



## **MACHINE CATALOG 2024**

Unloading and filling
Washing and drying
Polishing and peeling
Sorting
Conveyors and storage
Weighing and packaging
Onion peeling machines
Soil cultivation and harvest
preparation.
Fully automated lines







MACHINES PIÓRO is a company with over 15 years of experience in the production of agricultural machinery for the Polish and foreign markets. As a company, we develop, produce, advise and supply machines. we use specialized technologies and solutions, we have knowledge of the agricultural market and a well-equipped machinery park with our own design and construction department.

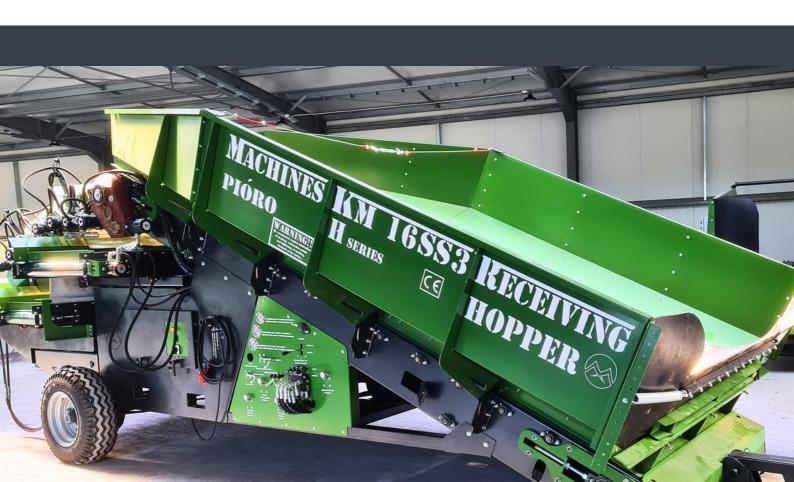
We listen and are open to our customers, we try to meet your expectations. We are a team of over 50 full-time people who create modern solutions. Honesty, innovation and commitment to customer service are the basis of our professional team. We are always happy to help in selecting devices for the client, contact us today and learn about the offer.

Our machines meet the highest standards, we certify CE machines, attest and legalize them. Our machines meet the requirements of EU funding, and we help to obtain funds from programs and attractive leasing conditions.





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The MACHINES PIÓRO KMR receiving hopper is intended for medium and large processing companies. A large-area machine with an appropriately profiled pocket conveyor allows you to unload even the largest trailers and semi-trailers. The separator used is very soft and delicate, which ensures perfect operation without any damage. The gear ratio is stepless, which allows for a very wide range of work. Depending on the selected option, we can use 3 or 4 receiving belts, electric or hydraulic drive with TURBO roller cleaning mode. We can set the accuracy and efficiency of the separator according to our own requirements, thanks to the hydraulic pump used to completely independently adjust the angle, height and spacing of the rollers.

#### Basic equipment of the KMR receiving hopper:

- 170 cm of horizontal tape, then rises at an angle of 30 degrees
- 7 screening rollers + 7 sorting rollers
- independent electric or hydraulic drive for each roller
- transverse, adjustable receiving belts driven by electric motors
- hydraulic adjustment of the sifter and sorter slots
- hydraulic pump
- time controller enabling series work
- smooth adjustment of the main belt
- smooth regulation of the speed of the separator rollers (with division
- to even/odd).

#### Optional equipment of the KMR receiving hopper:

- smooth adjustment of the sifter rollers (divided into even/odd)
- smooth adjustment of cross conveyors
- remote control (wireless)
- an ultrasonic sensor that determines the filling level to maintain constant performance
- TURBO cleaning mode for \*E version
- complete hydraulic drive with TURBO mode for \*H version

MODEL	KMR20SS3H	KMR20SS3E	KMR24SS3H	KMR24SS3E
MAX. SEPARATOR DIMENSIONS	925x360x330	925x360x330	925x390x330	925x390x330
MIN. SEPARATOR DIMENSIONS	855x360x330	855x360x330	855x360x330	855x360x330
CAPACITY	16,5	5 m³	21	m³
MAIN BELT WIDTH	200	) cm	240	) cm
NUMBER OF RECEIVING TAPES	3	3	3	3
NUMBER OF ROLLERS	14	14	14	14
LIFTING SPEED		0,5 3,5	m/min	
RANGE	10 55 mm + 10 90m			
POWER	7,5 kW	12 kW	11 kW	13,5 kW



The MACHINES PIÓRO KM receiving hopper ensures easy and quick unloading of vegetables from trailers. The machine is equipped with a durable rubber belt with special profiles, ensuring proper unloading and transport of vegetables to the separator made of soft and delicate rollers, without causing damage to the vegetables. Depending on the option, we can sort the goods into 3 or 4 fractions, which allows for thorough cleaning and division into fractions. We can set the accuracy and efficiency of the separator according to our own requirements, thanks to the hydraulic pump used to completely independently adjust the angle, height and spacing of the rollers

#### Basic equipment of the KM receiving hopper:

- 7 screening rollers + 7 sorting rollers
- independent electric or hydraulic drive for each roller
- transverse, adjustable receiving belts driven by electric motors
- hydraulic adjustment of the sifter and sorter gap and the separator inclination angle
- hydraulic pump
- time controller enabling series work
- smooth adjustment of the main belt
- smooth roller adjustment, alternating sorting (even/odd)

#### Optional equipment of the KM receiving hopper:

- smooth adjustment of rollers, alternating screening (even/odd)
- smooth adjustment of cross conveyors
- remote control (wireless)
- an ultrasonic sensor that determines the filling level to maintain constant performance

MODEL	KM12SS3	KM12SS3	KM16SS3	KM20SS3	KM20SS3	KM20SS4
MIN. SEPARATOR DIMENSIONS	730x300x275	800x300x275	730x320x275	820x300x260	730x340x275	820x340x275
MAX. SEPARATOR DIMENSIONS	810x300x275	880x300x275	810x300x275	900x300x260	810x340x275	900x340x275
CAPACITY	8,5 m³		10,5 m³		12,5 m³	
MAIN BELT WIDTH	120 cm		160 cm		200 cm	
NUMBER OF RECEIVING TAPES	3	4	3	4	3	4
NUMBER OF ROLLERS	14	21	14	21	14	21
LIFTING SPEED			0,5 3,5	m/min		
POWER	10,5 kW	11,5 kW	10,5 kW	11,5 kW	10,5 kW	11,5 kW



The MACHINES PIÓRO – KS receiving hopper is designed for unloading pallet boxes using a forklift turntable. An appropriately profiled rubber belt allows the vegetables to be transported to the cable-controlled soil separator, which then transfers the goods to the next machine in the vegetable line. Optionally, it can be equipped with an adjustable sorter with a transverse receiving belt \* model S

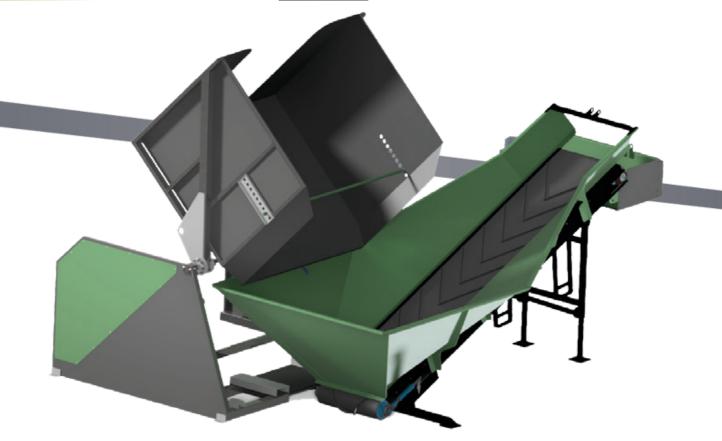
## Basic equipment of the KS receiving hopper:

