX angle grinder with SINGRISET head, becomes very effective machine for knife-less grinding, mincing vegetables, cheese and meat with simultaneous sinews removal, separation of gristles etc.

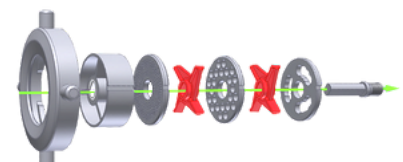


**SINGRISET**  
Separating innovation

Read more about Singriset on page 12

## Standard cutting sets

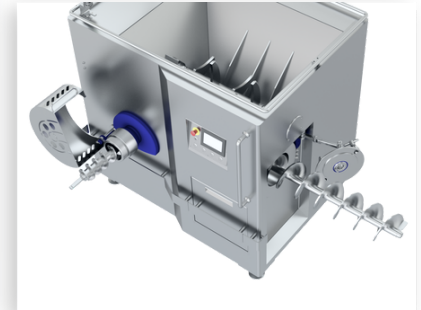
Cutting tools type G160 (pre-cutters, knives, hole plates, distance rings) in various configurations of 2, 3, 4 or 5 parts.



# Automatic angle grinder Model WW-160



Hopper extension



Opened zone of feeding screw

## Technical data

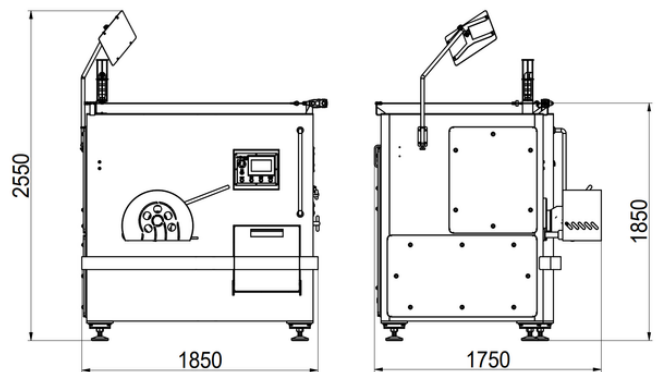
Standard hopper capacity:	500 / 800 l
Cutting tools:	Ø 160 mm [G160]
Configuration of cutting tools:	2 ÷ 5 parts
Feeding screw drive power:	1,5/1,9 kW
Main screw drive power:	26/37 kW
PLC control:	touch screen
Tool removal lever	hydraulic
Capacity:	up to 6000 kg/h*
Unloading height:	for 200 l bins
Multi-stage screw sealing:	rinsing channel
Screw housing:	CNC machined inner channels

\*depending on raw material, its temperature and cutting tools

## Options

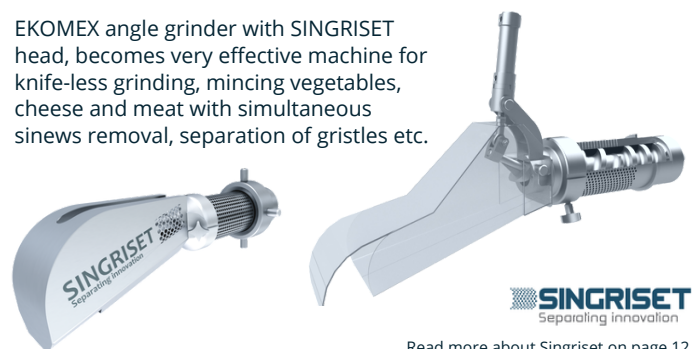
- Smooth adjustment of the screws speeds
- Block pre-cutter VERTICUT Series
- Z-arm or paddle mixing shaft, VERTIMIX series
- Column loading ZM200 for 200 l bins or type ZM-600 for BIGBOX containers
- Individual unloading height
- Control panel on the arm
- Singriset head

## Dimensions



## Separating head SINGRISET S-5000

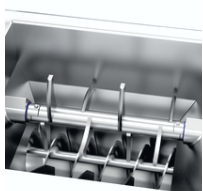
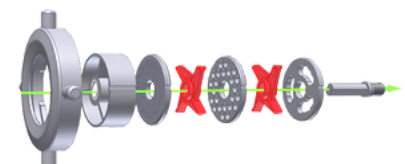
EKOMEX angle grinder with SINGRISET head, becomes very effective machine for knife-less grinding, mincing vegetables, cheese and meat with simultaneous sinews removal, separation of gristles etc.



