

## DESCRIPTION

The **DTU belt feeder** is a universal solution for feeding bulk materials with a flow rate of up to 40,000 l/h. Thanks to its hygienic design, which allows for easy disassembly and cleaning of certain components, the feeder is particularly suitable for use in the food industry.

The flow is controlled by changing the speed of the belt. **The gravity tension mechanism** extends its service life and increases measurement accuracy, while scrapers (internal and external) clean the belt of material residues. The dispenser is also equipped with a system that prevents belt deviation and a quick belt replacement system, without the need to change the tension.

Depending on the control system used, the device allows for continuous or batch dosing. It can also be used solely to measure the amount of material flowing through.

**The dust-proof enclosure** allows for connection to a dust extraction system. The removable side covers are equipped with polycarbonate inspection windows.

## SPECIFICATION

- Dosing accuracy:  $\pm 0.5\%$  of set value
- Belt width: 300 or 600 [mm]
- Gravitational tension of the belt
- Operating temperature: 0 to 50°C
- The polyurethane tape is **FDA approved**.
- 3x400 [V] AC motor with a power of 0.18, 0.25, or 0.37 [kW] (depending on the gear ratio)
- The belt speed is controlled by an **inverter**.

## PERFORMANCE

- 100 ÷ 20,000 [l/h] (300 [mm] wide belt)
- 200 ÷ 40,000 [l/h] (600 [mm] wide belt)
- Working range relative to nominal flow: 1:10
- Changing the level of the layerer in the feed hopper increases the operating range.

## MEASURING SYSTEM

- The scale is based on a **single C3 class strain gauge sensor** made of stainless steel or aluminum, with an IP66 (optionally IP68) protection rating.
- The device comes with a speed sensor in the form of an **encoder** mounted on the return shaft (IP67 protection rating, stainless steel).

## CONTROL SYSTEMS

Material flow measurement:

- 1020
- SGM800
- FLEX 2100/FLEX

**Continuous** and **batch** dosing:

- FLEX 2100/FLEX

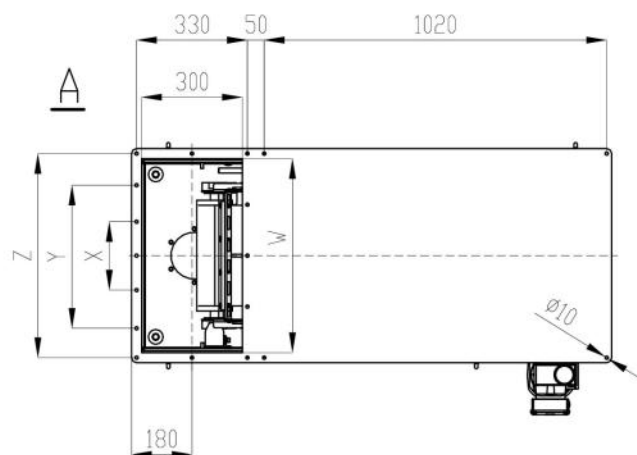
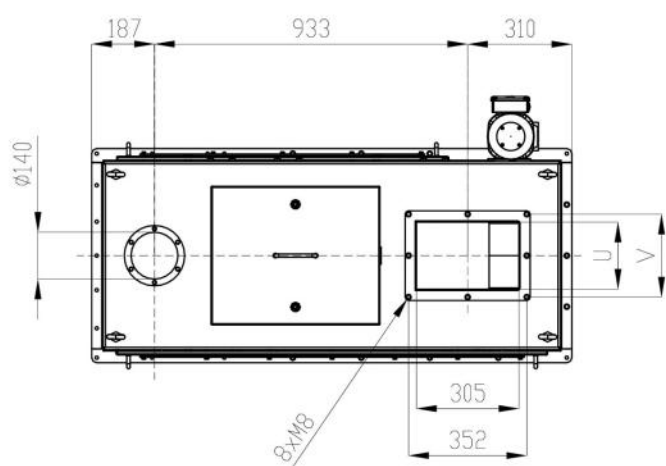
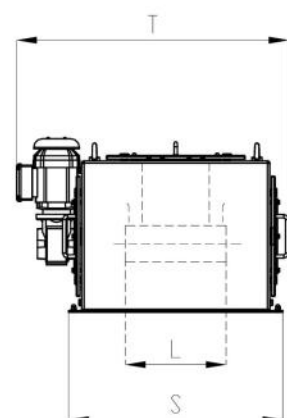
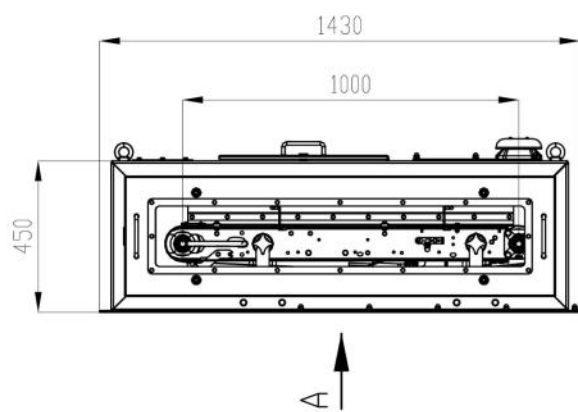
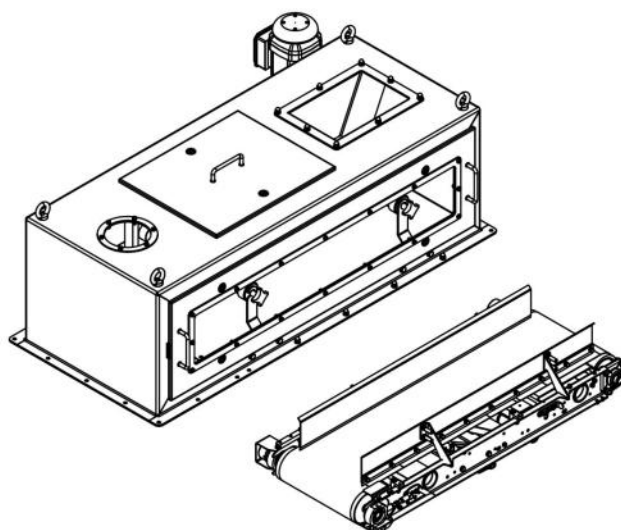
## EXECUTION

- The scale is made of **304 stainless steel**.
- The belt scraper inserts are made of **FDA-approved** PE UHMW plastic.
- Drive shaft covered with **FDA-approved** plastic.

## OPTIONS

- Made of 316L stainless steel
- Vibrating inlet
- Prefeeder control option
- Belt deviation control
- Belt slip control
- Ex version for explosion hazard zones
- Aseptic motor
- Belts designed for materials with temperatures up to 170°C
- IP68 strain gauge sensor
- Working range relative to nominal flow: 1:20 or 1:50

## DIMENSIONS



Tape width	S	T	U	V	W	X	Y	Z
300	638	810	200	250	578	304	-	608
600	942	1110	500	550	882	304	608	912