- 6 roller soil separator (rubber)
- adjustable angle of the goods separator
- smooth adjustment of the main belt

## Optional equipment of the KS receiving hopper:

- 8 or 10 roller soil separator
- radio remote control
- spiral soil separator
- ultrasonic sensor determining the filling level in the target maintaining constant performance
- conveyor collecting waste from the separator
- two-module separator cleaning and sorting (\*S model)

MODEL	KS65	KS65S	KS80S	KS80S
MIN. SEPARATOR DIMENSIONS	425x210x210	470x210x210	425x230x220	470x230x220
MAX DIMENSIONS OF THE SEPARATOR	Unregulated	500x210x210	Unregulated	500x230x220
CAPACITY	2	,5 m³	3,5	m³
MAIN BELT WIDTH	6	5 cm	80	cm
NUMBER OF RECEIVING TAPES	6	10	6	10
POWER	1,5 kW	3,5 kW	1,5 kW	3,5 kW



#### Basic equipment of the WS box tipper:

- · tipping module
- remote control (wired)

### Optional equipment of the WS box tipper:

• remote control (wireless)

## Basic equipment of the KW receiving hopper:

- 6 roller soil separator
- adjustable angle of the goods separator
- smooth adjustment of the main belt

## Optional equipment of the KW receiving hopper:

- 8 or 10 roller soil separator
- radio remote control
- spiral soil separator
- ultrasonic sensor that determines the filling level to maintain constant performance
- conveyor collecting waste from the separator
- two-module separator cleaning and sorting (model \*S)

The MACHINES PIÓRO - WS + KW box-pallet tipper with basket is used to unload box-pallets using the tipping module. Using an appropriate design, we can position the tippler in three directions (from the front or on the sides) to the KW receiving hopper. The basket is standardly equipped with a fixed separator for cleaning vegetables, and can optionally be equipped with an adjustable sorter with a transverse receiving belt \* model S

MODEL	WS12	WS16	KW50	KW50S	KW65	KW65S
DIMENSIONS	172x200x145	192x230x160	-	-	-	-
BASKET DIMENSIONS	100x120x900	160x120x120	-	-	-	-
POWER	2,2 kW	3,0 kW	1,5 kW	3,5 kW	1,5 kW	3,5 kW
MINIMUM LIFTING HEIGHT	300 cm	330 cm	-	-	-	-
NUMBER OF ROLLERS	-	-	6	10	6	10
MAIN BELT WIDTH	-	-	50	cm	65	cm
MAX. SEPARATOR DIMENSIONS	-	-	420x180x210	470x180x210	420x195x220	470x195x220
MIN SEPARATOR DIMENSIONS	-	-	Unregulated	500x180x210	Unregulated	500x195x220
CAPACITY	-	-	2 1	m³	2,5	m³





**DIMENSIONS** 380x250x260 500x230x280 TANK CAPACITY 3500 I 7000 I MAIN BELT WIDTH 80 cm 80 cm **RETURN VALVE** 2" 2" **AIR FILTER** 1 2 POWER 4,5 kW 7,5 kW

The Jacuzzi MACHINES PIÓRO - PSM receiving basket is designed for receiving vegetables in a water bath. Pouring the goods into this type of basket ensures no damage by continuous operation of the side-channel fan (air pump) aerating the water, and the goods themselves are introduced through a bar belt.

The sucked air passes through the air filter, which guarantees long-term operation of the fan, while the water level is automatically replenished.

## Basic equipment of the PSM receiving hopper:

- smooth adjustment of the main belt
- · compressed air

**PSM** 

- filling water with a solenoid valve
- manual drain valves
- adjustable leg height

## Optional equipment of the PSM receiving hopper:

- pneumatic drain valves with automatic
- level sensors
- · drying blower





PM

#### **VEGETABLE WASHER**

The MACHINES PIÓRO PM vegetable washer has a rotating drum made of perforated steel. It washes vegetables effectively and gently, it is the equivalent of a PT washer in the version without a strip. It helps in the absence of appropriate room dimensions for the production line. The drum has a double drive ensuring maximum torque and operational reliability under heavy loads. The drum speed can be adjusted by an inverter.

#### Basic equipment of the PM vegetable washer:

- drum with a diameter of 95 cm
- smooth regulation of drum rotation
- bathtub with settling funnels
- manual drain valves with large diameter fi150 cm

running water shower with a selector belt

#### Optional equipment of the PM vegetable washer:

• pneumatic drain valves

MODEL	PM1	PM2
DIMENSIONS	420x180x210	270x145x225
DRUM LENGTH	100 cm	200 cm
CAPACITY	250 kg	500 kg
NUMBER OF VALVES	1	2
EFFICIENCY	1 t/h	2 t/h
POWER	0,75 kW	1,5 kW



T VEGETABLE WASHER WITH TAPE

The MACHINES PIÓRO PT vegetable washer with belt has a rotating drum made of perforated steel and a selecting belt. Washes vegetables effectively and gently, while removing dirt and small stones. The drum has a double drive ensuring maximum torque and operational reliability under heavy loads. The drum speed can be adjusted by an inverter. The device is also equipped with a special belt that ensures proper transport of vegetables.

#### Basic equipment of a vegetable washer with a PT belt:

- drum with a diameter of 100 cm
- smooth regulation of drum rotation
- · bathtub with settling funnels
- manual drain valves with large diameter fi150 cm
- running water shower with a selector belt
- centralized lubrication system for the selection belt bearings

#### Optional equipment for a vegetable washer with a PT belt:

- pneumatic drain valves
- bar selecting tape



MODEL	PT2	PT3	PT4	PT5
DIMENSIONS	390x125x220	490x125x220	590x125x220	690x150x220
DRUM LENGTH	200 cm	300 cm	400 cm	500 cm
CAPACITY	500 kg	750 kg	1 000 kg	1 500 kg
NUMBER OF VALVES	3	4	5	6
EFFICIENCY	3 t/h	5 t/h	10 t/h	12 t//h
POWER	3 kW	4,5 kW	5 kW	6 kW

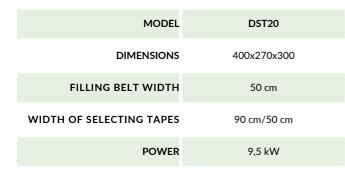
#### Basic equipment of the DST descaler:

- propeller-driven water turbine with smooth speed regulation
- · selecting belts with smooth speed regulation
- · central bearing lubrication system
- · two-chamber turbine chamber
- water level sensor
- overflow chamber
- manual drain valve

#### Optional equipment of the DST descaler:

- · I was born a separator
- pneumatic drain valve

The MACHINES PIÓRO – DST descaler is intended for cleaning and separating stones using a water vortex driven by a turbine. The descaler separates, cleans and transports very efficiently thanks to the conveyors used. Additionally, it can be equipped with a blade separator.





