QUALITY EXPERIENCE PASSION



# **GRAIN TRANSPORTATION**

SCREW CONVEYORS, CHAIN CONVEYORS AND BUCKET ELEVATORS

















# SCREW CONVEYORS TYPE PS160 AND PS220

- Screw conveyors are designed for transporting cereal grain, maize, and oilseeds.
- They can receive bulk material transported from the places located under the hoppers, from buffer silos or conveyors and move it to other silos or conveyors.
- They are suitable for transporting grain from BIN silos and to BIN silos and moving it between the silos, as well as for carrying grain from the intake hopper to the bucket elevator.
- The screw conveyors have a modular structure.

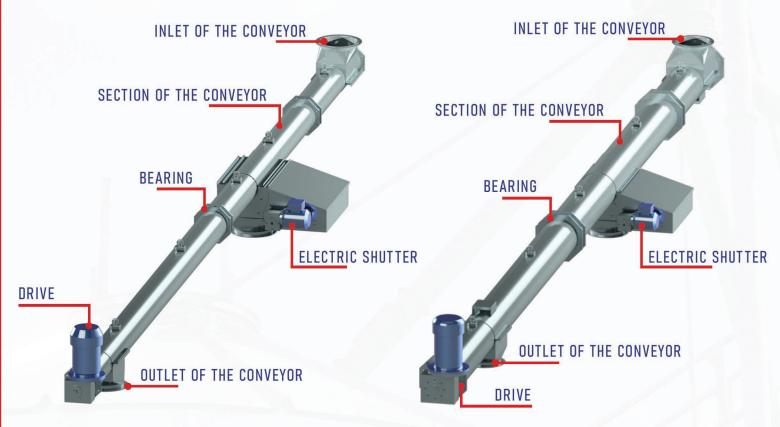
# SCREW CONVEYORS PS160

Nominal capacity - 28 t/h Length up to 9m



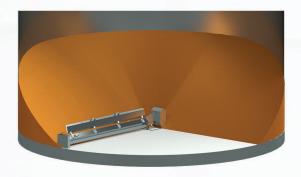
## SCREW CONVEYORS PS220

Nominal capacity - 45 t/h Length up to 15m



# INTERNAL SWEEP AUGERS TYPE PSW

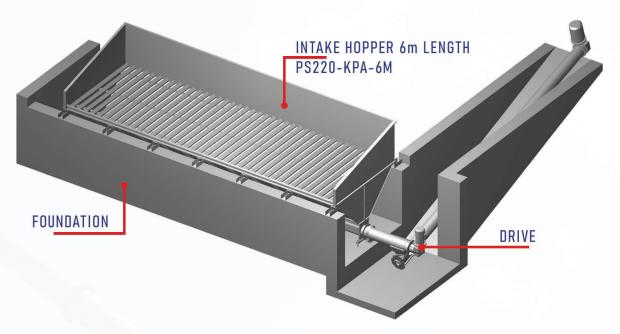
- Internal sweep augers enable residual grain unloading of the grain that was not able to fall gravitationally into conveyor mounted under the floor. Usually, in most of the silos, residual volume of the grain accounts for 15-20% of the silo's capacity.
- Sweep auger type PSW sweeps the grains while moving around the silo and transports them into underfloor conveyor.



silo type	model of sweep auger type PSW	
BIN60	PSW60	
BIN100	PSW220-BIN100	
BIN200	PSW220-BIN200	
BIN500	PSW 500	
BIN1000	PSW 1000	
BIN1500	PSW 1500	
FBIN9	PSW 500	
FBIN11	PSW 1000 or PSW11-S140	
FBIN14	PSW 1500 or PSW14-S140	
FBIN17	PSW17-S170 or PSW17-SCD210	
FBIN19	PSW19-S210 or PSW19-SCD210	

