

DESCRIPTION

The DTU belt weighfeeder is a universal solution for the gravimetric feeding of bulk solids at rates up to 40,000 kg/h. Thanks to its hygienic design, which allows easy disassembly and cleaning of selected components, the weighfeeder is particularly suited to applications in the food industry.

Flow control is achieved by varying the belt speed. A gravity tensioning system extends belt life and improves weighing accuracy, whilst internal and external belt scrapers remove residual material from the belt. The weighfeeder also features a belt tracking system to prevent belt misalignment and a quick belt-change mechanism that does not require re-tensioning.

Depending on the control system selected, the unit can operate in continuous or batch feeding mode. It can also be used solely for material flow measurement.



SPECIFICATION

- Feeding accuracy: **<0,5%** of setpoint
- Belt width: **300 or 600 [mm]**
- Gravity belt tensioning
- Operating ambient temperature: **0 do 50°C**
- Polyurethane/PVC belt with FDA approval
- **3 × 400 V AC** motor, **0.18, 0.25 or 0.37 kW** (depending on gear ratio)
- Belt speed controlled via variable frequency drive (VFD)



CAPACITY

- **100 ÷ 20,000 [kg/h]** (300 mm belt width)
 - **200 ÷ 40,000 [kg/h]** (600 mm belt width)
- Turndown ratio: **1:10** (min to max)
Manual adjustment of the pre-gate height further extends the operating range



WEIGHING SYSTEM

- Single load cell weighing system, accuracy class C3, stainless steel, IP67
- Speed sensor
- Belt slip detection
- Belt misalignment detection



CONTROL SYSTEMS

Material flow measurement:

- 1020
- SGM800
- FLEX 2100/FLEX
- SIWAREX WP241

Continuous and batch feeding:

- FLEX 2100/FLEX



CONSTRUCTION

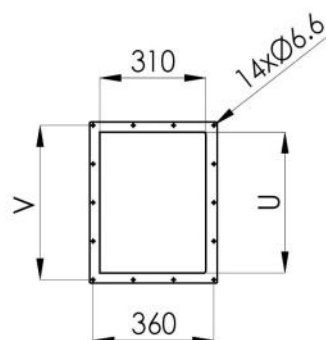
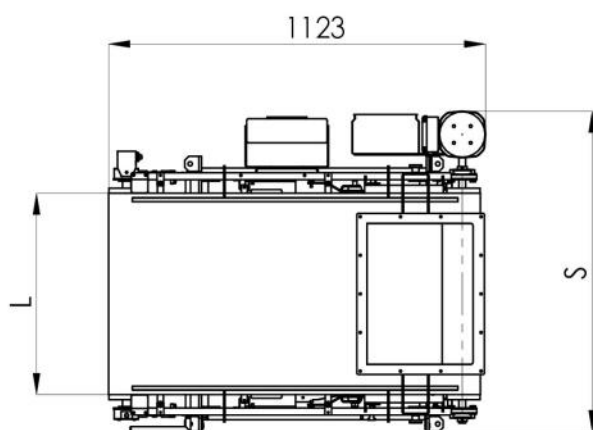
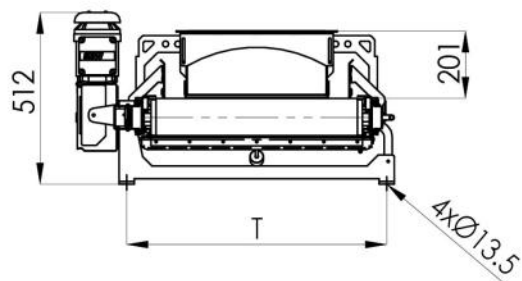
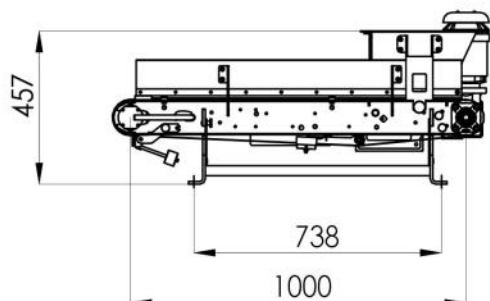
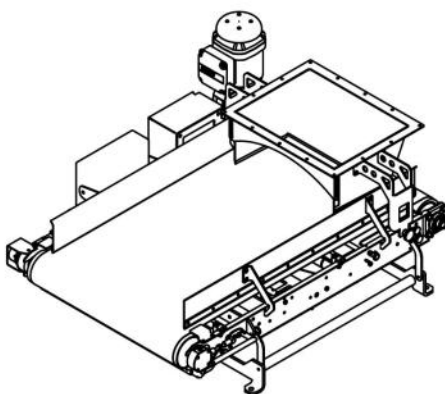
- Weighframe manufactured from stainless steel 304
- Belt scraper inserts made of PE-UHMW with FDA approval
- Drive roller coated with FDA-approved polymer



OPTIONS

- Stainless steel 316L construction
- Vibrating inlet
- Pre-feeder control capability
- ATEX-rated design for explosive atmospheres
- Aseptic motor
- Belt rated for material temperatures up to 170 °C
- Load rated IP68/IP69K

DIMENSIONS



Szer. taśmy L	S	T	U	V
300	655	475	150	190
600	955	775	450	490