#### **SCREW DESCALER**

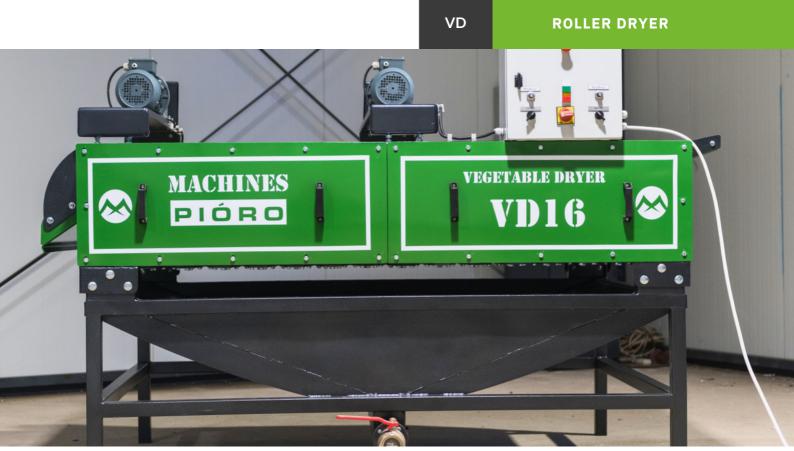
**ODV** 

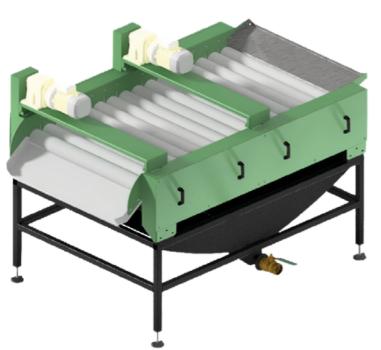
The MACHINES PIÓRO - ODV screw descaler is used to precisely separate vegetables from stones. The stones fall to the bottom of the bathtub, and the goods are transported to the machine's chute using a screw lift. The device is intended for potato peeling lines.

MODEL	ODV20
DIMENSIONS	185x125x250
EFFICIENCY	5 t/h
SCREW DIAMETER	42 mm 155x110x100
BATHTUB DIMENSIONS	1,5 kW
POWER	185x125x250

## Basic equipment of the ODV screw descaling machine:

- screw elevator selecting goods
- smooth speed regulation
- pressure hatch
- water valve





The MACHINES PIÓRO VD roller dryer is used to collect water and dry the surface of vegetables. Vegetables are transported by a set of rollers towards the outlet, while the rollers have a special system for draining water into the tank.

## Basic equipment of the VD roller dryer:

- rolls with special absorbent non-woven fabric
- water squeezing system
- chain drive with shock absorber system
- smooth speed regulation
- manual water drain valve

MODEL	VD7	VD8	VD12	VD16
DIMENSIONS	125x190x170	220x190x170	220x190x170	250x190x170
NUMBER OF ROLLERS	7 pcs.	8 pcs.	12 pcs.	16 pcs.
PRESSURE ASSEMBLY	7 pcs.	12 pcs.	12 pcs.	16 pcs.
WORKING WIDTH		120 cm		
EFFICIENCY	5 t/h	8 t/h	13 t/h	18 t/h
POWER	1,1 kW	1,1 kW	2,2 kW	3,0 kW



## Basic equipment of the PRO13 rotary brusher:

- 13 brushes with different bristle hardnesses
- rotating drum with the ability to change the direction and speed of operation
- rotating brushes with the ability to change the direction and speed of work
- adjustable gate on the discharge side
- automatic control via touch panel
- two-chamber water purification system recycling 2 drain valves with a diameter of 150 mm
- 2-part water spray along the length of the drum
- adjustment of the drum inclination angle using a hand hydraulic pump

## Optional equipment of the PRO13 rotary brusher:

pneumatic water valves

• central bearing lubrication system



PRO13

#### **ROTARY BRUSHING MACHINE**

The MACHINES PIÓRO - PRO13 rotary brusher is used for cleaning and polishing vegetables using water. The machine ensures the highest polishing efficiency thanks to brushes working in opposite directions and a rotating drum on which the brushes are mounted. Independent, smooth regulation of brush and drum rotation is performed using a touch panel. It is possible to create your own modes, adapted to a given vegetable. The machine is standardly equipped with a water recovery system - two-chamber recycling.

MODEL	PRO13/2	PRO13/3
DIMENSIONS	340x190x300	430x190x300
NUMBER OF BRUSHES	13 pc	s.
BRUSH LENGTH	198 cm	298 cm
BRUSH DIAMETER	198 m	m
EFFICIENCY	7 t/h	10 t/h
POWER	9,5 kW	13,5 kW

#### PS8

## RAIL BRUSHING MACHINE

The MACHINES PIÓRO – PS8 rocker brusher is used for cleaning and polishing root vegetables. The use of a rocking drum system allows for increased cleaning accuracy. Brushes with smooth speed regulation are responsible for the quality of polishing. The machine can additionally be equipped with a water recovery system - two-chamber recycling, which increases efficiency.

## Basic equipment of the PS8 rocker brush:

- 8 brushes with different bristle hardnesses
- rocking drum
- · rotating brushes with the possibility of changing direction and
- · working speed
- adjustable gate on the discharge side
- manual drain valves
- 2-part water spray along the length of the drum

## Optional equipment of the rocker brush:

• two-chamber water purification system - recycling (PS8R)

PS8R/3

• pneumatic drain valves

MODEL

DIMENSIONS	340x190x300	340x200x300	430x190x300	430x190x300
NUMBER OF BRUSHES		8 p	cs.	
BRUSH LENGTH	198	cm	298	3 cm
BRUSH DIAMETER		198	mm	
EFFICIENCY	3 t/h	3 t/h	5 t/h	5 t/h
POWER	4.5 kW	6 kW	6 kW	8.5 kW

The MACHINES PIÓRO PS7 bathtub brusher is used for cleaning and polishing root vegetables using brushes with smooth speed control.

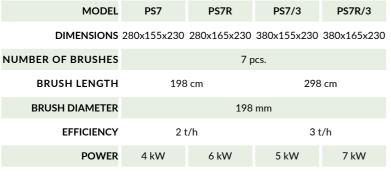
The machine can additionally be equipped with a two-chamber recycling water recovery system, which allows for better efficiency

#### Basic equipment of the PS7 bath brusher:

- 7 brushes with different bristle hardnesses
- rotating brushes with the ability to change the direction and speed of work
- · adjustable gate on the discharge side
- manual drain valves
- 2-part water spray along the length of the drum

#### Optional equipment of the PS7 bath brusher:

- two-chamber water purification system recycling (PS7R)
- pneumatic drain valves





**PPS** 

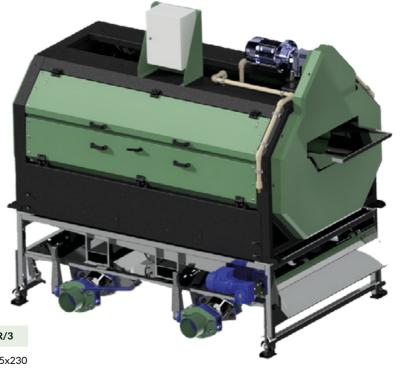
Flat brushing machine PPS PEN MACHINES Used for cleaning vegetables without using water. The machine is equipped with wave brushes. The speed of the brushes is regulated by an inverter. The rubber cover reduces dust and ensures more thorough cleaning.