### INTAKE HOPPER WITH SCREW CONVEYOR

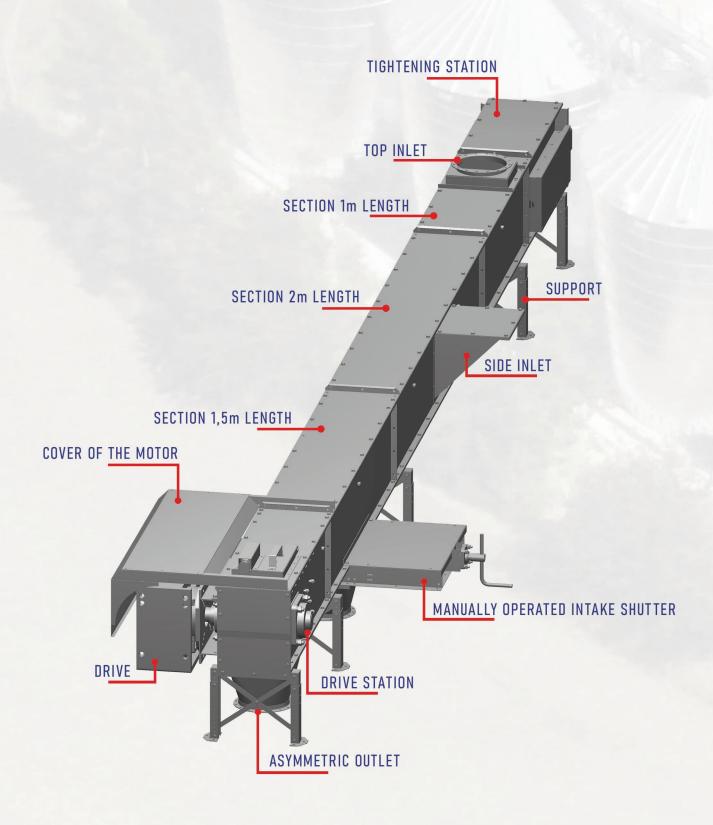
- Intake hopper is dedicated to grain unloading from farm trailers, semitrailers, and open cargo bodies of the trucks.
- It enables the transport of the bulk material to warehouses, silos or other places designed for grain and seed storage.
- Intake hopper consists of body made of galvanized steel. There is located a screw conveyor in the bottom part of the hopper. There is a grate mounted in the top part of the body. There are sides located above the surface of a grate also.
- It is possible to use adjustable cover above the spiral to regulate amount of bulk material received by the hopper.
- Intake hopper may be produced in the following lengths: 5m, 6m, 8m or 9m.





# CHAIN CONVEYORS MODEL RED250

- Chain conveyors are designed for transporting cereal grain, maize, and oilseeds.
- Transport can take place horizontally or at an angle of up to 30°.
- Chain conveyors offered in the total length from 3m to 80m (extension every 0,5m) are designed to work with a nominal capacity of 45 t/h.
- The performance of the device depends, among others, on the type of grain being transported, moisture of bulk material, grain contamination level, inclination angle of the conveyor and the filling level of the conveyor body.
- The drives are equipped with helical-bevel gearboxes.



#### BIN BASIC COMPONENTS OF RED250 CHAIN CONVEYOR:

- drive station with helical-bevel gearbox (reducer) and motor with the power of from 3kW to 15kW depending on the conveyor length
- tightening station with chain tensioning springs
- segments of the conveyor with the following length: 1m, 1,5m or 2m
- chain with scrapers

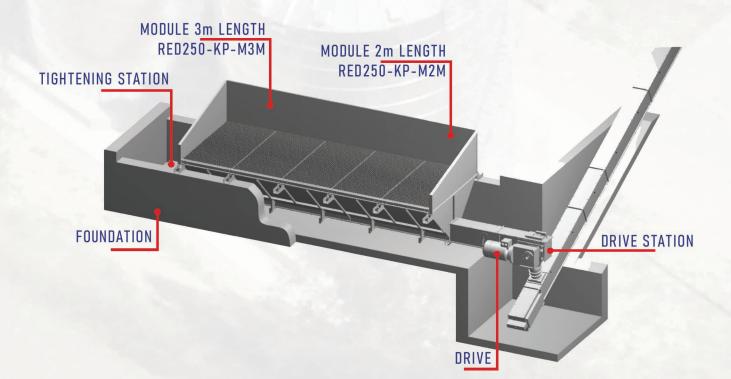
#### BIN ADDITIONAL COMPONENTS OF RED250 CHAIN CONVEYOR:

- top inlet and side inlet
- asymmetric outlet
- outlet with manually or electrically operated shutter
- height adjustable supports of the conveyor. lower support with the height from 2cm to 9,5cm and higher support with the height from 30cm to 44.6cm
- angular support of the conveyor with height-adjusting (from 30cm to 112,8cm) and the slop adjusting (to 30°) designed for supporting inclined conveyors
- cover of the motor protecting the drive from atmospheric precipitation

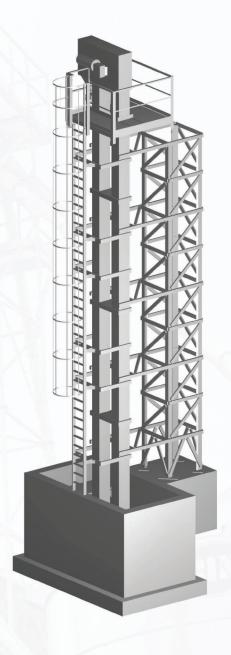
# INTAKE HOPPER WITH CHAIN CONVEYOR

- Intake hopper is dedicated to the unloading of grains, maize, and oilseeds from farm trailers, semitrailers, and open cargo bodies of the trucks.
- Intake hopper consists of the body made of galvanised steel and the grate made of "WEMA" bridging grilles.
- There is located a chain conveyor in the bottom part of the hopper. It is possible to connect screw conveyor, chain conveyor or bucket elevator to the conveyor.
- The lever installed in the section of the chain conveyor helps to control the amount of received bulk material.

### INTAKE HOPPER 5m LENGTH



#### BUCKET ELEVATORS MODEL PK250 Bucket elevators are used for vertical transportation of cereal grains, maize, and oilseeds to the maximum height of 29,93 m. HEAD Elevator is equipped with a reducer and a motor with brake. Break can be unblocked by hand. TWO-WAY VALVE One chute or two chutes can be mounted to the boot of the chain conveyor. SECTION 1,425m LENGTH BIN company offers 3 sizes of chutes: small chute for one pipe or conveyor, BEND OF FILLING PIPE special chute for two pipes or conveyors, large chute for several pipes or conveyors. FILLING PIPE The bucket elevator must be attached to structural elements ensuring its stability. Bucket elevators have been designed to work with a nominal capacity of 45 t/h. SECTION 2,85m LENGTH WITH EXPLOSION RELIEF MEMBRANES model of height of the bucket elevator the transmission engine power PK250-8.6 8,55 m 5,5 kW 9,98 m 5.5 kW PK250-10.0 PK250-11.4 11,40 m 5,5 kW 5.5 kW PK250-12.8 12,83 m SECTION 2,85m LENGTH 14,25 m 5,5 kW PK250-14.3 5,5 kW PK250-15.7 15,68 m PK250-17.1 17.10 m 5,5 kW PK250-18.6 18,53 m 5,5 kW 19,95 m 5,5 kW PK250-20.0 PK250-21.4 21,38 m 7,5 kW 7,5 kW PK250-22.8 22,80 m PK250-24.2 24,23 m 7.5 kW PK250-25.6 7,5 kW 25,65 m PK250-27.1 27,08 m 11 kW PK250-28.5 28,50 m 11 kW PK250-29.9 29,93 m 11 kW SCREW CONVEYOR SECTION 2,85m LENGTH WITH MOUNTING HOLES LARGE CHUTE BOOT



## SUPPORT OF THE BUCKET ELEVATOR

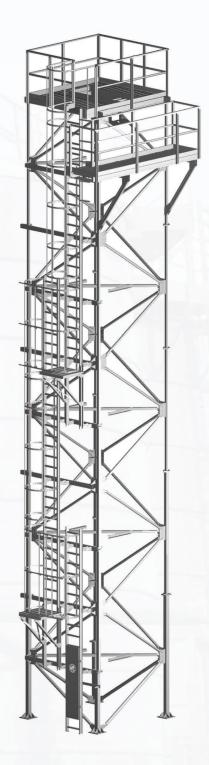
- Support of the bucket elevator is multifunctional support PRS with the appropriate number of conveyor fasteners.
- It is possible to use PRS support to bucket elevators produced by the company BIN with a height of up to 12,8m.
- Maintenance of the bucket elevator fixed to the support can be provided by the maintenance platform model PK250-PLATFORM. The platform is equipped with the ladder.

