# **Dosing Device DS21-100**



## **Features**

- Volumetric screw feeder based on a proved concept.
- Conveyor screw diameter 100 mm.
- Low headroom (250 mm), good residual discharge.
- Different extension bins mountable.
- Conveying length according to customer • preferences.
- Drive of screw and stirrer via frequency controlled three-phase AC motor with thermal protection; power up to 1.5 kW.
- Stirring device with drive (three-phase AC motor) is optional available, headroom 250 mm.
- Due to a very robust design, absolute operational safety, even under harsh production conditions.

# **Application**

- For dosing dry, powdery and granular bulk materials.
- Perfect for dosage of poorly flowing material when equipped with the optional stirrer.
- Dosage rate up to 50 litre/minute, adjustable 1:20 via frequency converter.
- As discharging devices for silos and big bags.
- In conjunction with the shut-off valves of the DS-ASG series, it is also usable as a variable feeding element, e.g. for revolving hopper scales type ED-90, ED-91 and ED-21 or other hopper scales.

# **Operating principle**

The screw feeder functions according to the moving auger principle where the bulk material is moved forwards in a tube by a rotating screw. With a horizontal arrangement of the feed screw, friction-induced rotation of the bulk material with the screw is prevented by its own weight. With this arrangement, however, the bulk material must not completely cover the screw lead and its core shaft as this would eliminate sliding surfaces and cause the rotation of the material with the screw. Consequently, the external diameter of the dosing screws in our units gradually becomes wider towards the point of discharge.

# **Standard configuration**

#### **Dosing hopper:**

- 9 litres volume
- Inlet flange for suspended attachment to existing hoppers, or mounting of extension bins, covers, etc.

Version with trough shaped bucket to empty the residue. Integrated stand plate.

2 brackets (Type NETTER NCB1) for installation of compressed air vibrators on the hopper

#### Screw feeder:

- Solid, single-flight blade screw (double-flight in the discharge area) with core shaft and progressively increased external diameter
- Outlet tube corresponding to the conveying length
- Dosing star at the discharge position to break up the bulk material.
- Version made of steel (optional stainless steel)
- Drive via three-phase gear motor.

## Additional equipment

- Devices in ATEX with certification (on request).
- Concentric gasket to partition of the outlet when integrating the customers own receiving hoppers.
- Supply extension hoppers, volumes according to the clients requirements.
- Angled connecting piece at the outlet for transition to down pipes.
- Clamping link to additionally fix the outlet tube. (recommended from a length of 2 m)
- Stirrer device with separate driving motor, to relieve the bulk material.
- Compressed air vibrators (NETTER K8).
- Bulk material contacted parts in stainless steel.
- Inclined conveyors for up to 35 ° practicable.
- Flap closure ASG-100 as shut-off valves to avoid product fall and moisture intake.

### Technical data

- Recommended maximum conveying length up to 4000 mm and more, if preferred.
- Pipe outer diameter 114 mm.
- Screw core diameter 34 mm.
- Permissible ambient temperature 0 °C ... + 40 °C
- Inclusive frequency controllable drive via threephase AC motor; power depending on conveying rate.

### Standards and norms

- According to conformity explanation the valid European standards
- EC declaration

Fon:

Revision: 2023/08/17 Errors and technical changes reserved

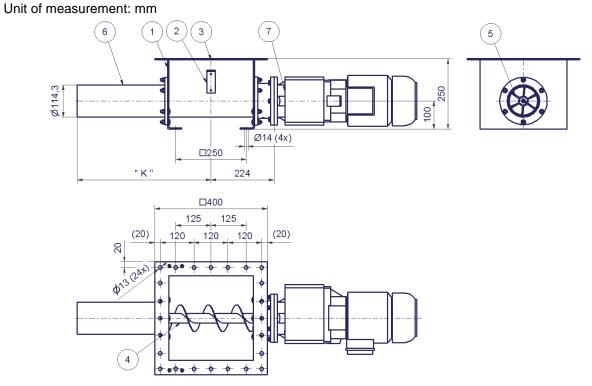


Grimmenstein 9/1 D-88364 Wolfegg +49 7527 9604-0 / Fax: -32 E-Mail: info@scheurich-gmbh.de Internet: www.scheurich-gmbh.de Page

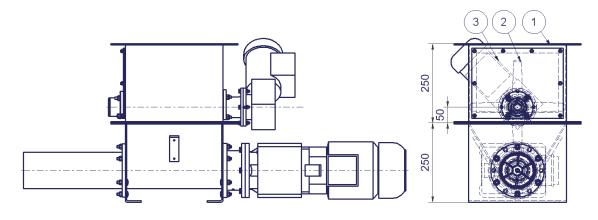
# **Dosing Device** DS21-100

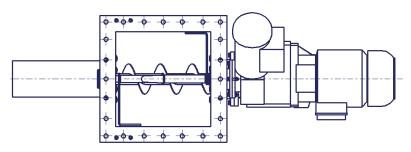


# **Dimensions**



#### Dimensions of standard configuration dosing device DS21-100





#### DS21-100 with optional stirring device (headroom 250 mm, same connection flange)

Fon:

Revision: 2023/08/17 Errors and technical changes reserved



9/1 D-88364 Wolfegg +49 7527 9604-0 / Fax: -32 Grimmenstein 9/1 info@scheurich-gmbh.de E-Mail: www.scheurich-gmbh.de Internet:

Page

2/2