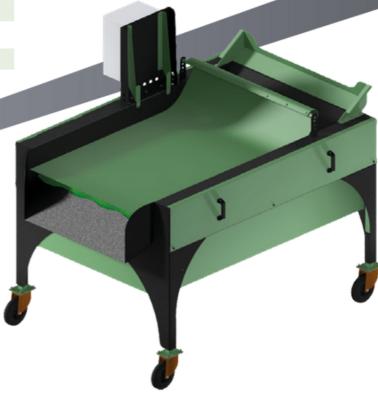
#### Basic equipment of the PPS flat brushing machine:

- wave brushes with smooth speed regulation
- pressure rubber
- · 4 road wheels
- brush speed adjustment

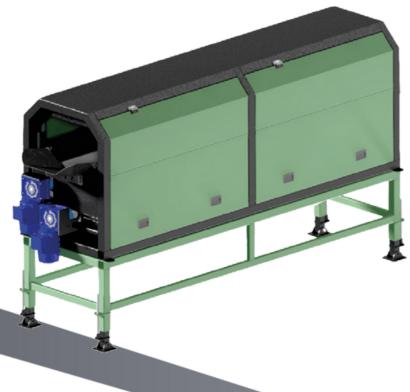
## Optional equipment of the PPS flat brushing machine:

- · dust extraction
- water spray over the working part + tank + drain valve





MODEL	PPS10	PPS12	PPS14	PPS16
DIMENSIONS	170x145x160	190x145x160	210x145x160	240x145x160
NUMBER OF BRUSHES	10 pcs.	12 pcs.	14 pcs.	16 pcs.
BRUSH LENGTH		100	cm	
POWER	0,75 kW	1,1 kW	1,5 kW	2,2 kW



The MACHINES PIÓRO PAM pumpkin brushing machine uses a long bristle brushing system with a running water spray to thoroughly clean and polish without damaging the skin of the vegetable. The machine can additionally be equipped with a water recovery system - two-chamber recycling

#### Basic equipment of the PAM pumpkin brush:

- 2 brushes with long bristles and the ability to change the direction and speed of the brushes
- possibility of adjusting the height of the side support
- 2-part water spray along the length of the drum
- independent drive for each brush

#### Optional equipment of the PAM pumpkin brush:

• two-chamber water purification system - recycling (PA m³R)

MODEL	PAM3	PAM3R
DIMENSIONS	360x100x190	
NUMBER OF BRUSHES	2 pcs.	
BRUSH LENGTH	300 cm	
EFFICIENCY	3 t/h	
POWER	3,0 kW	5,0 kW

## **CORUNDUM PEELER**

CPRO12

The CPRO12 corundum peeler is designed for peeling off the skin of vegetables after initial washing: potato, carrot, beetroot, celery, etc. The raw material fed to the feed is taken by a horizontal screw and moves it along, over the rotating rollers covered with corundum. A running water shower was installed inside the chamber.

#### Basic equipment of the CPRO12 corundum peeler:

- 12 corundum rollers
- screw convevor
- running water shower
- · smooth regulation of roller speed
- smooth adjustment of the selecting screw
- · manual drain valve

## Optional equipment of the CPRO12 corundum peeler:

- stainless steel construction
- · pneumatic drain valve

MODEL	CPRO12/2	CPRO12/3	
DIMENSIONS	280x140x255	380x140x255	
ROLLER LENGTH	200 cm	300 cm	
SCREW DIAMETER	83 cm		
ROLLER DIAMETER	11 cm		
EFFICIENCY	2 t/h	3,5 t/h	
POWER	3 kW	4 kW	



## CPRO25

The MACHINES PIÓRO CPRO25 rotary corundum peeler is designed for peeling vegetables after initial washing: potato, carrot, beetroot, celery, etc. The raw material fed to the feed is taken by a horizontal screw and moves it along, over rotating rollers covered with corundum. A running water shower was installed inside the chamber. The use of a rotating drum allows for greater accuracy.

#### Basic equipment of the CPRO25 rotary corundum peeler:

- 25 corundum rolls
- screw conveyor
- running water shower
- smooth regulation of roller speed
- smooth adjustment of the selecting screw
- manual drain valve

## Optional equipment for a rotary peeler

- corundum CPRO25:
- stainless steel construction
- pneumatic drain valve



MODEL	CPRO25/2	CPRO25/3
DIMENSIONS	350x150x305	450x150x305
ROLLER LENGTH	200 cm	300 cm
SCREW DIAMETER	83	cm
ROLLER DIAMETER	11	cm
EFFICIENCY	4 t/h	6 t/h
POWER	7,5 kW	11 kW

## **KNIFE PEELER**

CPX

The MACHINES PIÓRO CPX knife peeler is designed for cold peeling of vegetables after initial washing: potato, carrot, beetroot, celery, etc. The raw material fed to the feed is taken by a horizontal screw and moves it along a drum equipped with 25 strips containing 375 / 550 knives. peeling. A running water shower was installed inside the chamber.

## Basic equipment of the CPX knife peeler:

- knife drum
- screw conveyor
- running water shower
- smooth adjustment of the selecting screw
- strips with knives
- drum speed adjustment

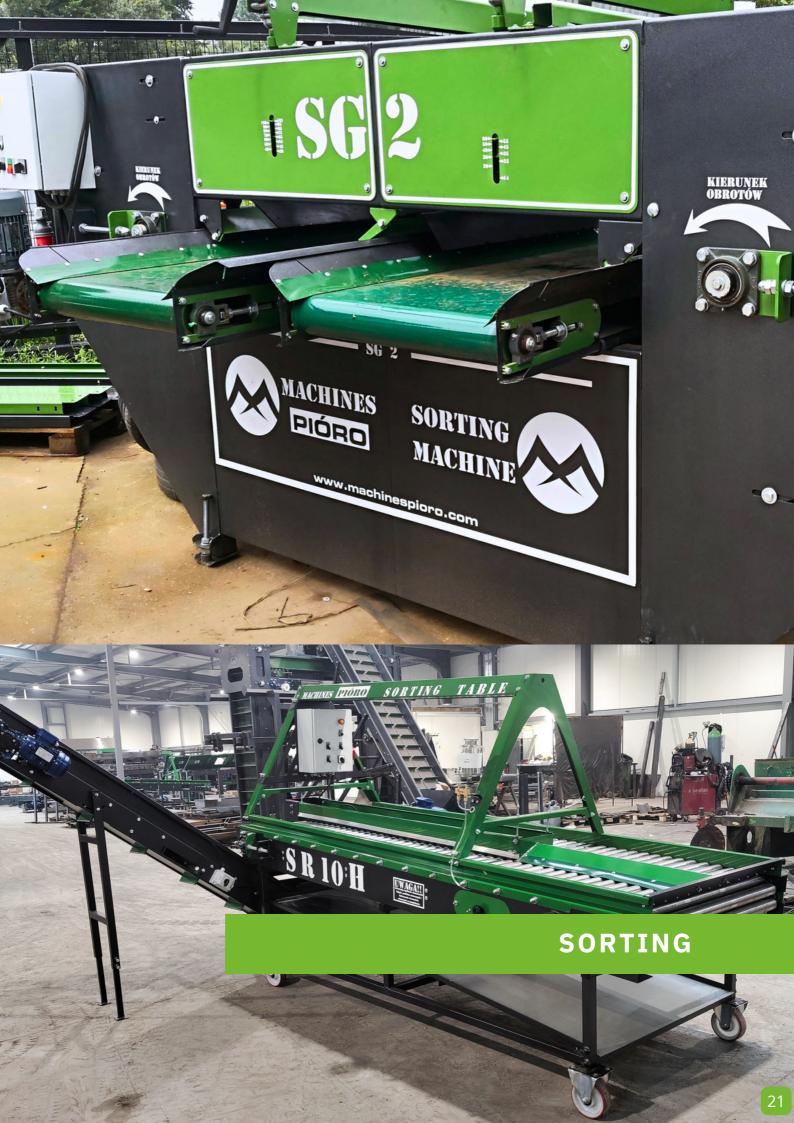
## Optional equipment of the CPX knife peeler:

• variable height of the feet of the lower frame structure

MODEL	CPX200	CPX300
DIMENSIONS	420x150x260	520x150x260
DRUM LENGTH	200 cm	300 cm
NUMBER OF KNIVES	375	550
EFFICIENCY	2 t/h	3 t/h
POWER	7 kW	11 kW







#### **ROLLER TABLE**



The MACHINES PIÓRO SR roller table is used for manual selection of impurities, rotten or damaged vegetables after the washing and sorting process. The working element are rollers that transport and rotate vegetables, which ensures their accurate selection. The device has smooth adjustment of the roller speed and lighting above the working part

#### Basic equipment of the SR roller table:

- plastic rollers on a toothed track with smooth regulation of travel speed
- lighting above the working area
- waste compartment
- drip tray

