



Features

- Volumetric double screw dosing unit with new „screw-in-screw“ principle.
- Dosing flow ratio 1:225 possible
- This dosing unit fulfils the requirements of a maximum volumetric displacement at a very high dosing accuracy in a previously unequalled way.
- Conveyor screw diameter 100 mm for coarse flow dosing, and 35 mm for fine flow dosing
- Driving both conveyor screws with a single three-phase AC motor permits a low-cost design of connecting and control system to be achieved.
- Space-saving design due to concentric arrangement of the two dosing screws.
- A variety of different top containers is possible.
- Stirrer module with separate drive (three-phase AC motor) optionally available (can be retrofitted, of course).
- Conveyor length to customer requirements.
- Due to a very robust design, absolute operational safety even under harsh production conditions.

Application

- Dosing of dry powdery or granulated bulk material.
- Wherever a fast dosage and a high accuracy is required.
- With optional stirrer ideally suited for poorly flowing material.
- Dosing volumes of, for example, 0.2 ... 45 litres/minute at a speed of 10 ... 100 RPM.
- As discharge elements for silos and big bags.

Theory of operation

- The dosing screws work according to the translation thread principle where the bulk material is shifted like a nut through the screw that rotates in the pipe. The friction which results from the weight prevents the dosing material from rotating too.
- To exclude densification of the dosing material, the coarse dosing stops during fine dosing.

Standard configuration

- Dosing material container
 - 6.5 litres effective volume.
 - In feed flange at top for a hanging installation to containers at the building side or for installing storage bins and top containers, lids, etc.
 - Rough-shaped container with remainder emptying and integrated base.
- Single-flight full blade dosing screw with core shaft.
- Outlet tube according to conveying length (customized)
- Made of standard steel
- Driven via a three-phase AC screw gear motor

Additional equipment

- Collar for bulk heading the outlet when feeding into building containers.
- Storage top bins, volume and design as required by the customer.
- Elbow socket at the outlet for the transfer into down pipes.
- Clamping lugs for additional attachment of the outlet pipe.
- Stirrer module with separate drive motor for aerating the dosing material.
- Parts that are in contact with the dosing material are made from stainless steel.
- Inclined conveyor systems on request.
- Flap closure as shut-off device to prevent material from continuing flowing.

Specifications

- Conveying length to customer requirement up to 4000 mm.
- Screw lead according to the outside diameter 35 or 100 mm.
- Pipe outside diameter 114.3 mm.
- Permissible ambient temperature 0° C ... + 50 °C
- Driven by three-phase AC worm gear motor, frequency-controlled, rated up to 2.2 kW according to requirements

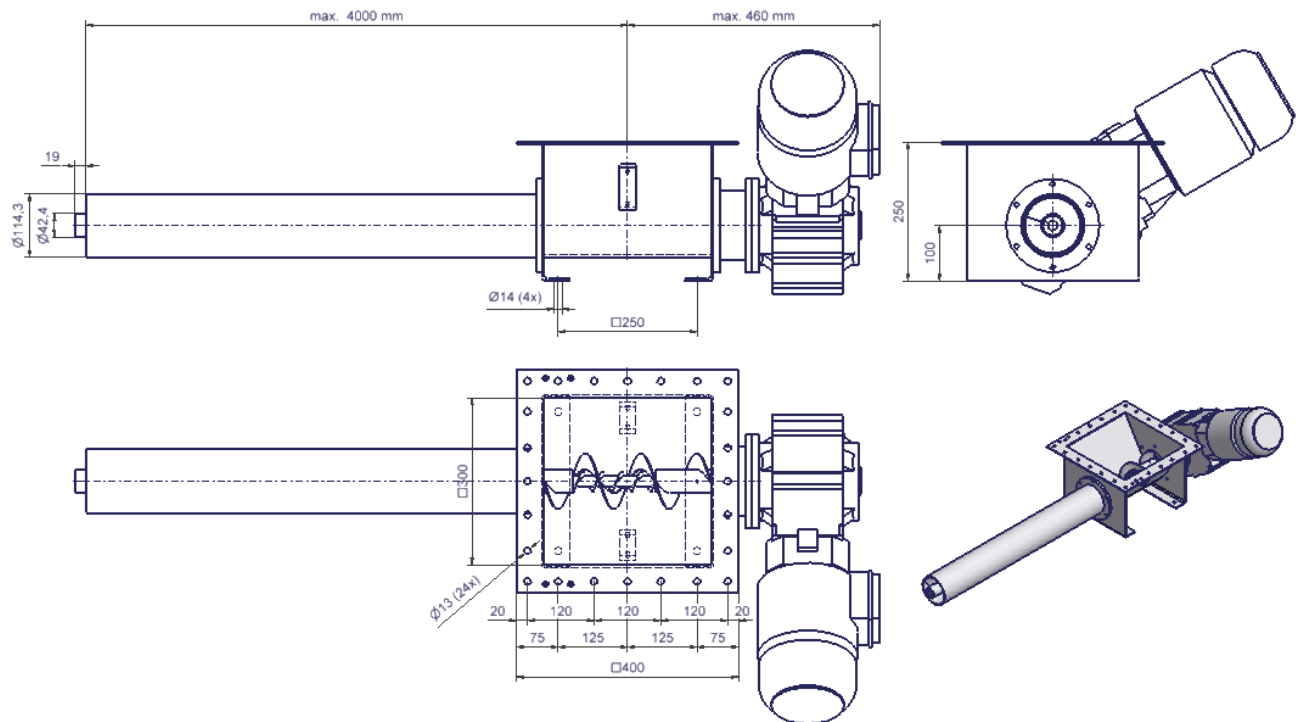
Standards and approvals

- Declaration of conformity according to the valid European standards.
- EC declaration
- Unit in ATEX design in preparation

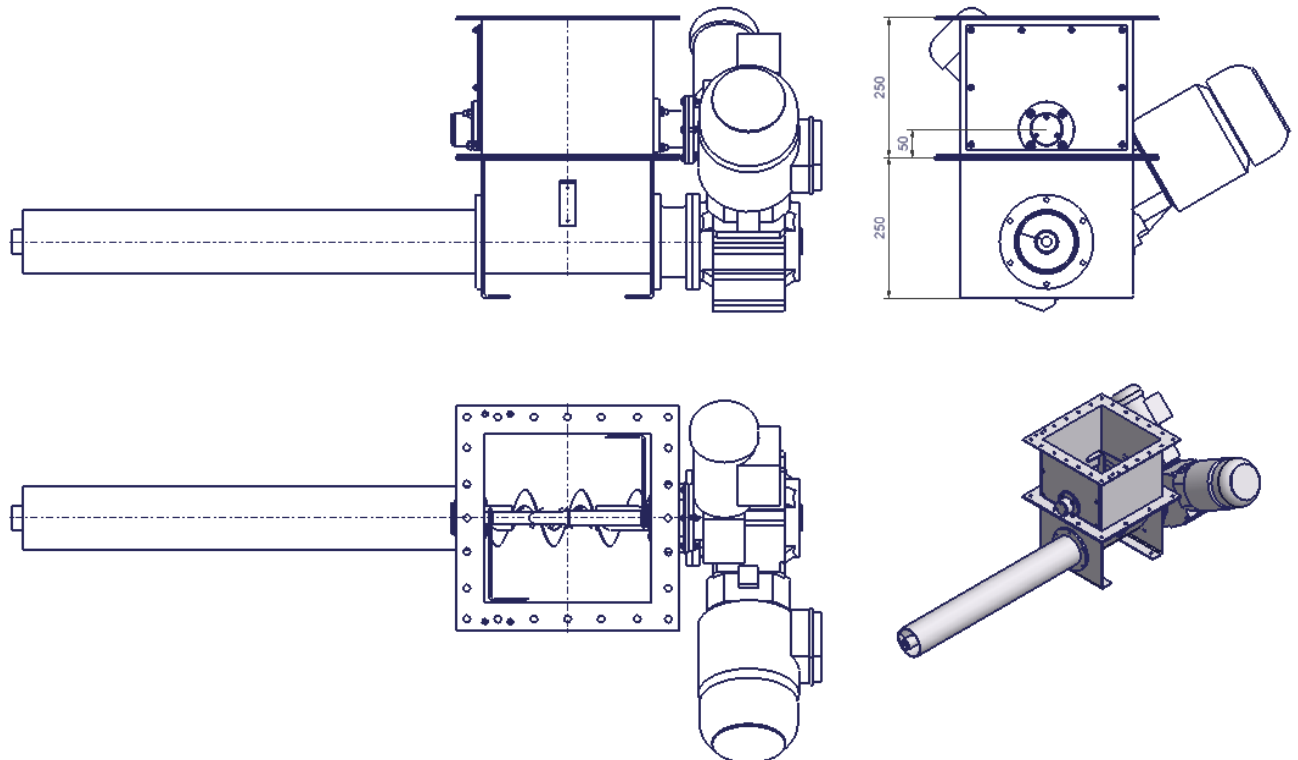


Dimensions

Unit of measurement: mm



Dimensions of standard configuration of double screw dosing unit DSD-21



Dimensions of additional equipment with stirrer for double screw dosing unit DSD-21