

Application

The WBF weigh belt feeder allows ensuring the continuous bulk product dosing.

This dosing infrastructure ensures the joint extraction and weighing of any gravity flowing product through a feeding hopper provided.

The WBF has been specially designed for use in the cement, steel, mineral, fertilizer production, agri-industry and other activity sectors using dosing, single or double regulation dosing.

This doser is equipped with a continuous weighing scale integrated in the conveyor and a belt speed measuring device. These measurements are used to calculate the flow rate with an accuracy from +/- 0.25 % to +/- 1.0 % depending on the application and product behaviour.

The standard model ranges extend from 1 t/h to 2000 t/h.

This WBF doser can be used to provide with constant or variable set point single product dosing, or a multi-product dosing with a global set point and proportions.

Application

The WBF belt feeder is used in the continuous dosing process for free flowing dry granular products at fixed or variable speed as well as limestone, gypsum, clay, clinker, various ores, coal, coke, pellets, additives of various kinds, etc.

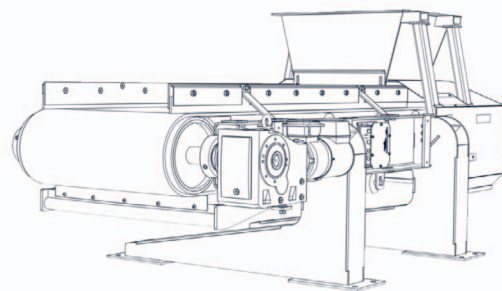
It can be associated with other dosers of various types to make a recipe. In this case the doser can be controlled by a proportional value of the global line flow rate target.

This belt feeder can be connected to our I400 WBF regulation controller (data sheet 04-32-83-1 FT) or our CI 400 WBF stand alone power cabinet .

General presentation

The WBF doser consists of the following parts:

- A fabricated sheet metal frame. Its cantilever shape allows replacing the belt very rapidly. This frame can be installed on a metal structure or a concrete floor,
- Two folded sheet metal stringers carrying the flat roller stations forming the belt conveyor,
- A measuring device specially designed for transmitting the weight value of the product passing on the belt. It includes a specific bracket assembly resting on two strain gauge load cells with their mechanical assembly environments,
- A SET OF mine adjustable roller brackets allow aligning the rollers in the weighing area,
- A mine type carrying and return rollers.
- A dual rafters rubber coated barreled control drum mounted on cast iron ball bearings,
- A constant speed drive geared motor unit consisting of an asynchronous motor and floating mounted hollow shaft gearbox.
- A smooth barreled return drum mounted on ball bearings.
- A smooth synthetic textile carcass rubber belt with anti-abrasion coating.
- A screw belt tension adjustment device placed at the tail of the conveyor. The belt release device was designed to facilitate the quick belt change operation,
- An external underlying scraper under the drive drum,
- An optional tangential scraper at the product outflow,
- A V-shaped internal scraper, on the belt return strand,
- A belt travel speed measuring device mounted on the driven drum,
- A standard test weights support, incorporated into the WBF structure, allows making easy calibration on the using site.
- A blocking device of the integrated weighing frame for transportation and on-site mechanical installation,
- 4 lifting rings.