## Optional equipment of the SR roller table:

- waste tape
- stainless steel rollers
- · reinforced version of the drive
- working length 200/250/350/400 cm

MODEL	SR8	SR8H	SR10	SR10H
DIMENSIONS	325x130x190	325x130x190	325x150x190	325x150x190
WORKING WIDTH	80 cm	80 cm	100 cm	100 cm
COMPARTMENTS NOMBER OF	1	1	1 or 2	1 or 2
EFFICIENCY	5 t/h	20 t/h	8 t/h	30 t/h
SERVICE	2	2 4	36	38
POWER	1,1 kW	1,1 kW	1,5 kW	1,5 kW

#### THICKNESS SORTER

SG

The MACHINES PIÓRO SG thickness sorter is a device designed for sorting vegetables according to their diameter. The vegetable calibrator works well for round and oblong vegetables (potato, onion, parsley, carrot). The working element of the calibrator are rollers made of stainless steel with an adjustable gap between them, ensuring proper sorting in accordance with the setting. The sorted vegetables are transported to dedicated conveyors with the option of changing the feeding direction. Each sort has an individual setting value. The sorting speed is regulated by smooth regulation of the speed of the sorting module drive

MODEL	SG2	SG3	SG4	SG5
DIMENSIONS	415x280x190	500x280x190	585x280x190	670x280x190
TREADMILL WIDTH		100 cm / 120	cm / 160 cm	
NUMBER OF SORTS	2 + nadsort	3 + nadsort	4 + nadsort	5 + nadsort
SORTING SCOPE		5 -10	5 mm	
EFFICIENCY		8/10/12	2/14 t/h	



#### Basic equipment of the SG thickness sorter:

- stainless steel rollers
- · adjustable sorting cranks
- receiving tapes
- flat feeding conveyor
- leg height adjustment

#### Optional equipment of the SG thickness sorter:

- electronic system for controlling the gap spacing
- treadmill width: 100/120/160 cm
- spacing up to 160 mm (SG \* H model)
- electric sorting adjustment

The MACHINES PIÓRO SD length sorter is designed for sorting longitudinal vegetables in terms of length. These sorters are usually used to reject vegetables that are too short or broken. The sorting process is carried out by sliding the correct product to the end of the treadmill, vegetables that are too small fall into the selected sort.

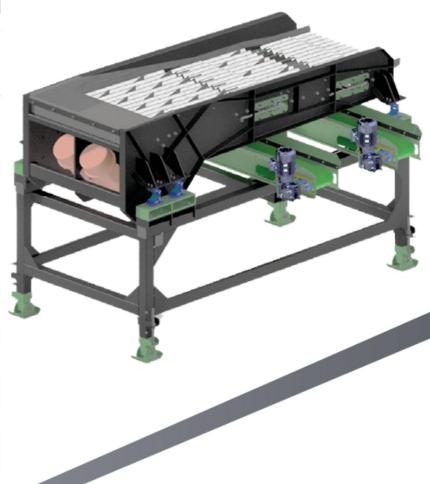
#### Basic equipment of the SD length sorter:

- stainless steel sorting sieves
- smooth regulation of vibration frequency
- conveyor for transporting waste
- sorting regulation

Optional equipment of the SD length sorter:

- galvanized structure
- vibration oscillators

MODEL	SD2 120	SD2 90
DIMENSIONS	280x210x170	280x210x170
WORKING WIDTH	120 cm	90 cm
NUMBER OF SORTS AND RECEIVING TAPES	2	2
THE POWER OF VIBRATION MOTORS	2x1.1 kW	2 x 1.1 kW
POWER CONSUMPTION	3 kW	3 kW
NUMBER OF VIBRATION SUSPENSIONS	6	6
EFFICIENCY	3 t/h	2,5 t/h



## SRS

#### **SPIRAL SORTER**

The MACHINES PIÓRO SRS spiral sorter is used to sort dirty goods, with preliminary removal of impurities and sifting out too fine goods. Then it is passed on for further selection in accordance with the given operating parameter. The device allows sorting in the range from 0 to 90 mm into 2 sorts + 1 super-sort.

#### Basic equipment of the SRS spiral sorter:

- · spiral rollers
- 2 receiving tapes
- chute into the pallet box
- smooth regulation of the speed of even-numbered rollers and
- odd numbers on the second separator module
- smooth regulation of the speed of the receiving tapes

MODEL	SRS12
DIMENSIONS	185x270x200
WORKING WIDTH	120 cm
NUMBER OF SORTS AND RECEIVING TAPES	2 + nadsort
THE POWER OF VIBRATION MOTORS	230 x 50
POWER	7 kW
EFFICIENCY	12 t/h



The MACHINES PIÓRO SO100 circulation sorter is used to sort goods with preliminary removal of impurities. The machine is intended for round vegetables (potatoes). Sorting is carried out using a selected perforated belt and appropriately set shakers. During operation, the vegetables fall into the holes in the belt and land on the conveyor transporting the goods to the next stages of processing or to the pallet box.

## Basic equipment of the SO100 circular sorter: perforated belt (selection of hole sizes)

1 receiving belt conveyor, chute for pallets, smooth regulation of the speed of the sorting belt, smooth regulation of the speed of the receiving belt

#### Optional equipment of the SO100 circular sorter:

stainless steel structure, leg height adjustment

MODEL	SO100
DIMENSIONS	240x200x250
WORKING WIDTH	120 cm
NUMBER OF SORTS	1 + nadsort
THE RECEIVING TAPE	200 x 70 cm

MAIN TAPE HOLE "30x30" "35x35" "40x40" "45x45" "50x50" SIZE "52x52" "55x55" "57x57" "60x60" "65x65" "70x70" 4 kW

POWER	4 t/h
FEEICIENCY	240×200×250





LMI

## Separator was born

The MACHINES PIÓRO LMI leaf separator removes leaves and other waste from root vegetables. The working element is a hedgehog belt with adjustable working angle and working speed. The separator can be installed directly on the DST descaler.

#### **Basic equipment of the LMI cut separator:**

- hedgehog tape
- pouring
- adjustable angle

#### Optional equipment for the LMI cut separator:

• smooth regulation of belt speed

MODEL	LMI50	LMI80
DIMENSIONS	185x87x230	185x127x230
CONVEYOR LENGTH	175 cm	175 cm
CONTRACTOR WIDTH	50 cm	80 cm
POWER	0,75 kW	1,1 kW



**BIG BAG FILLER** 

NFK

The MACHINES PIÓRO NFK Big Bag filler is used to fill big bags or pallet boxes with vegetables. The device is equipped with an automatic cascade enabling gentle loading of goods into a given bag or box. Optionally, the machine can be equipped with weighing modules with a touch panel and a task parameterization function.

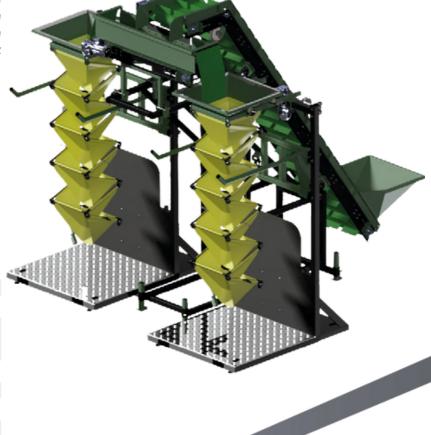
#### Basic equipment of the NFK Big Bag filler:

- feeding conveyor
- automatic cascade system
- bag hooks

## Optional equipment of the NFK Big Bag filler:

- · weighing modules
- · radio remote control

MODEL	NFK10	NFK20
DIMENSIONS	430x135x320	430x350x345
NUMBER OF FILLING SECTIONS	1	2
EFFICIENCY	7 t/h	9 t/h
POWER	1 kW	2 kW
DISPLAY	4,3"	4,3"
INDUCTIVE SENSORS	1	2
STRAIN SENSOR	4	8
CASCADE END SENSORS	1	2
ULTRASONIC SENSORS	1	2
CONTROL	Schneide	er Electric



BOX FILLER NB20



The MACHINES PIÓRO NB20 box filler is a fully automatic device designed to evenly fill boxes, minimizing damage to the goods. Adjustable hydraulic segments automatically control their position inside.

