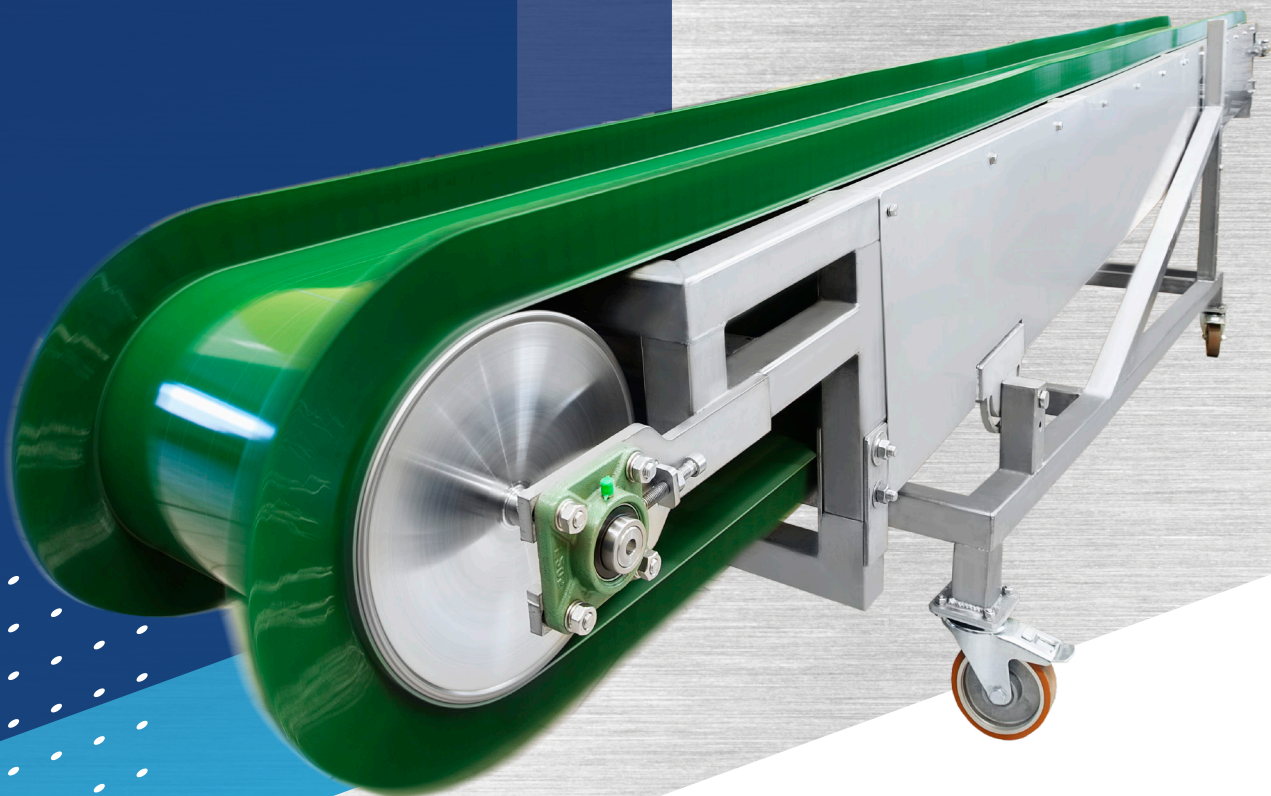


# Conveyors



Catalogue  
sheet

**MIVALT**



## MP-SC Screw Conveyor



### Product description

The Screw Conveyor, designed for the efficient transport of solid cake from MP-DW series dewatering machines, offers enhanced capabilities over MP-BC series belt conveyors, notably in its ability to move sludge to greater elevations. Its compact cross-section provides a space-saving advantage compared to the broader design of belt conveyors.

Constructed primarily from DIN1.4301 (AISI304) stainless steel, the conveyor's durability is assured. The screw shaft, positioned within a tube, requires no lining material, eliminating the need for routine replacement of wear parts.

The conveyor is powered by an SEW gear-motor positioned at the conveyor's upper end, ensuring superior efficiency over traditional worm-type gear motors. The shaft's installation in a ball bearing with permanent lubrication at the conveyor's lower end, coupled with a dry sliding bearing mid-shaft,

guarantees minimal need for the maintenance, consistent gap between the screw shaft and tube. A drainage outlet at the conveyor's base allows for the removal of excess water, addressing the potential for wet solid-cake conditions.