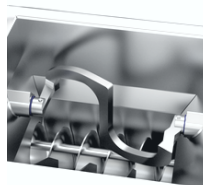
Read more about Singriset on page 12

## Standard cutting sets

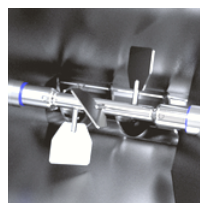
Cutting tools type G160 (pre-cutters, knives, hole plates, distance rings) in various configurations of 2, 3, 4 or 5 parts.



VERTICUT



VERTIMIX Z



VERTIMIX paddle mixing shaft

# Automatic angle grinder Model WW-200



- Control panel on the swinging arm
- Hopper extension
- Increased discharge height
- Opened feeding screw zone

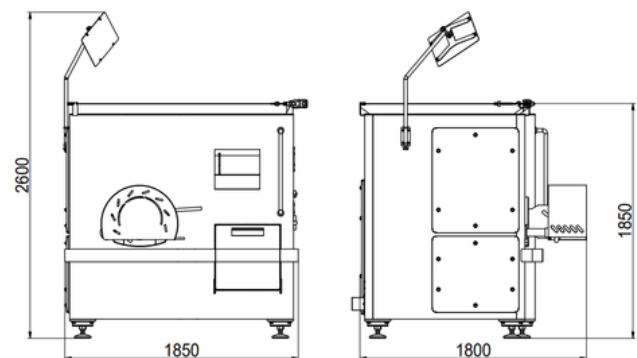


## Technical data

Standard hopper capacity:	500 / 800 l
Cutting tools:	Ø 200 mm [U200]
Configuration of cutting tools:	2 ÷ 5 parts
Feeding screw drive power:	1,5/1,9kW
Main screw drive power:	55 kW (optional 75 kW)
PLC control:	touch screen
Tool removal lever	hydraulic
Capacity:	up to 10000 kg/h*
Unloading height:	for 200 l bins
Multi-stage screw sealing:	rinsing channel
Screw housing:	CNC machined inner channels

\*depending on raw material, its temperature and cutting tools

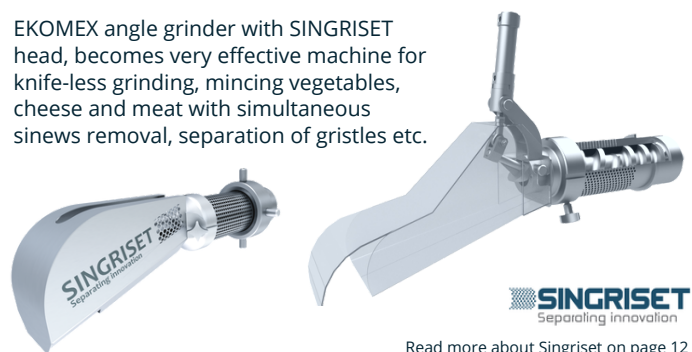
## Dimensions



## Options

- Smooth adjustment of the screws speeds
- Block pre-breaking shaft VERTICUT Series
- Z-arm or paddle mixing shaft, VERTIMIX series
- Column loader ZM-200 for 200 l bins or ZM-600 for BIGBOX containers
- Individual discharge height
- Singriset head

## Separating head SINGRISET S-7000



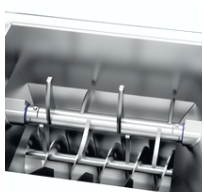
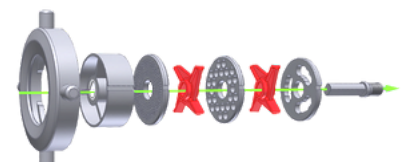
EKOMEX angle grinder with SINGRISET head, becomes very effective machine for knife-less grinding, mincing vegetables, cheese and meat with simultaneous sinews removal, separation of gristles etc.