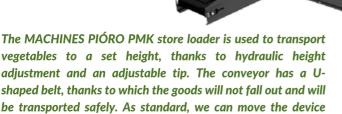
#### Basic equipment of the NB box filler:

- adjustable loading belt
- smooth regulation of belt speed
- automatic sensors for the condition and filling of pallet boxes

#### Optional equipment for the NB box filler:

feeding conveyor

MODEL	NB20
DIMENSIONS	300x140x160
BOX DIMENSIONS	$100 \times 120$ cm or $130 \times 170$ cm
MAIN BELT WIDTH	60 cm
POWER	4 kW



#### **Basic equipment of the PMK store loader:**

- U-shaped tape
- hydraulic height adjustment
- hydraulic tip adjustment

thanks to the rolling chassis.

- smooth speed regulation
- driving chassis

#### Optional equipment of the PMK store loader:

swivel wheels

MODEL	PMK9	PMK11
CONVEYOR LENGTH	900	1100
CONTRACTOR WIDTH	65 cm	65 cm
FEED HEIGHT	150 - 450 cm	150 - 500 cm
POWER	2,2 kW	3,0 kW





# BUFFER WITH A FEEDING CRANE

The buffer with the MACHINES PIÓRO BHL feeding crane is intended for ongoing buffering of goods to ensure smooth production. Particularly recommended in front of weighing devices. The device has its own chute and internal cascade for gentle loading. The device functions as a silo that can be expanded at any time with an additional segment, thus increasing its capacity.

#### Basic equipment of a buffer with a BHL feeding crane:

- · feeding conveyor
- selecting conveyor
- segmented construction
- internal cascade

#### Optional equipment of the buffer with a BHL feeding crane:

smooth belt speed regulation and fullness sensor

MODEL	BHL2	BHL4	BHL6	BHL10
BUFFER DIMENSIONS	230x180x260	230x180x315	230x180x350	230x180x395
CAPACITY	2.5 m³	4 m³	6,6 m³	10,5 m³
POWER		21	⟨W	

BF

**BUFFER** 



The MACHINES PIÓRO – BF buffer plays a very important role, especially in large technological lines. It is usually used in front of weigh-packing machines or channel scales. It ensures continuous supply of vegetables to subsequent machines. Standardly equipped with a cascade system to absorb falls of poured vegetables. The height of the tank can be changed by increasing or decreasing the number of panel layers (the height of one panel is 60 cm). The standard version of the tank is equipped with 5 layers of panels, giving it a capacity of 17 m³, or about 10T, depending on the type of vegetables.

MODEL	BF2	BF3	BF4	BF5
BUFFER DIMENSIONS	290x260x380	290x260x440	290x260x500	290x260x560
CAPACITY	3 m³	6 m³	9 m³	12 m³
TONNAGE	4T	6T	8T	10T
POWER		2 k	:W	









MODEL	WE1	WE2
DIMENSIONS	285x100x255	285x100x250
LVDEC NOWRFK OF	1	2
TAPES WIDTH	50 cm	35 / 15 cm
WEIGHING	25 kg	25 kg
CONTROL	Schneider Electric	
POWER	1 kW	1,5 kW

CHANNEL SCALE

WSK

The MACHINES PIÓRO WSK channel scale ensures high efficiency and weighing accuracy. The machine operates by weighing a given portion in accordance with the set parameters. The number of weighing buckets depends on the machine version. This machine allows you to significantly increase the speed and accuracy of weighing. The device is designed for automatic operation together with a packaging machine (rashing machine). It consists of a supporting structure, a section that pours the goods into individual buckets, a conveyor that transports the goods to the raster and a conveyor that delivers the goods to the scale. The machine is operated via a touch panel with Lenze automation.

#### Basic equipment of a WSK channel scale:

- weighing channels with full bucket opening system
- spreading + bucket belt feeders
- cross conveyor
- touch control panel
- support frame

#### Optional equipment of the WSK channel scale:

- feeding conveyor
- full sensor
- service platform with ladder

The MACHINES PIÓRO WE2 weighing and packaging machine is designed for portioning vegetables in accordance with a given portion. The device consists of a weighing tank and a main and feeding belt (one or two depending on the version). The belt filling the weighing hopper operates at high speed, then the scale starts the weighing cycle until it approaches the required weight, and then, depending on the setting, it releases the goods or waits for the operator to use the touch sensor. The device is designed for semi-automatic or automatic operation, depending on the use of the packaging machine. The machine is operated via a touch panel with Schneider Electric automation.

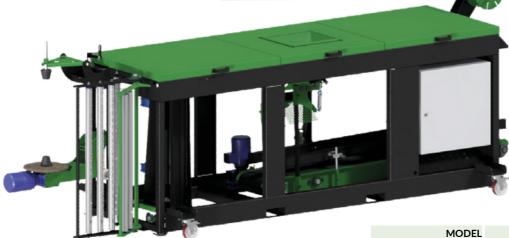
#### Basic equipment of the WE weighing and packing machine:

- weighing tank
- · feeding conveyor
- touch control panel
- full sensor



MODEL	WSK6	WSK8	WSK10	WSK12		
<b>DIMENSIONS</b> 365x190x250 365x242x250 365x294x250 365x346x2						
CHANNELS NOWREK OF	6	8	10	12		
WEIGHING RANGE	1kg - 30kg					
CONTROL		Lenze 10" t	touch panel			
POWER	2 kW	2,5 kW	3 kW	3,5 kW		
PNEUMATIC POWER SUPPLY	6 bar	7 bar	8 bar	9 bar		
BUCKET VOLUME	11	11	11	11		
LENGTH OF RECEIVING TAPES	280 cm	332 cm	384 cm	436 cm		





The MACHINES PIÓRO F automatic foil wrapping machine is used to automatically pack vegetables into foil bags by sealing them. A foil wrapping machine plays a role in the case of every vegetable, most often used in the technological line of sorting, washing and packaging lines. The packaging machine requires an automatic weighing machine.

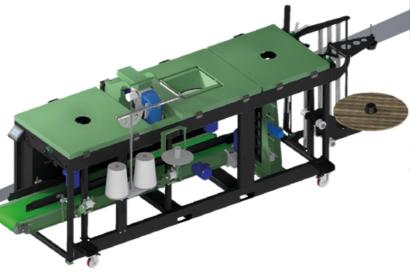
Basic equipment of the F automatic laminating machine:

vibration of the pourer, vibration of the bag base, control panel, sealing module

#### **Optional equipment:**

label printer

MODEL	F1	F2
DIMENSIONS	400x130x165	400x130x165
PACKING SCOPE	2,5 15 kg	2,5 20 kg
EFFICIENCY	3 t/h	4 t/h
CONTROL	Schneider Electric	
POWER	2,5 kW	3,5 kW



MODEL	RC1	RC2
DIMENSIONS	430x130x120	430x130x120
PACKING SCOPE	2,5 30 kg	2,5 30 kg
EFFICIENCY	4 t/h	6 t/h
CONTROL	Schneider Electric	
POWER	2,5 kW	3,5 kW

RC RASHPLAIN

The MACHINES PIÓRO RC raschel machine is an excellent device for packing and sewing raschel bags. The final product is aesthetically packed vegetables sewn into raschel bags with a label sewn along the entire length. The racking machine requires an automatic scale to work properly. The device is designed to pack into bags from 2.5 to 30 kg. The racking machine takes the bags from the reel, cuts them, and after filling them with vegetables, sews them, placing a label on the seam. The racking machine can be equipped with a single- or double-thread sewing head. Control based on the Schneider Electric touch panel.