For maintenance and cleaning, service access is conveniently located at top of the tube. Installation flexibility is provided by two support consoles for floor anchoring, with the conveyor's angle adjustable via alternative screw placement on the upper console.

The conveyor is available for customization as a mobile unit on wheels or as a rotary unit, catering to diverse operational requirements. For environments experiencing low temperatures (below 4°C or 39°F), the outdoor segment of the conveyor can be optionally outfitted with a heating cable and insulation to ensure uninterrupted functionality.

### Parameters

|                              | MP-SC-3.5                            | MP-SC-5      | MP-SC-6      |
|------------------------------|--------------------------------------|--------------|--------------|
| Motor                        | 3x230/400 V, 50/60 Hz, 0.55 kW, IP55 |              |              |
| Screw RPM                    | 39 [min-1] (50 Hz)                   |              |              |
| Screw shaft diameter         | 200 [mm]                             |              |              |
| Max. capacity                | 2.5 [m3/h]                           |              |              |
| Ambient temperature          | +4 to +60 °C (without heating)       |              |              |
| Material                     | Stainless steel DIN 1.4301 / AISI304 |              |              |
| Max. conveyor angle          | 30 °                                 |              |              |
| Max. width                   | 320 mm                               |              |              |
| Axis length                  | 4180 [mm]                            | 5 480 [mm]   | 6 230 [mm]   |
| Transportation length        | 3 300 [mm]                           | 4 600 [mm]   | 5 600 [mm]   |
| Outlet elevation (angle 30°) | 1 550 [mm]                           | 2 460 [mm]   | 2 950 [mm]   |
| Inlet (LxW)                  | 600x200 [mm]                         | 600x200 [mm] | 600x200 [mm] |
| Outlet (LxW)                 | 200x200 [mm]                         | 200x200 [mm] | 200x200 [mm] |
| Weight                       | 160 kg                               | 200 kg       | 250 kg       |



## MP-BC Belt Conveyor



### Product description

The Belt Conveyor, specifically designed for the transport of sludge cake from the MP-DW dewatering screw press, excels in applications requiring the placement of a dewatering machine within a building while situating sludge transport containers outdoors for optimal handling. This conveyor supports an inclination up to 18 degrees, enabling elevation adjustments without necessitating the dewatering machine's placement above the container.

Featuring a pedestal delivery with lockable wheels, the conveyor's design eliminates the need for permanent ground fixation, offering mobility for varied uses — such as facilitating the use of multiple containers for sludge cake or enabling convenient storage of the conveyor to conserve space post-dewatering.

In contrast to screw conveyors, belt conveyors boast advantages in being lighter, more cost-effective, and more energy-

efficient, with no requirement for winter heating. Additionally, maintenance and servicing are straightforward, and there is no risk of bearing damage from excessively wet sludge cake entering the conveyor.

The belts are equipped with welded waveguides along the sides, ensuring material remains on the belt and preventing side leakage. This design feature addresses common sealing challenges at the belt and frame interface found in other belt conveyor models.

Powered by an SEW Eurodrive gearbox with front transmission for efficient operation, the conveyor's rollers are fitted with roller bearings for smooth movement.

### Parameters

|                         | MP-BC-4   | MP-BC-5  | MP-BC-6  |
|-------------------------|---|----------|----------|
| Electric drive          | 3x230/400 V, 50/60 Hz, 0.12 kW  |          |          |
| Cylinder RPM            | 9.8 [min-1]   |          |          |
| Belt speed              | 140 [mm/s]  |          |          |
| Belt width              | 400 [mm]  |          |          |
| Transportation capacity | 4 [m3/h]  |          |          |
| Belt type               | Polyester fabric with PVC, stabilized, 2 layers, a total thickness of 3 mm, the hardness of the top layer 70 of HSA |          |          |
| Ambient temperature     | -10 up to +80 °C  |          |          |
| Frame material          | Stainless steel DIN 1.4301 / AISI304  |          |          |
| Maximum inclination     | 18 °  |          |          |
| Conveyor width          | 916 mm  |          |          |
| Conveyor height (0 °)   | 1150 mm   | 1150 mm  | 1150 mm  |
| Conveyor length (0 °)   | 4 000 mm  | 5 500 mm | 6 500 mm |
| Weight                  | 280 kg  | 340 kg   | 390 kg   |



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