**SINGRISET**  
Separating innovation

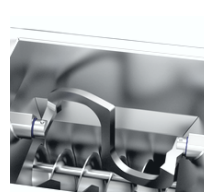
Read more about Singriset on page 12

## Standard cutting sets

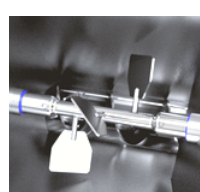
Cutting tools type U200 (pre-cutters, knives, hole plates, distance rings) in various configurations of 2, 3, 4 or 5 parts.



VERTICUT

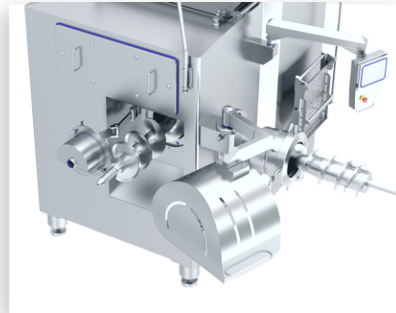


VERTIMIX Z



VERTIMIX paddle mixing shaft

# Automatic angle grinder Model WW-280



Opened zone of passing and compressing raw material



Control panel and throat casing on swinging arm

## Technical data

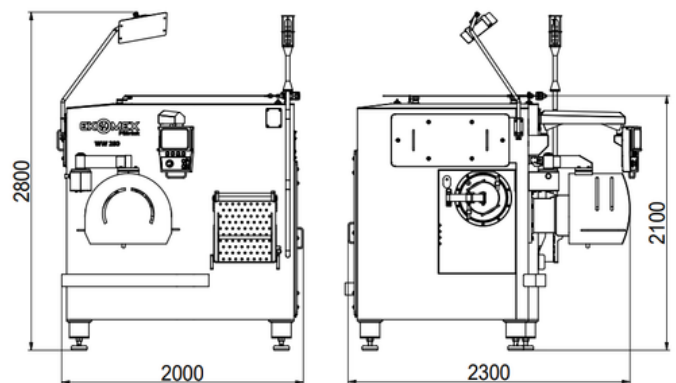
Standard hopper capacity:	480 / 760 l
Cutting tools:	Ø 280 mm
Configuration of cutting tools:	2 ÷ 5 parts
Feeding screw drive power:	5,5 kW
Main screw drive power:	90 kW (optional 110 kW)
PLC control:	touch screen
Tool removal lever	hydraulic
Capacity:	up to 15000 kg/h*
Unloading height:	for 200 l bins
Multi-stage screw sealing:	rinsing channel
Screw housing:	CNC machined inner channels

\*depending on raw material, its temperature and cutting tools

## Options

- Smooth adjustment of the screws speeds
- Block pre-breaker VERTICUT Series
- Z-arm or paddle mixing shaft VERTIMIX series
- Column loader ZM-200 for 200 l carts or ZM-600 for BIGBOX container
- Individually adapted discharge height of the machine

## Dimensions



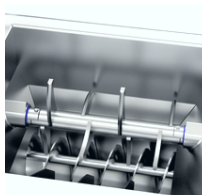
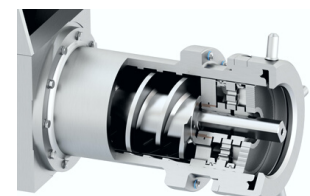
## Cutting set with screw separation

Possible 4 or 5-part tool configuration.  
Degree of separation smoothly adjustable by the speed of the ejecting screw or pneumatic cylinder.