## **Basic equipment of the RC raster:**

- vibration of the hopper
- · vibration of the bag base
- touchpad
- sewing head single-thread or double-thread (Fischbein)

#### Optional equipment of the RC raster:

• label printer





## PROPELLER ONION CUTTER (BUILT-IN)



SECTION 2	MODEL
415x165x240	DIMENSIONS
2	NUMBER OF PROPELLERS
2	NUMBER OF VIBRATING TABLES
3400	LENGTH OF RECEIVING TAPE
6	VIBRATIONAL SUSPENSIONS
2x 0.75 kW	VIBRATION MOTORS
10 t/h	EFFICIENCY
4.4 kW	POWER

**Basic equipment of the OSZ propeller cutter:** 

The MACHINES PIÓRO OSZ onion propeller cutter is a machine designed to clean harvested onions from the remains of adhering soil, poorly adhering scales or dried chives. The side part of this machine is, depending on the version, two or three cutting knives. The onion is fed into a hopper from which it is directed to the selection table, where it is divided into onions of small diameter and onions suitable for cutting. Small onions are transported through a chute outside the machine, and

• adjustable cutting knives

larger onions are sent for cutting.

- vibrating tables with smooth regulation
- · receiving tape
- built-up structure

#### Optional equipment of the OSZ propeller cutter:

• smooth regulation of the speed of the cutting knives

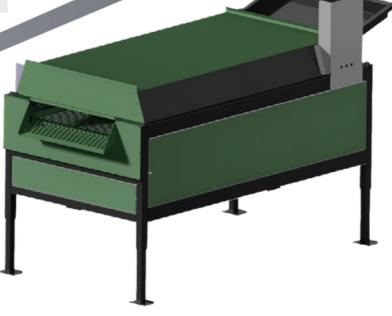
**ONION CLIMER** 

os

The OS propeller cutter for onions is a machine designed to clean harvested onions from the remains of adhering soil, poorly adhering scales or dried chives. The working part of this machine is two cutting knives. The onion is fed into a hopper from which it is directed to the selection table, where it is divided into onions of small diameter and onions suitable for cutting. Small onions are transported out of the machine, and larger onions are sent for cutting.

## Basic equipment:

- · adjustable 2 cutting knives
- vibrating table



MODEL	OS2
DIMENSIONS	240x130x130
PROPELLERS	2
EFFICIENCY	10 t/h
POWER	5,5kW



R

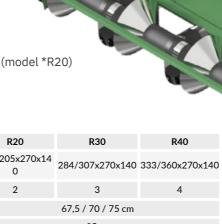
The MACHINES PIÓRO R ridge machine/former is used to form ridges preparing the soil for sowing root vegetables. The redliner has a unit equipped with a very durable gear, adapted to 540 rpm. The units are equipped with a special deep-tilling tiller with very strong teeth, which loosens the soil to 30 cm and then applies an appropriately large mass of earth to form ridges or beds. The final stage of the machine is kneading the side surface, maintaining a soft center.

#### Basic equipment of the R redliner:

- tiller
- forming plates
- · mechanical drive of the tiller
- hydraulic drive of the forming shaft

#### Optional equipment of the R rededge:

- mechanical drive of the forming shaft (model \*R20)
- PTO shaft
- hydraulic markers



 
 MODEL
 R20
 R30
 R40

 DIMENSIONS
 190/205x270x14 0
 284/307x270x140
 333/360x270x144

 NUMBER OF RIDS
 2
 3
 4

 RIDGE SPACE
 67,5 / 70 / 75 cm
 50

 RIDGE HEIGHT
 25 cm
 20 cm

 WIDTH OF THE TOP PLANE
 22 cm
 501/min
 501/min

SHREDDER / TREE TOPPING MACHINE

OBN

The MACHINES PIÓRO OBN leaf shredder / topper is designed for shredding leaves or chives before digging vegetables out of the ground, without damaging the root head. The shredder is designed to work on ridges, beds or flat areas.

#### **Basic equipment of the OBN shredder:**

- · 2 topping modules
- set of trimming strips
- · chain drive
- 4 road wheels

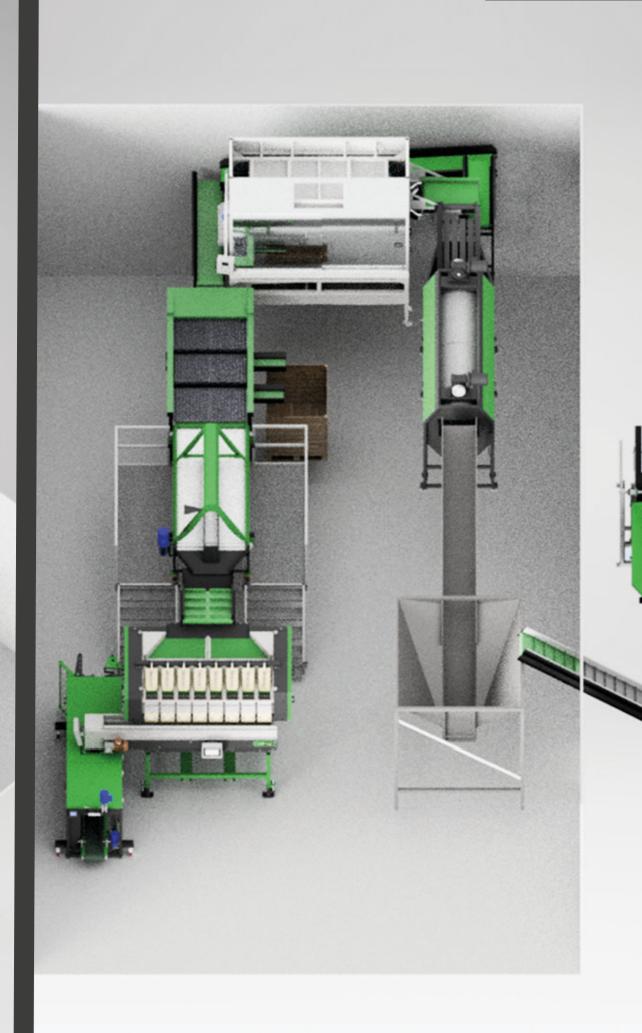
#### Optional equipment of the OBN shredder:

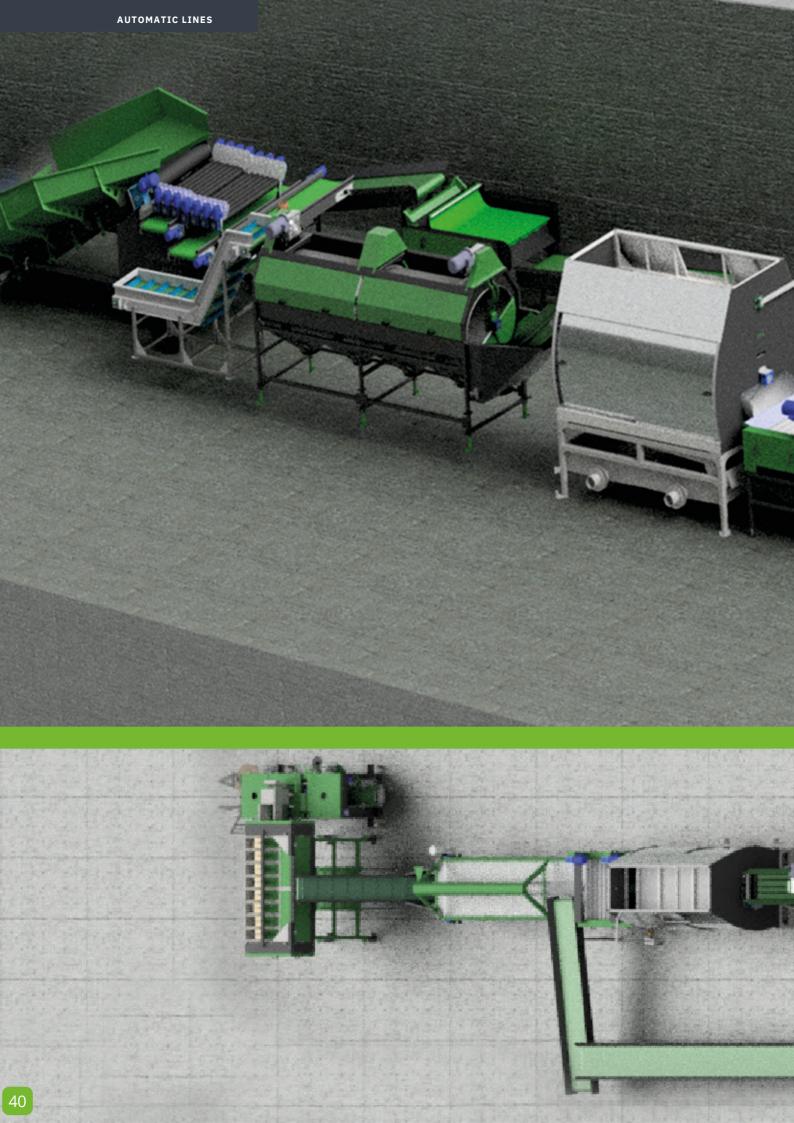
cutting saws

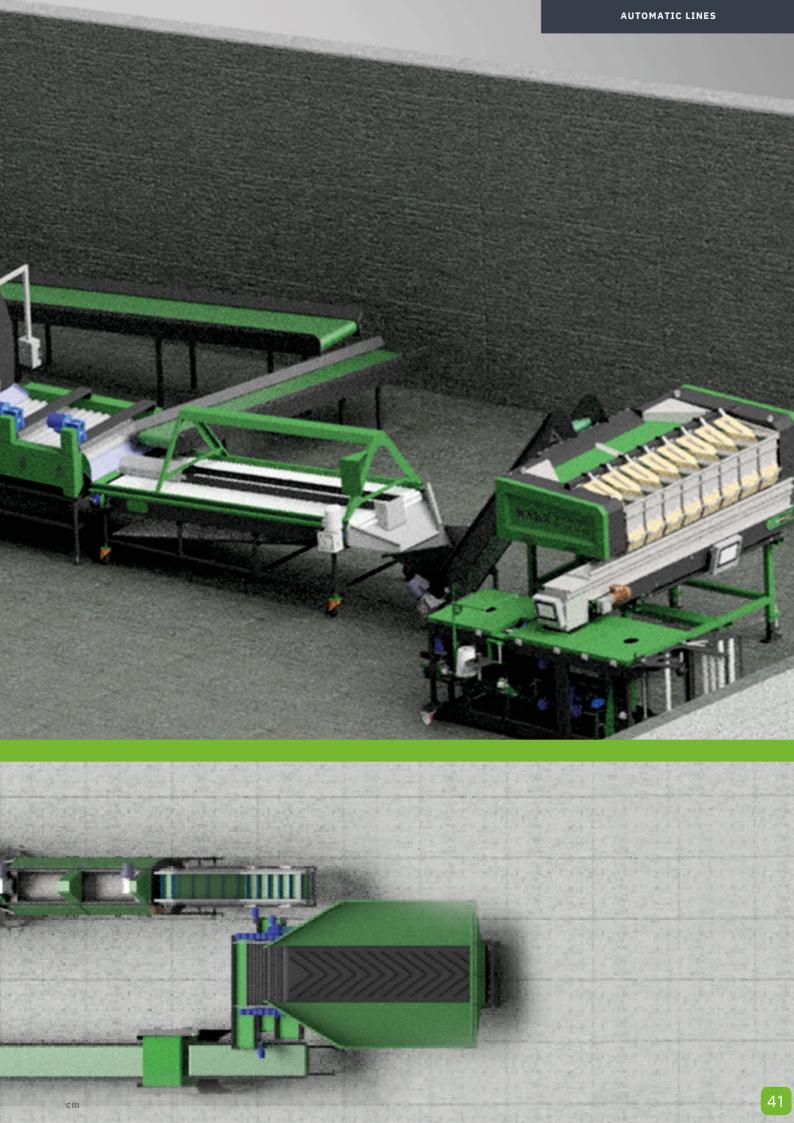
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MODEL	OBN16	OBN18
DIMENSIONS	240x210x150	270x210x150
WORKING WIDTH	160 cm	180 cm
POWER REQUIRED	30 kW	35 kW

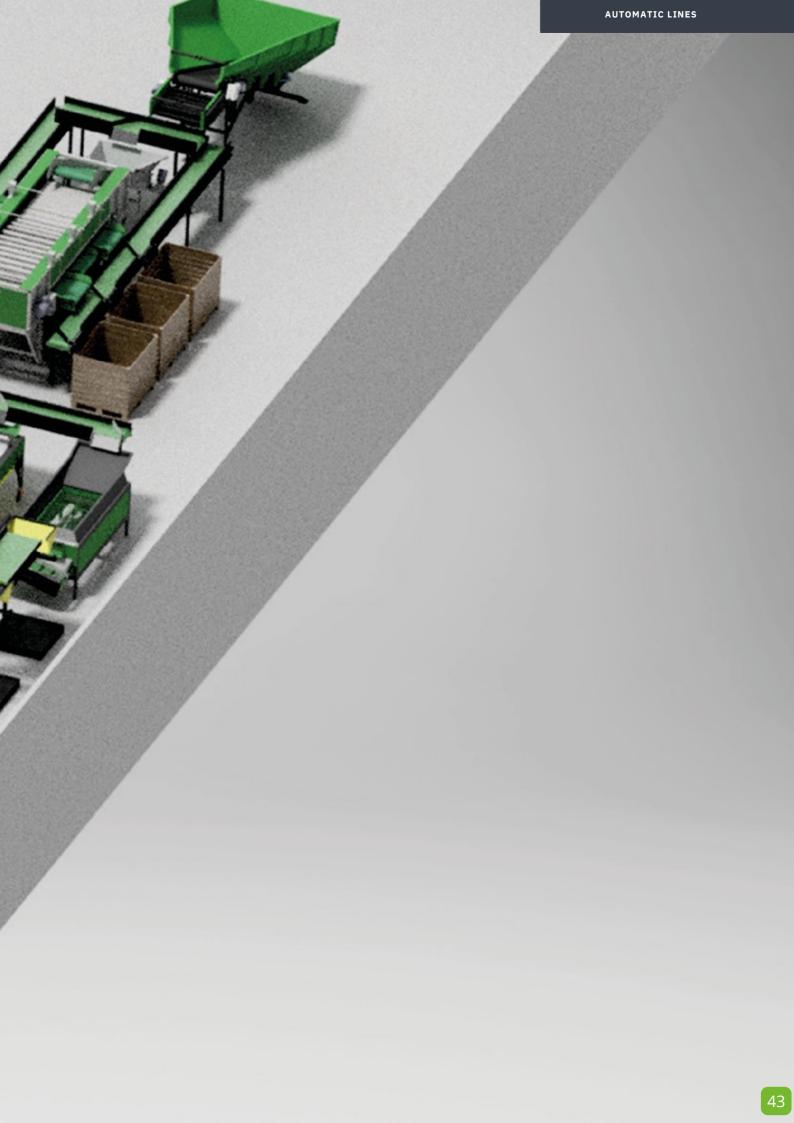
















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