model of PRS support	model of PK250 bucket elevator	
PRS-7M	PK250-8.6	
PRS-8M	PK250-10.0	
PRS-9M	PK250-11.4	
PRS-10M	PK250-12.8	

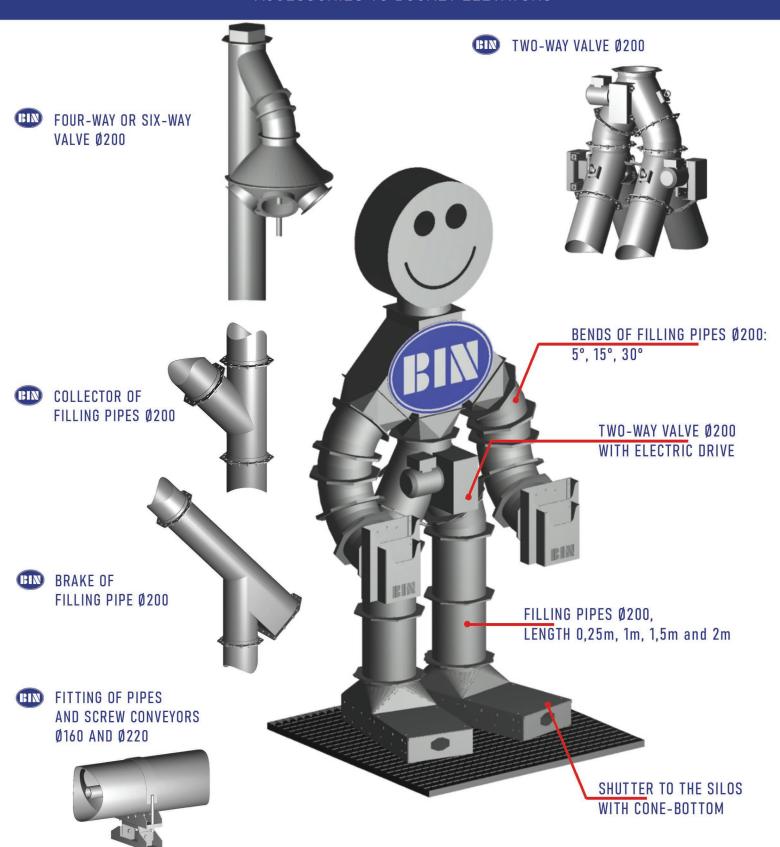
# **BUCKET ELEVATOR SUPPORT TOWER**

- The tower is used to support a bucket elevator.
- The support tower is equipped with two platforms and the ladder with the safety cage. The top platform enables maintenance of the bucket elevator head. The bottom platform allows access to the valves and filling pipes.
- The heights of the support towers are adjusted to the heights of standard bucket elevators manufactured by the company BIN.

model of the tower	total height of the tower	model of the elevator
WPK-1-12.8	14,1 m	PK250-14.3
WPK-1-14.3	15,5 m	PK250-15.7
WPK-1-15.7	16,9 m	PK250-17.1
WPK-1-17.1	18,3 m	PK250-18.6
WPK-1-18.5	19,8 m	PK250-20.0
WPK-1-20.0	21,2 m	PK250-21.4
WPK-1-21.4	22,6 m	PK250-22.8
WPK-1-22.8	24,0 m	PK250-24.2
WPK-1-24.2	25,5 m	PK250-25.6



# ACCESSORIES TO BUCKET ELEVATORS





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#### **EXPORT DEPARTMENT**



export@bin.agro.pl

FULL LIST OF DISTRIBUTORS AVAILABLE ON THE WEBSITE:

