metkan

Machinery and plant technology

General catalogue

From crushing to palletizing,
at every production stage.

Products and pages

Product families, operating principles and technical selection data. Click a product name to open its section.

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MCK Hammer crusher



The MCK series reduces low- and medium-hardness materials using hammers on a high-speed rotor. Grate selection, feed arrangement and rotor operating conditions are assessed together with the target product size.

APPLICATIONS

Limestone and aggregates · Coal preparation · Suitable mineral and recycling feedstocks

Operation and maintenance.



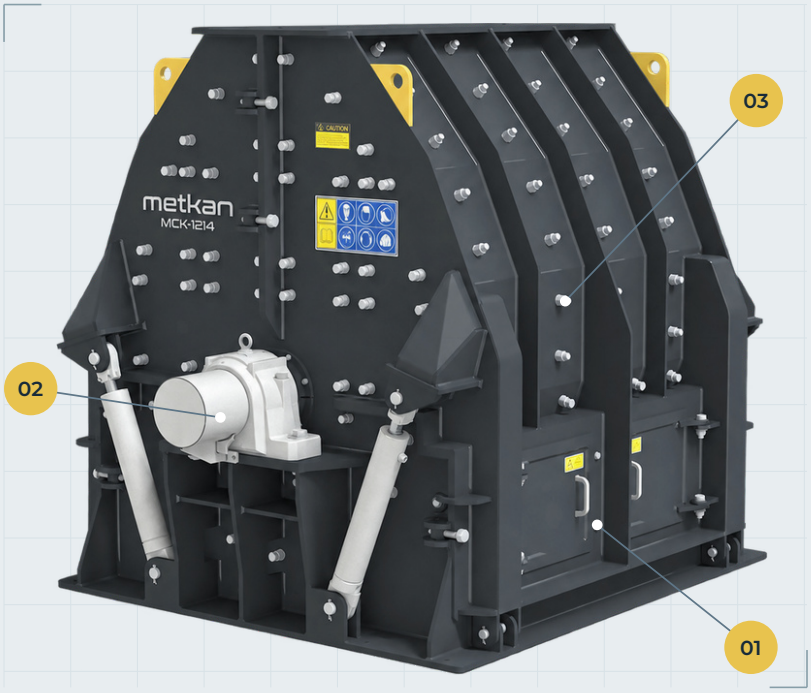
Operating principle diagram. Not to scale; not a manufacturing drawing.

Feeding. Material enters the crushing zone through the feed opening. Consistent feeding supports stable operation.

Impact. Hammers on the high-speed rotor transfer impact energy to the material and reduce its size.

Grate discharge. Grate opening affects product size and discharge; it is selected with rotor operating conditions and feed characteristics.

Machine details



01 **Housing covers**

Access to internal areas for maintenance and inspection.

02 **Bearings**

Part of the periodic inspection and lubrication plan.

03 **Connections**

Removable connections and visible inspection points.

Wear parts

Hammers, liners and grates are replaceable. Parts are selected for the material and operating conditions.

Maintenance space

Cover movement, component removal paths and lifting access are planned with the machine layout.

Technical data.

Capacity alone is not enough. Compare rotor size, feed opening, power and installation conditions together.

Parameter		MCK-1010	MCK-1012	MCK-1214
Capacity	t/h	**25-75**	**40-100**	**50-150**
Motor power	kW	**75-110**	**90-132**	**132-160**
Rotor diameter	mm	**1000**	**1000**	**1200**
Rotor width	mm	**1000**	**1200**	**1400**
Feed opening	mm	**1020 × 240**	**1220 × 240**	**1420 × 320**
Weight	kg	**6200**	**7600**	**9500**

SELECTION CONDITIONS

01 Capacities are approximate at a bulk density of 1.6 t/m³. They vary with size distribution, moisture, friability, rotor speed, installed power and circuit design.

02 Weights exclude the drive system, support legs, maintenance platform and inlet/outlet chutes.

03 Feed opening dimensions do not specify the maximum permissible lump size. Maximum feed size is determined separately for the material and operating conditions.

Ranges support preliminary selection. The final choice is verified against your material and required product.

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MCS Circular Vibrating Screen



Circular vibration for classifying aggregate, sand, coal, and granulated materials. Select the screening area and number of decks to suit your process.

APPLICATIONS

Aggregates and sand · Granular materials · Process lines

Operation and maintenance.

From the screening surface and drive system to the feed arrangement and discharge openings, every component serves the same goal: separating material into the required fractions.

01

Feeding

Material is distributed evenly across the screening surface.

02

Classification

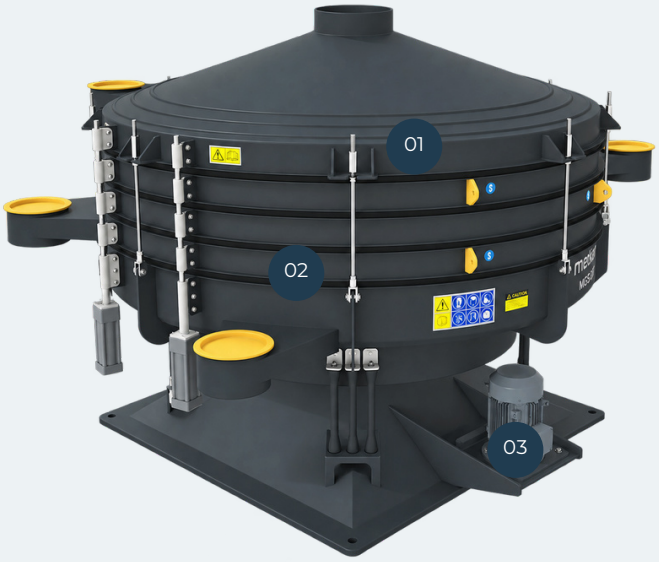
Vibration separates material according to the screen aperture size.

03

Fraction discharge

The separated products move through their respective outlets to the next process step.

MACHINE DETAILS



01 Screening surface

The screen aperture and screening surface are selected according to the target particle size and material properties.

02 Deck arrangement

The number of decks is determined alongside the desired number of products and screening capacity.

03 Drive

Vibration, feed distribution and the screening surface work together. Check the fasteners and bearings during maintenance.

APPLICATIONS

Aggregates and sand

Classification into the target particle size ranges.

Granular materials

Selection of screen media and decks to suit the particle size distribution.

Process lines

Coordinated planning of feed, screening and recirculation.

Technical data.

Evaluate model selection together with material properties, target capacity and plant layout.

Technical specification	MCS-1600	MCS-2000	MCS-2600
Screen diameter	1580 mm	1880 mm	2580 mm
Screening area (per deck)	1.8 m^2	2.6 m^2	5.3 m^2
Required floor area	2.5 m^2	3.6 m^2	6.8 m^2
Power	4 kW	4 kW	5.5 kW
Dimensions	Height / Weight	Height / Weight	Height / Weight
1 deck	1450 mm / 840 kg	1470 mm / 950 kg	1500 mm / 1550 kg
2 decks	1630 mm / 920 kg	1650 mm / 1030 kg	1680 mm / 1680 kg
3 decks	1810 mm / 980 kg	1830 mm / 1090 kg	1860 mm / 1840 kg
4 decks	1990 mm / 1050 kg	2010 mm / 1150 kg	2040 mm / 2000 kg
5 decks	2170 mm / 1170 kg	2190 mm / 1270 kg	2220 mm / 2150 kg

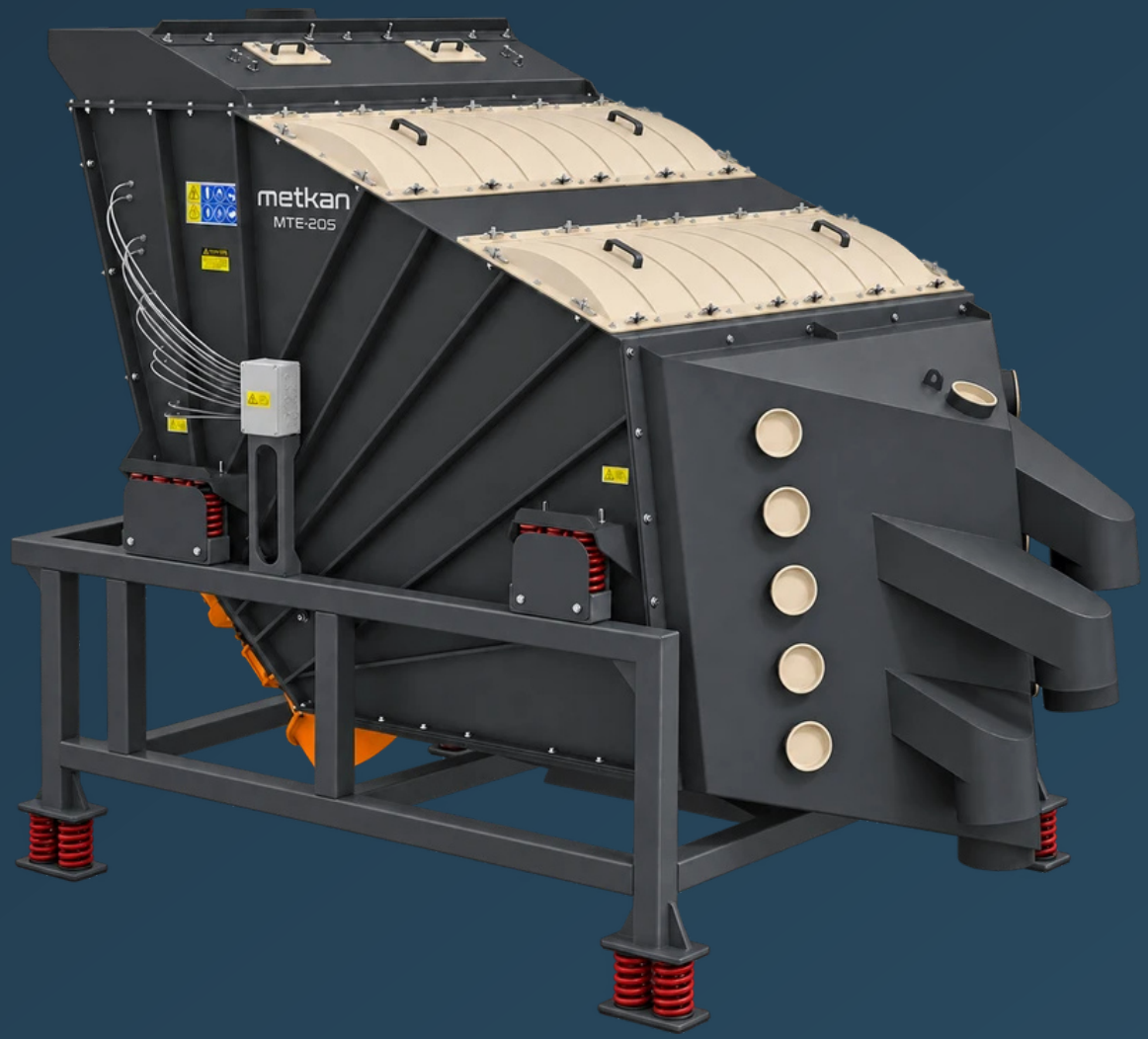
Selection notes

All information in this table is for informational purposes only; it is non-binding and subject to change without prior notice.

Technical data support preliminary selection. Final capacity, power, dimensions and supply scope are defined in the technical quotation.

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MTE Vibrating Screen



Multi-deck vibrating screening for fine material applications. Five sizes, each available with 1–5 decks, to suit your material.

APPLICATIONS

Calcite and mineral screening · Quartz sand and dry mortar · Closed-circuit classification

Operation and maintenance.

The Metkan MTE vibrating screen is designed to classify dry fine-grained and granular materials. This fine screening range is selected according to the target fractions in mineral applications such as calcite and quartz sand.

01

Feeding

Material is distributed evenly across the screening surface.

02

Classification

Vibratory motion moves the material across the screen surfaces. Feed distribution, drive settings and support structure are assessed for the process conditions.

03

Fraction discharge

The separated products move through their respective outlets to the next process step.

MACHINE DETAILS



01 Multi-deck screening

Each size is available with 1, 2, 3, 4 or 5 decks. Screen apertures and outlets are planned together for the required product fractions.

02 Vibratory drive

Vibratory motion moves the material across the screen surfaces. Feed distribution, drive settings and support structure are assessed for the process conditions.

APPLICATIONS

Calcite and mineral screening

Classification into target size fractions after crushing and grinding.

Quartz sand and dry mortar

Preparation of sand fractions for the recipe and separation of fines.

Closed-circuit classification

Separation of the finished fraction and return of oversize material to crushing or grinding.

Technical data.

Evaluate model selection together with material properties, target capacity and plant layout.

Technical specification	1000 × 2400	1500 × 2400	2000 × 2400	2000 × 3600	3000 × 3600
Width mm	1000	1500	2000	2000	3000
Length mm	2400	2400	2400	3600	3600
Deck options	1 / 2 / 3 / 4 / 5	1 / 2 / 3 / 4 / 5	1 / 2 / 3 / 4 / 5	1 / 2 / 3 / 4 / 5	1 / 2 / 3 / 4 / 5
Total motor power	4.4 - 7.8 kW	4.4 - 8 kW	8.5 - 15 kW	16.8 - 20 kW	22 - 31 kW
Machine weight kg	2 200 - 3 100	2 400 - 3 900	4 200 - 6 000	6 500 - 9 000	10 000 - 14 000

Selection notes

Dimensions are shown as width × length. Each size can be independently configured with 1, 2, 3, 4 or 5 decks.

Power ranges are the combined catalogue input power of both motors; calculations use 50 Hz, the 1000 rpm class and a total stroke of 5 mm (±2.5 mm amplitude).

Machine weight includes the motors and support frame, excluding the material load. Values vary with the number of decks and equipment. Final weight is established during project engineering.

The calculation adds a material load of 10% to the vibrating mass. Final power, eccentric setting and stroke are verified using the final mass, spring calculations and measurements under load.

Technical data support preliminary selection. Final capacity, power, dimensions and supply scope are defined in the technical quotation.

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MKM Horizontal Powder Mixer



Homogeneous mixing of powder and granulated materials. Horizontal mixing solutions that address the recipe, batch volume, and discharge arrangement together.

APPLICATIONS

Construction chemicals · Powder materials · Production lines

Operation and maintenance.

Mixing volume, formulation and discharge arrangement are all parts of the same process. For the MKM series, selection depends on material behavior and batch requirements as well as vessel volume.

01

Metered feeding

The materials in the formulation are fed into the mixer in the specified quantities.

02

Mixing

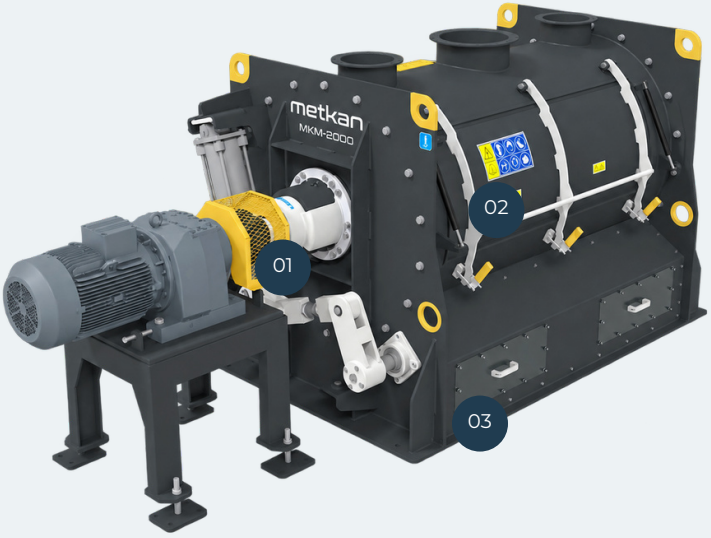
The target mix is prepared at a suitable fill level and for a suitable mixing time.

03

Discharge

The mix is transferred to the next production or packaging step.

MACHINE DETAILS



01 **Mixing**

Fill level, mixing time and material properties are considered together.

02 **Batch volume**

Net volume and working capacity are different. Selection is based on the target batch size.

03 **Discharge**

The discharge arrangement and line connections are planned around the production sequence and cleaning requirements.

APPLICATIONS

Construction chemicals

Dry mix production and formulation based processes.

Powder materials

Batch preparation based on material properties.

Production lines

Dosing, mixing, and end-of-line integration.

Technical data.

Evaluate model selection together with material properties, target capacity and plant layout.

Technical specification	MKM-0800	MKM-1200	MKM-1600	MKM-2000	MKM-3000
Motor power kW	15 - 30	15 - 37	18,5 - 45	22 - 55	30 - 55
Net volume L	800	1200	1600	2000	3000
Working volume L (min–max)	200 - 550	300 - 850	500 - 1150	550 - 1400	800 - 2100
*Weight kg	1400	2200	2350	2600	3400

Selection notes

All information in this table is for informational purposes only; it is non-binding and subject to change without prior notice. *Weights shown do not include the drive motor, support legs, or maintenance platform.

Technical data support preliminary selection. Final capacity, power, dimensions and supply scope are defined in the technical quotation.

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MRP Robotic Palletizing



Robotic palletizing planned around package specifications, line speed, and pallet arrangement. A controlled transition from the production line to dispatch.

APPLICATIONS

Bag palletizing · Case palletizing · End-of-line automation

Operation and maintenance.

Every movement, from gripping the package to placing it on the pallet, impacts the rest of the line. The robot, gripper, and pallet pattern are planned in conjunction with production requirements.

01

Package preparation

Products are positioned correctly at the end of the line.

02

Gripping and transfer

The robot picks up the package using the gripper and moves it to the palletizing area.

03

Placement

Packages are stacked according to the designated layer and arrangement pattern.

MACHINE DETAILS



01 **Gripper**

Package weight, dimensions, and surface characteristics are key inputs for gripper selection.

02 **Pallet pattern**

Pallet dimensions, layer structure, and stacking pattern are determined based on product specifications.

03 **Line integration**

Conveyor flow, robot reach, and the working area are evaluated within a unified layout.

APPLICATIONS

Bag palletizing

Gripper and stacking pattern tailored to package specifications.

Case palletizing

Assessment based on dimensions, weight, and pallet pattern.

End-of-line automation

Integrated planning of conveyor and palletizing processes.

Technical data.

Evaluate model selection together with material properties, target capacity and plant layout.

Technical specification	MRP-01	MRP-02
Gripper type	Single gripper	Double gripper
Payload kg	≤ 50	Project-specific
Cycle time s	5-7	7–9
Palletising rate bags/h	600-800	800-1000
Reach mm	2400	2600
Pallet type	Euro / ISO	Euro / ISO
Layer pattern	Column / Interlocking	Column / Interlocking

Selection notes

The specified capacities and cycle times are theoretical and approximate values; actual performance may vary depending on parameters such as bag weight and fill rate, bag type and surface structure (kraft, PP, valved, open-mouth), product flowability and bag shape stability, line feed speed, conveyor layout and line geometry, robot reach, pallet pattern type, number of layers and layer pressing requirements, and gripper type (vacuum/mechanical).

Technical data support preliminary selection. Final capacity, power, dimensions and supply scope are defined in the technical quotation.

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MKE Bucket Elevators



Vertical conveying for powder and granulated materials. Bucket design, drive, and housing arrangement are evaluated according to the material's properties.

APPLICATIONS

Powder and granules · Silo feeding · Plant connections

Operation and maintenance.

Every component—from bucket geometry to the drive system, and from the infeed zone to the discharge point—is part of the vertical conveying system. The MKE series is selected based on material and height requirements.

01

Feeding

Material is fed into the bottom inlet of the elevator.

02

Vertical conveying

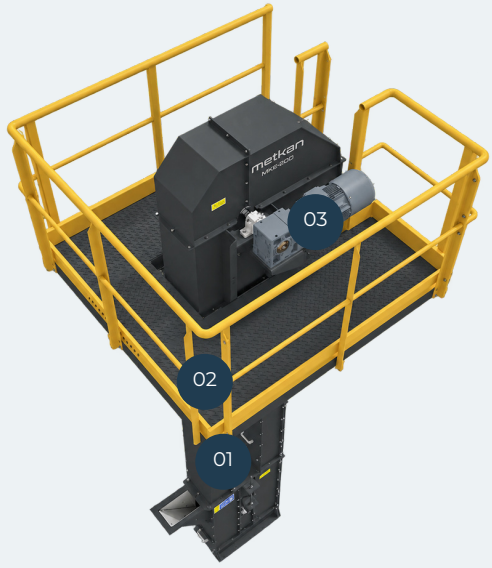
Buckets transport the material to the designated height.

03

Discharge

Material is transferred from the top outlet to the next process step.

MACHINE DETAILS



01 **Bucket selection**

Bucket volume, fill level, and speed collectively determine capacity.

02 **Vertical structure**

Casing height is determined based on the facility layout and connection points.

03 **Drive and maintenance**

Tensioning, bearings, and bucket connections are key inspection points in the maintenance plan.

APPLICATIONS

Powder and granules

Bucket and speed selection based on flow characteristics.

Silo feeding

Vertical conveying and transfer to an upper level.

Plant connections

Integration of equipment at different elevations.

Technical data.

Evaluate model selection together with material properties, target capacity and plant layout.

Technical specification	MKE-100	MKE-150	MKE-200	MKE-250	MKE-300	MKE-350
Bucket size	100	150	200	250	300	350
Casing cross-section mm	190 x 170	240 x 200	300 x 250	340 x 280	430 x 340	530 x 340
Belt width mm	120	200	250	300	350	400
Belt speed m/s	1,5	1,6	1,6	1,6	1,6	2
Pulley diameter mm	330	420	420	520	520	620
Conveying capacity m^3/h	8	22	38	71	125	148
Bucket volume L	0,38	0,87	1,79	3,18	6,7	8,6
Bucket weight kg	0,22	0,5	0,86	1,65	2,54	3,65

Selection notes

Technical data support preliminary selection. Final capacity, power, dimensions and supply scope are defined in the technical quotation.

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MSC Screw Conveyors



Screw conveying for powder, granulated, and fine-grained materials. A design suited to the line length, incline, and material behavior.

APPLICATIONS

Powder materials · Granular products · Metered feeding

Operation and maintenance.

Screw diameter, pitch, rotational speed, and casing are all components of the conveying operation. In the MSC series, capacity depends not only on diameter but also on material flow, inclination, and line length.

01

Feeding

Material is fed into the screw inlet in a controlled manner.

02

Screw conveying

The rotating screw advances the material along the housing.

03

Discharge

Material is transferred to the next piece of equipment or storage point.

MACHINE DETAILS



01 **Screw structure**

Diameter, pitch, and rotational speed are evaluated in conjunction with fill level and material behavior.

02 **Enclosed housing**

Selection of tubular or U-shaped housing is based on product and maintenance requirements.

03 **Drive**

Conveying capacity, length, inclination, and friction collectively determine the motor selection.

APPLICATIONS

Powder materials

Controlled conveying within an enclosed housing.

Granular products

Selection suited to flow and abrasion characteristics.

Metered feeding

Feeding arrangement compatible with the control system.

Technical data.

Evaluate model selection together with material properties, target capacity and plant layout.

Technical specification	MSC-160	MSC-200	MSC-250	MSC-300	MSC-350	MSC-400
Screw diameter mm	160	200	250	300	350	400
Screw pitch mm	160	200	250	300	350	400
Tube / U-trough section	Ø168 tube / 170 U-trough	Ø219 tube / 220 U-trough	Ø273 tube / 275 U-trough	Ø324 tube / 325 U-trough	Ø377 tube / 380 U-trough	Ø426 tube / 430 U-trough
Motor power kW	2,2	3	4	5,5	7,5	11
Rotational speed rpm	90	90	90	90	90	70
Theoretical capacity m^3/h	6	10	18	28	40	50
Wall thickness mm	4	4	5	5	6	6
Total weight* kg	180	230	310	420	520	650

Selection notes

*Weight: Based on a length of ~6 m, standard gear-motor drive, and dual-end bearing support.

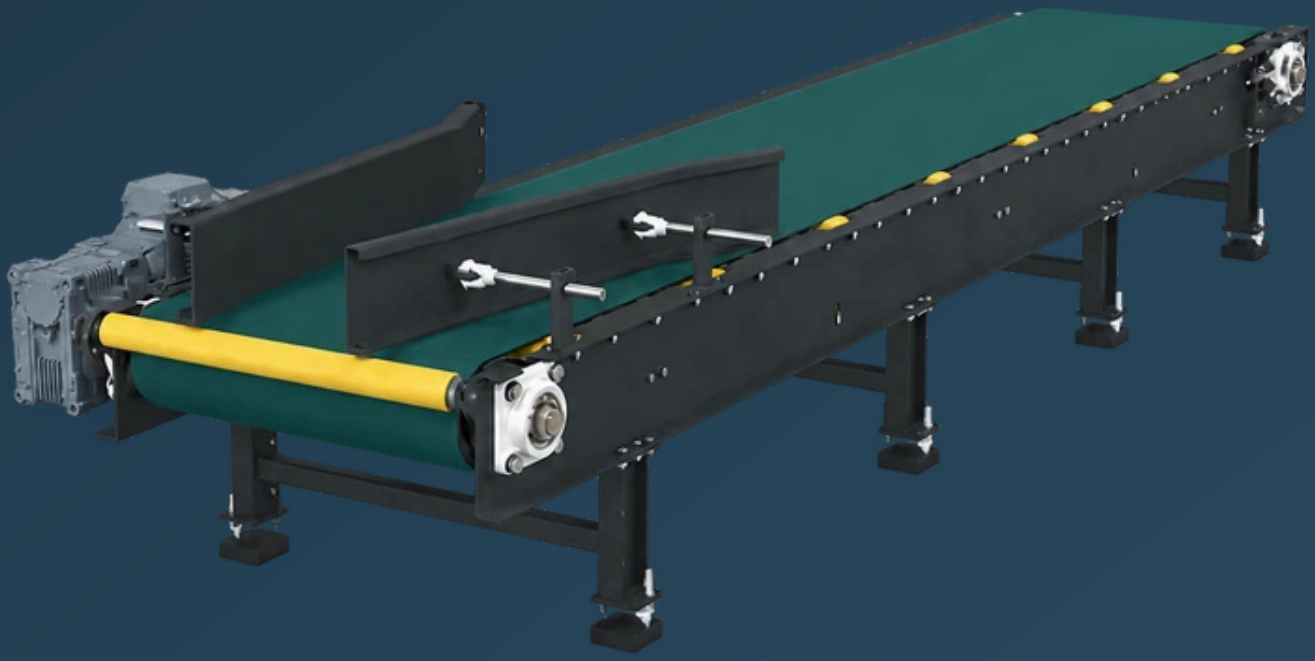
Calculations are based on calcite ($CaCO_3$) with a density of 1.6 tons/m^3.

The stated capacity values are theoretical; actual conveying capacity may vary depending on material particle size and distribution, moisture content, fill rate, screw speed (rpm), pitch-to-diameter ratio, inclination angle, conveying length, wear condition, and surface roughness.

Technical data support preliminary selection. Final capacity, power, dimensions and supply scope are defined in the technical quotation.

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Bag Conveyor



Transfers filled bags from the filling line to weighing, inspection or palletizing stations in a controlled flow.

APPLICATIONS

Bagged product lines · Post-filling inspection · Palletizing preparation

Operation and maintenance.

Transfers filled bags from the filling line to weighing, inspection or palletizing stations in a controlled flow.

01

Define the product

Bag dimensions, weight and product behaviour are the starting point for selection.

02

Plan the flow

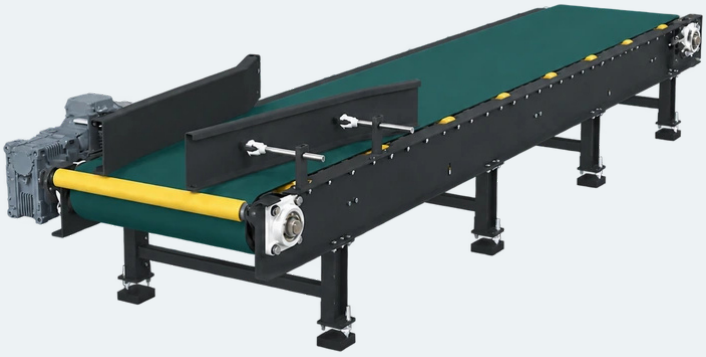
Assess inlet, outlet and transfer points with the other equipment.

03

Coordinate control

Match the conveyor task to line speed and automation requirements.

MACHINE DETAILS



01 Belt width matched to bag dimensions

02 Drive matched to line speed

03 Length and height suited to the layout

Line integration

Belt width, conveyor length, height, drive and control options are determined by bag properties and line layout. This catalogue does not specify fixed dimensions or a guaranteed capacity.

Selection for your line.

Transfers filled bags from the filling line to weighing, inspection or palletizing stations in a controlled flow.

Selection input	Information assessed together
Bag	Bag type, dimensions, weight and surface properties.
Product	Product behaviour inside the bag and bag shape stability.
Line capacity	Bags per hour, line speed and operating pattern.
Layout	Inlet and outlet heights, available space and transfer points.
Control	Signal coordination with filling, weighing, rejection and palletizing equipment.
Maintenance	Access areas, cleaning and periodic inspection requirements.

Selection notes

Belt width, conveyor length, height, drive and control options are determined by bag properties and line layout. This catalogue does not specify fixed dimensions or a guaranteed capacity.

Bag Flattening Conveyor



Shapes the bag after filling to prepare a more even and stable package for palletizing.

APPLICATIONS

Bagged product lines · Post-filling inspection · Palletizing preparation

Operation and maintenance.

Shapes the bag after filling to prepare a more even and stable package for palletizing.

01

Define the product

Bag dimensions, weight and product behaviour are the starting point for selection.

02

Plan the flow

Assess inlet, outlet and transfer points with the other equipment.

03

Coordinate control

Match the conveyor task to line speed and automation requirements.

MACHINE DETAILS



01 Adjustment to bag dimensions

02 Adjustable pressing mechanism

03 Synchronized with filling and palletizing lines

Line integration

Belt width, conveyor length, height, drive and control options are determined by bag properties and line layout. This catalogue does not specify fixed dimensions or a guaranteed capacity.

Selection for your line.

Shapes the bag after filling to prepare a more even and stable package for palletizing.

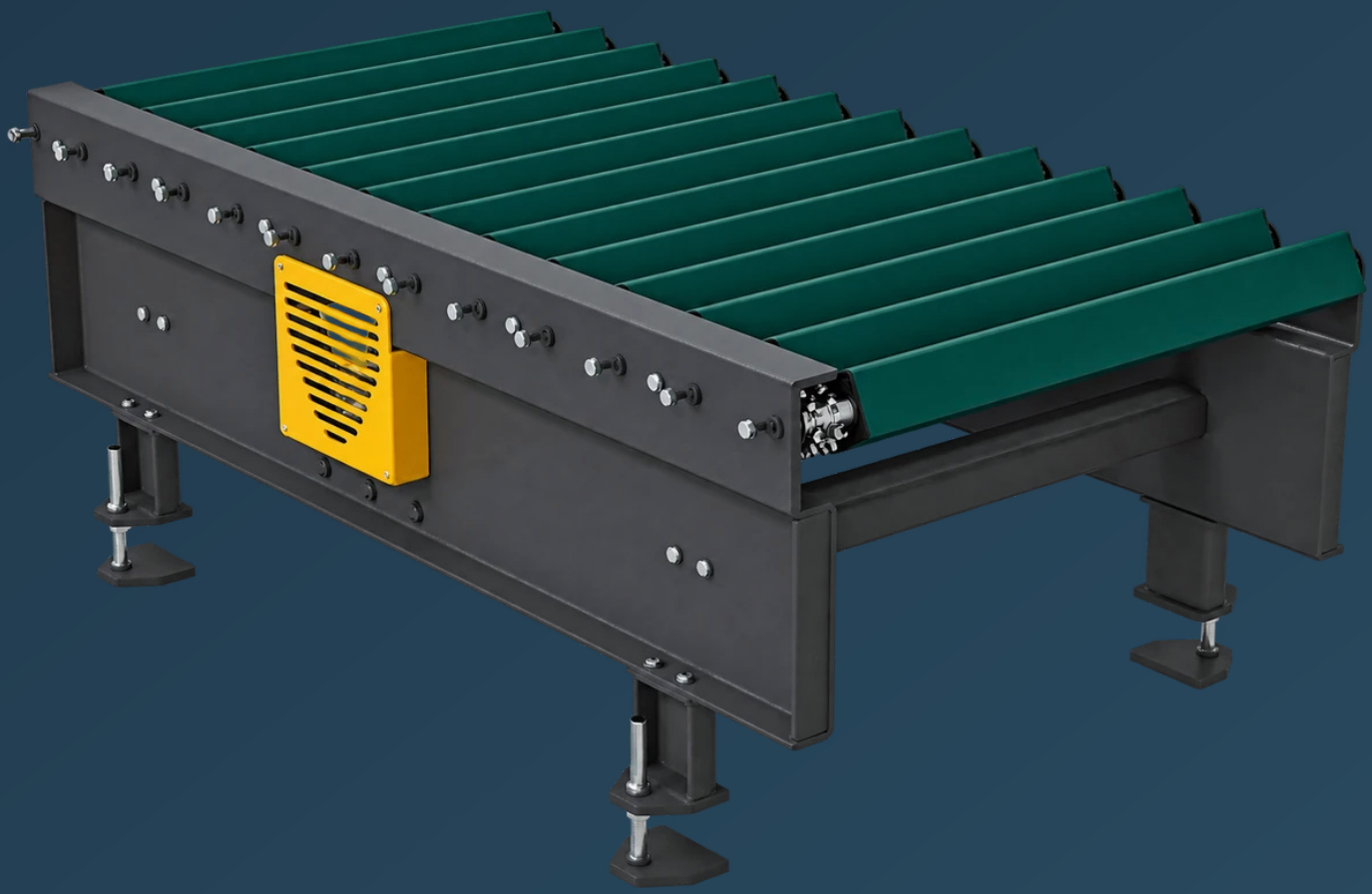
Selection input	Information assessed together
Bag	Bag type, dimensions, weight and surface properties.
Product	Product behaviour inside the bag and bag shape stability.
Line capacity	Bags per hour, line speed and operating pattern.
Layout	Inlet and outlet heights, available space and transfer points.
Control	Signal coordination with filling, weighing, rejection and palletizing equipment.
Maintenance	Access areas, cleaning and periodic inspection requirements.

Selection notes

Belt width, conveyor length, height, drive and control options are determined by bag properties and line layout. This catalogue does not specify fixed dimensions or a guaranteed capacity.

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Vibrating Conveyor



Uses the motion generated by square rollers to help distribute and settle material inside the bag.

APPLICATIONS

Bagged product lines · Post-filling inspection · Palletizing preparation

Operation and maintenance.

Uses the motion generated by square rollers to help distribute and settle material inside the bag.

01

Define the product

Bag dimensions, weight and product behaviour are the starting point for selection.

02

Plan the flow

Assess inlet, outlet and transfer points with the other equipment.

03

Coordinate control

Match the conveyor task to line speed and automation requirements.

MACHINE DETAILS



01 Square roller system

02 Vibration adjustment to suit the product

03 Bag stabilization before palletizing

Line integration

Belt width, conveyor length, height, drive and control options are determined by bag properties and line layout. This catalogue does not specify fixed dimensions or a guaranteed capacity.

Selection for your line.

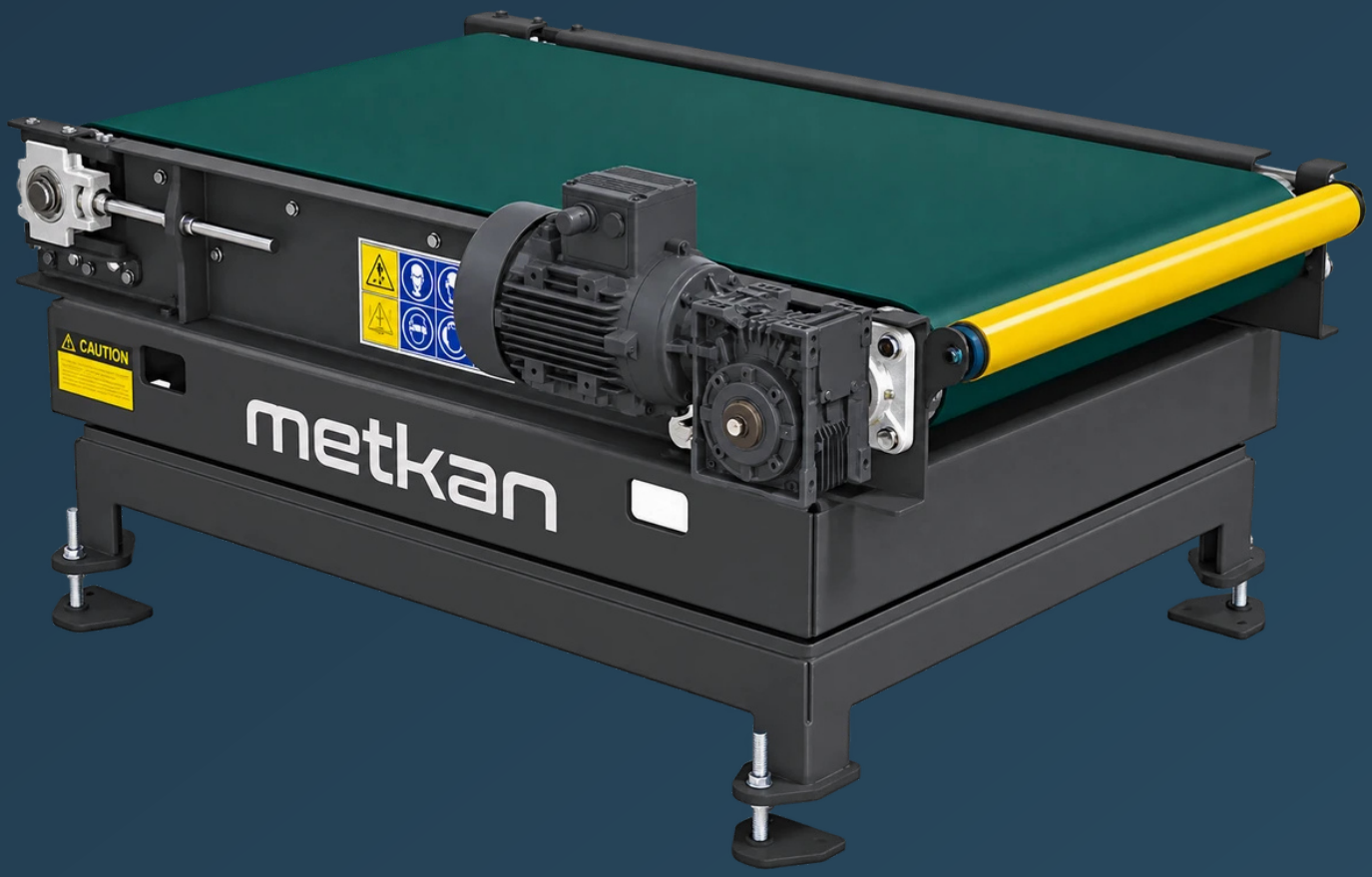
Uses the motion generated by square rollers to help distribute and settle material inside the bag.

Selection input	Information assessed together
Bag	Bag type, dimensions, weight and surface properties.
Product	Product behaviour inside the bag and bag shape stability.
Line capacity	Bags per hour, line speed and operating pattern.
Layout	Inlet and outlet heights, available space and transfer points.
Control	Signal coordination with filling, weighing, rejection and palletizing equipment.
Maintenance	Access areas, cleaning and periodic inspection requirements.

Selection notes

Belt width, conveyor length, height, drive and control options are determined by bag properties and line layout. This catalogue does not specify fixed dimensions or a guaranteed capacity.

Weighing Conveyor



Checks bag weight after filling. The measurement is used by the line control and rejection system.

APPLICATIONS

Bagged product lines · Post-filling inspection · Palletizing preparation

Operation and maintenance.

Checks bag weight after filling. The measurement is used by the line control and rejection system.

01

Define the product

Bag dimensions, weight and product behaviour are the starting point for selection.

02

Plan the flow

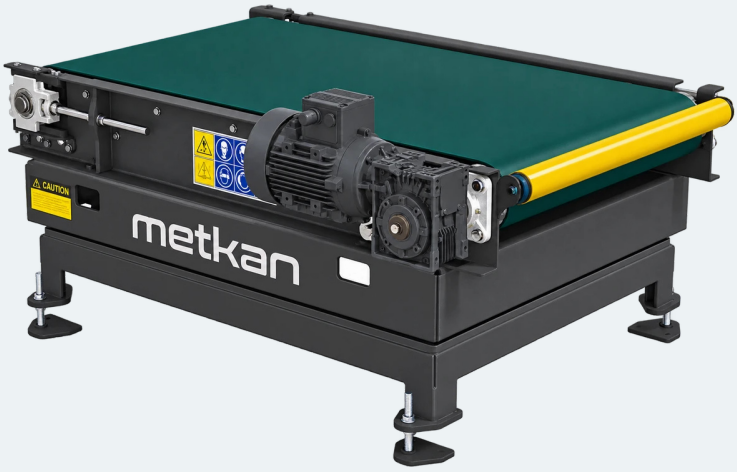
Assess inlet, outlet and transfer points with the other equipment.

03

Coordinate control

Match the conveyor task to line speed and automation requirements.

MACHINE DETAILS



01 Weight checking with load cells

02 Data exchange with the control system

03 Designed for calibration

Line integration

Belt width, conveyor length, height, drive and control options are determined by bag properties and line layout. This catalogue does not specify fixed dimensions or a guaranteed capacity.

Selection for your line.

Checks bag weight after filling. The measurement is used by the line control and rejection system.

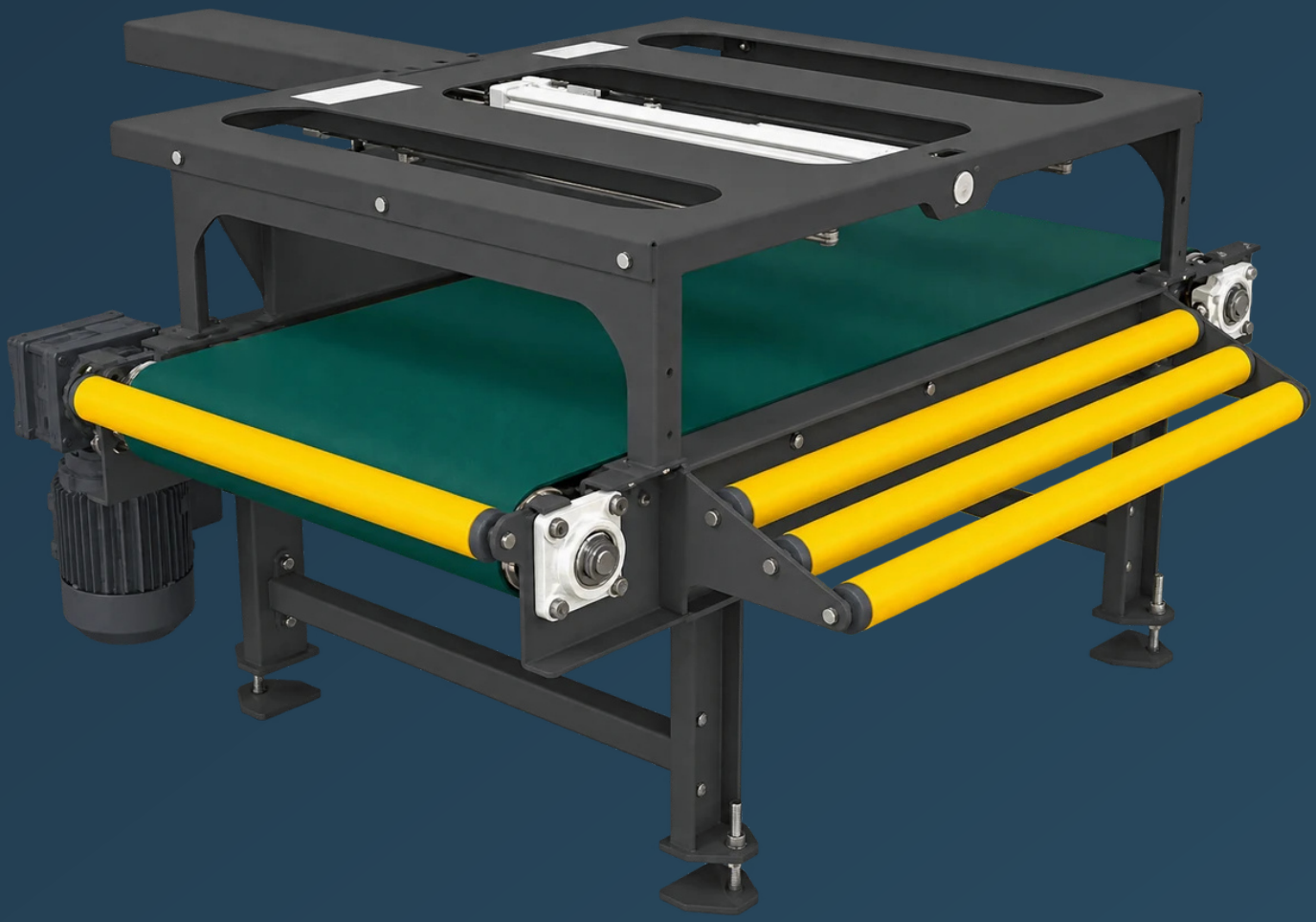
Selection input	Information assessed together
Bag	Bag type, dimensions, weight and surface properties.
Product	Product behaviour inside the bag and bag shape stability.
Line capacity	Bags per hour, line speed and operating pattern.
Layout	Inlet and outlet heights, available space and transfer points.
Control	Signal coordination with filling, weighing, rejection and palletizing equipment.
Maintenance	Access areas, cleaning and periodic inspection requirements.

Selection notes

Belt width, conveyor length, height, drive and control options are determined by bag properties and line layout. This catalogue does not specify fixed dimensions or a guaranteed capacity.

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Reject Conveyor



Diverts bags that fail weight or quality checks away from the main production flow.

APPLICATIONS

Bagged product lines · Post-filling inspection · Palletizing preparation

Operation and maintenance.

Diverts bags that fail weight or quality checks away from the main production flow.

01

Define the product

Bag dimensions, weight and product behaviour are the starting point for selection.

02

Plan the flow

Assess inlet, outlet and transfer points with the other equipment.

03

Coordinate control

Match the conveyor task to line speed and automation requirements.

MACHINE DETAILS



01 Rejection triggered by a control signal

02 Pneumatic or mechanical mechanism to suit the application

03 Synchronized with the weighing conveyor

Line integration

Belt width, conveyor length, height, drive and control options are determined by bag properties and line layout. This catalogue does not specify fixed dimensions or a guaranteed capacity.

Selection for your line.

Diverts bags that fail weight or quality checks away from the main production flow.

Selection input	Information assessed together
Bag	Bag type, dimensions, weight and surface properties.
Product	Product behaviour inside the bag and bag shape stability.
Line capacity	Bags per hour, line speed and operating pattern.
Layout	Inlet and outlet heights, available space and transfer points.
Control	Signal coordination with filling, weighing, rejection and palletizing equipment.
Maintenance	Access areas, cleaning and periodic inspection requirements.

Selection notes

Belt width, conveyor length, height, drive and control options are determined by bag properties and line layout. This catalogue does not specify fixed dimensions or a guaranteed capacity.

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From machine to plant. Engineering in every detail.

Metkan develops machinery and plant solutions for construction chemicals, minerals and aggregates. At our manufacturing centre in Elbistan, we consider equipment together with feeding, conveying and production flow.

Four inputs for selection

01 **Material and product**

Material properties; for bagged products, bag type, dimensions and weight.

02 **Process target**

Inlet conditions, required product and the next production stage.

03 **Production target**

Target hourly capacity, operating hours and production pattern.

04 **Installation**

Inlet/outlet levels, connections, drive and maintenance access.

Projects and sales

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Manufacturing centre

Çiçek OSB Mahallesi 1. Sokak No:11
Elbistan / Kahramanmaraş, Türkiye

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Catalogue data support preliminary selection. Final capacity, power, dimensions and supply scope are defined in the technical quotation. Images represent the product family; configurations may vary.