

Multi-function weighing system



Advantages:

Extremely compact design which contains devices for the most varied functions:

- **Pneumatic conveying for filling the scale = optimum installation of the scale**
- **Weighing; can be used as an additive, subtractive or differential scale**
- **Agitator discharge = suitability for poorly flowing bulk solids**
- **Dead load compensation = very good resolution and accuracy of the scale due to the use of light load cells**
- **Can be used in dust ex-zone 20**
- **Stainless steel design (material-contact)**

This version has a loss-in-weight scale with a discharge screw conveyor for metering small components. The scale is filled through vacuum conveying. The weighing vessel is designed as a receiving vessel for this purpose. It has a built-in JET-separation filter. An edge-to-edge agitator with an internal drive is provided for a safe material discharge even when handling poorly flowing components. The weighing receiving vessel with a built-in filter and the metering screw with a flanged geared motor considerably increase the dead load of the scale. A mechanical dead load compensation unit is installed to achieve the required metering accuracy.

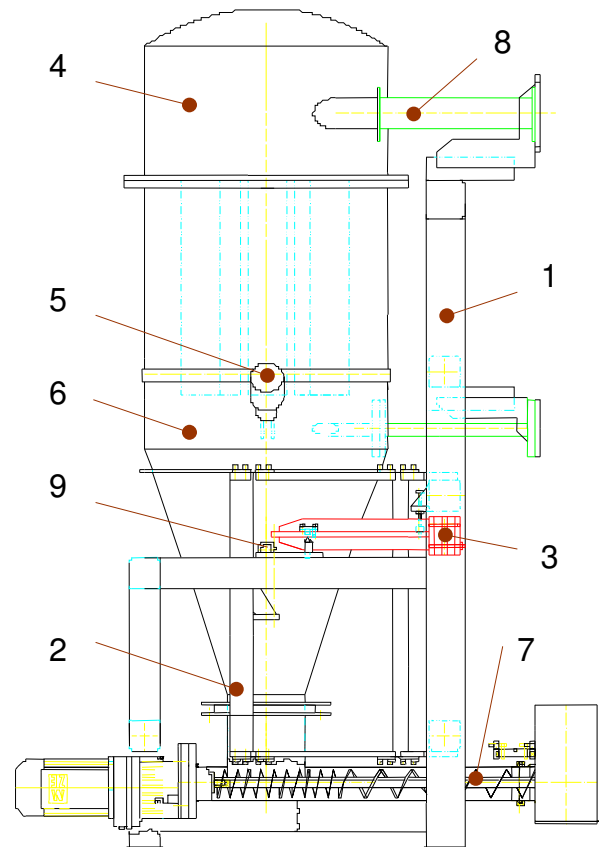
Design features and characteristic data:

- Weighing vessel = receiving vessel of a vacuum conveying system with a filter and a max. sensor
- Mechanical dead load compensation unit
- Discharge aid: agitator
- Discharge metering: metering screw with a quick-action flap valve
- Geometrical volume of the scale vessel: variable
- Maximum load of the scale: variable
- Resolution: depending on dosing precision

Description:

The scale comprises:

1. Support frame
2. Parallel suspension bar system
3. Mechanical dead load compensation unit
4. Jet bag filter
5. Weighing vessel with a max. sensor
6. Agitator as a discharge aid
7. Metering screw
8. Two compensators for the scale coupling
9. Two load cells



Due to the accurate guiding of the weighing receiving vessel, the parallel suspension bar system induces the exact force of weighed bulk solids in the load cells and transfers the dead load to the load compensation lever.

The mechanical dead load compensation unit allows the use of load cells having small nominal loads. This ensures a considerably better resolution and higher weighing accuracy when compared with direct weighing.