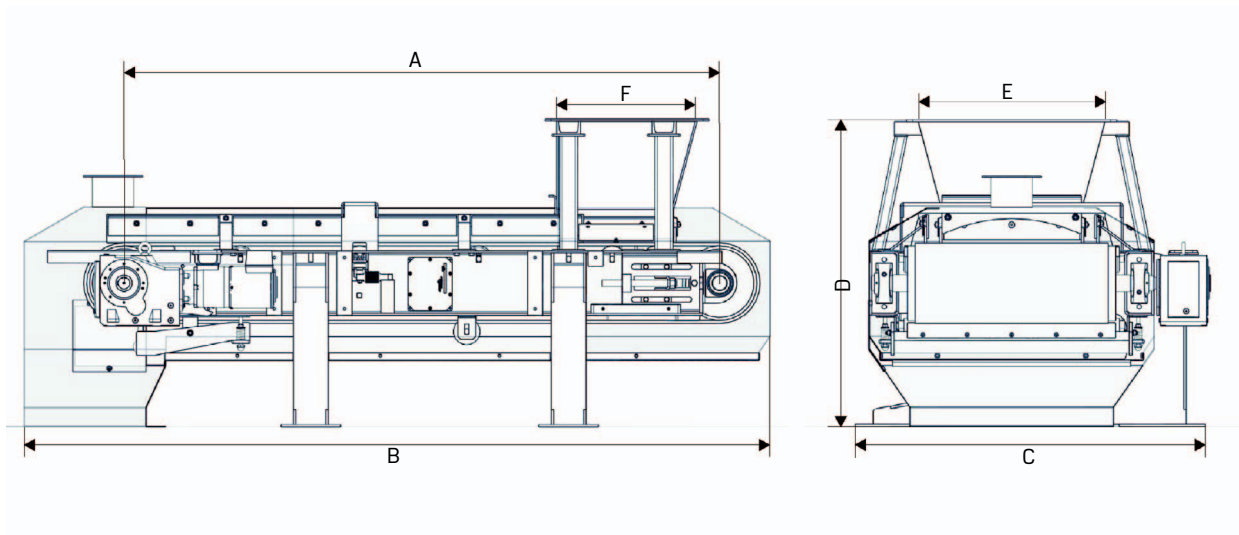
Compliance

Machine Directive 2006/42/CE.

Low Voltage Directive 2006/95/CE.

Electromagnetic Compatibility Directive 2004/108/CE.

Dimensions and weight



	Width belt	A	B	C	D	E	F	Weight (kg)
WBF6 2000	650	2000	2700	1150	1500	500	550	630
WBF6 3000	650	3000	3700	1150	1500	500	550	700
WBF8 2000	800	2000	2700	1350	1500	600	700	700
WBF8 3000	800	3000	3700	1350	1500	600	700	800
WBF10 3000	1000	3000	3700	1500	1500	700	850	880
WBF10 3500	1000	3500	4200	1500	1500	700	850	1000
WBF10 4500	1000	4500	5200	1500	1500	700	850	1300
WBF12 3500	1200	3500	4200	1700	1500	800	1000	1200
WBF12 4500	1200	4500	5200	1700	1500	800	1000	1500
WBF14 3500	1400	3500	4200	1900	1500	1000	1150	1400
WBF14 4500	1400	4500	5200	1900	1500	1000	1150	1800

All dimensions are in mm.

Options

- ▼ Feed hopper to channelling the product on the belt. The flaps provide belt sealing, It is equipped with a vein height adjustment guillotine forming a product layer on the belt.
- ▼ Local electrotechnical control cabinet.
- ▼ Factory set calibration bar for small capacities.
- ▼ Discharge chute with flange for connection to the site central dedusting circuit.
- ▼ Product vein covering.
- ▼ Built-in seal and anti-dust enclosure.
- ▼ Roller type sway switch.
- ▼ Belt slippage detector.
- ▼ Anti wear plates for hopper or discharge chute.
- ▼ Material probe for product presence detection.
- ▼ Emergency stop on each side of the conveyor.
- ▼ Operator safety protection sheets.
- ▼ Manual slide gate or bars gate for product isolation, to be attached under the customer silo, above the feed hopper.
- ▼ Automatic adjustment multi-position slide gate for feeders weighing different products.
- ▼ Adjustable flyweights guillotine for any products with presence of large size block.
- ▼ Sided wall belt.
- ▼ Tangential belt scraper in addition to scraper underneath.

Your specialist

Illustrations are not binding. Precia-Molen reserves the right to modify at any time, the characteristics of the equipment described in this brochure.

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WORLDWIDE WEIGHING