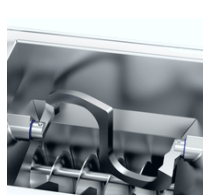


## Standard cutting sets

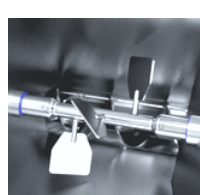
Cutting tools type K280 (pre-cutters, knives, hole plates, distance rings) in various configurations of 2, 3, 4 or 5 parts.



VERTICUT

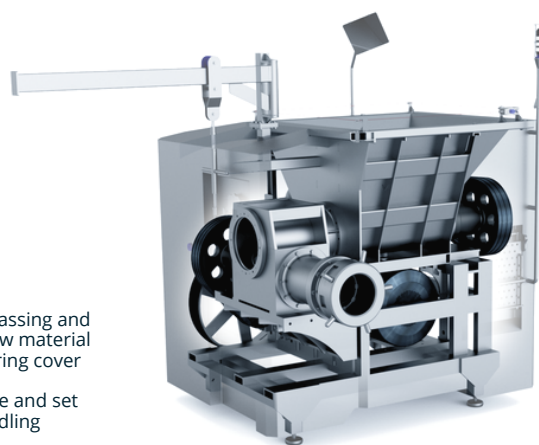


VERTIMIX Z



VERTIMIX paddle mixing shaft

# Automatic angle grinder for blocks Model WW-300



- Opened zone passing and compressing raw material with screw bearing cover
- Integrated crane and set of carts for handling screws

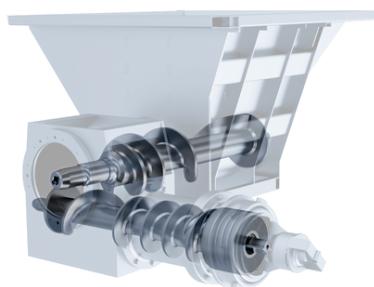
## Technical data

Standard hopper capacity:	750 l
Cutting tools:	Ø 300 mm
Configuration of cutting tools:	2 ÷ 5 parts
Feeding screw drive power:	22 kW
Main screw drive power:	110 kW (optional 132 kW)
PLC control:	touch screen
Tool removal lever	hydraulic
Capacity (frozen meat):	up to 8000 kg/h*
Unloading height:	for 200 l bins
Multi-stage screw sealing:	rinsing channel
Screw housing:	CNC machined inner channels

\*depending on raw material, its temperature and cutting tools

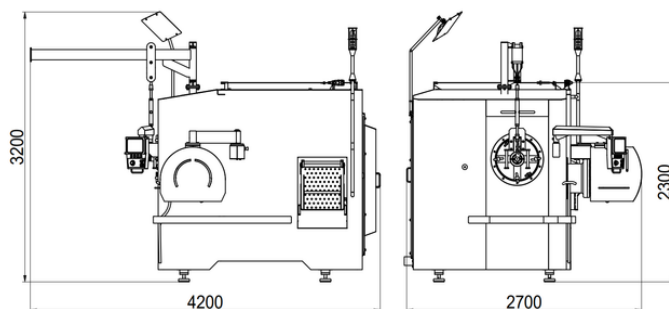
## Options

- Smooth adjustment of the screws speeds
- Column loading device ZM-200 for 200 l bins or type ZM-600 for BIGBOX containers
- Individually adapted discharge height of the machine
- Block loading transporter



- Tool blocking system
- Angled arrangement of screw, enabling smooth flow of raw material

## Dimensions



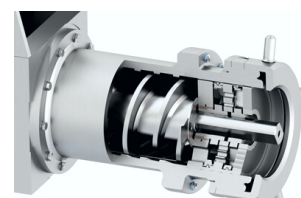
## Sets of screws for frozen raw materials

Special design of screw for cutting blocks in the hopper.



## Cutting sets for frozen raw materials

Cutting tools type WX300 (pre-cutters, knives, hole plates, distance rings) in various configurations of 2, 3, 4 or 5 parts.







### Singrister separating head

The grinders WP130, WW130, WW160, WW200 can be equipped with the grinding and separating head SINGRISET. The complete head consists of elements:

- main screw with tool collector
- support ring with sliding bushing
- separator screw
- hole filter with holes  $\varnothing$  1,2,3,5,7 mm or slots under 1mm
- pressure valve with nut

EKOMEX grinder with SINGRISET head, becomes effective machine for knife-less grinding, grinding vegetables, cheese and meat with simultaneous sinews removal, separation of gristles and other harder fractions, which improves the quality of received product.

It can also successfully replace expensive, dedicated devices for separating poultry and pork bones and fish bones.

### Sets of screws for fresh and frozen raw materials

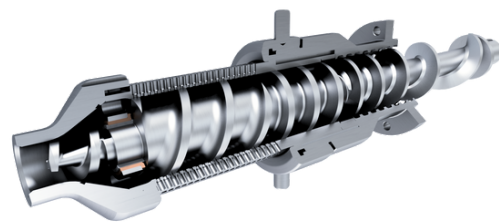
Grinders are supplied with a universal set of screws. Optionally, for more demanding and frozen products, dedicated screws are available, depending on the type and the final degree of grinding.



## Additional equipment for grinders



**SINGRISET**  
Separating innovation



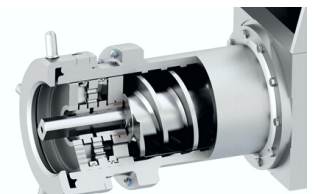
### Cutting units with pneumatic or screw separation

Separating sets for grinders from 130 to 280 mm. Possible 4 or 5-piece configuration of cutting tools. Separation level adjusted smoothly by the speed of ejection screw or pneumatic valve. Efficient separation can be provided with grinding on the end hole plate 3 to 8 mm.

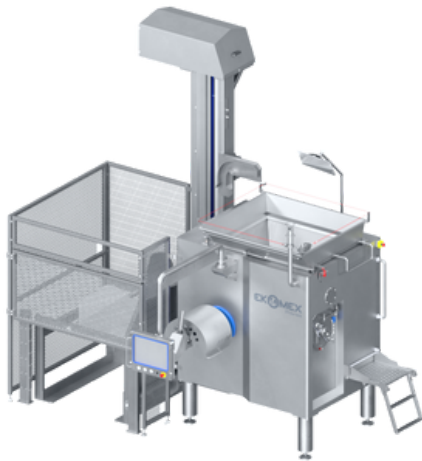


### Cutting sets for skins, fresh and frozen raw materials

Cutting tools for the grinders with diameters from 130 to 300 mm (pre-cutters, knives, hole plates, spacer rings) in various configurations of 2, 3, 4 or 5 parts.

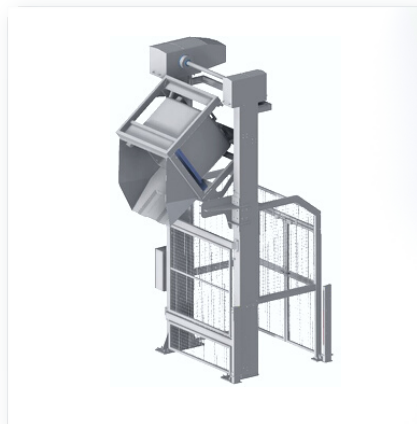


## Additional equipment for grinders



### Loading units ZM600

Available in one- or two-column versions, for loading grinders with palbox/bigbox containers, with maximum payload up to 1000 kg.



### Column loading units ZM200 or arm loading units ZR200

For loading grinders with standard bins 200 or 300 l, with maximum payload up to 300 kg



### Belt and screw conveyers

Available in different configurations, with the possibility of adaptation for individual production needs. Transport of fresh product in elements or grinded, as well as for frozen blocks.

