



MaxxCal

Offline calibration unit
for MaxxFow HTC



Product information

Using

The bulk density of solids is an important process parameter in a lot of operations in which solids will be handled.

Till this day the determination of the bulk density is usually very complex. It is only possible by taking samples and analysis of these samples in the laboratory.

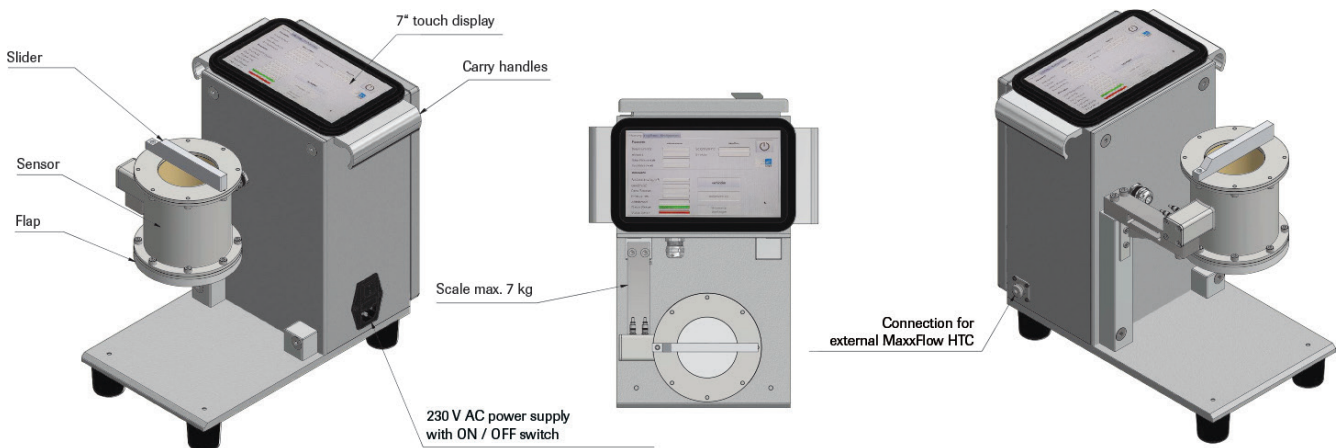
The MaxxCal is designed to determine the true bulk density as well as the electrical behaviour of materials. This information is metered independently by the process and shared with the MaxxFlow HTC used in the process.



Sensor design

The MaxxCal consists of following components:

- Measuring tube DN 70
- Weighing cell
- Flap for closing the lower part of the measuring tube
- Slider for reproducible filling
- 7" touch display
- Carry handles
- 230 V power supply with ON / OFF switch
- ModBus connection



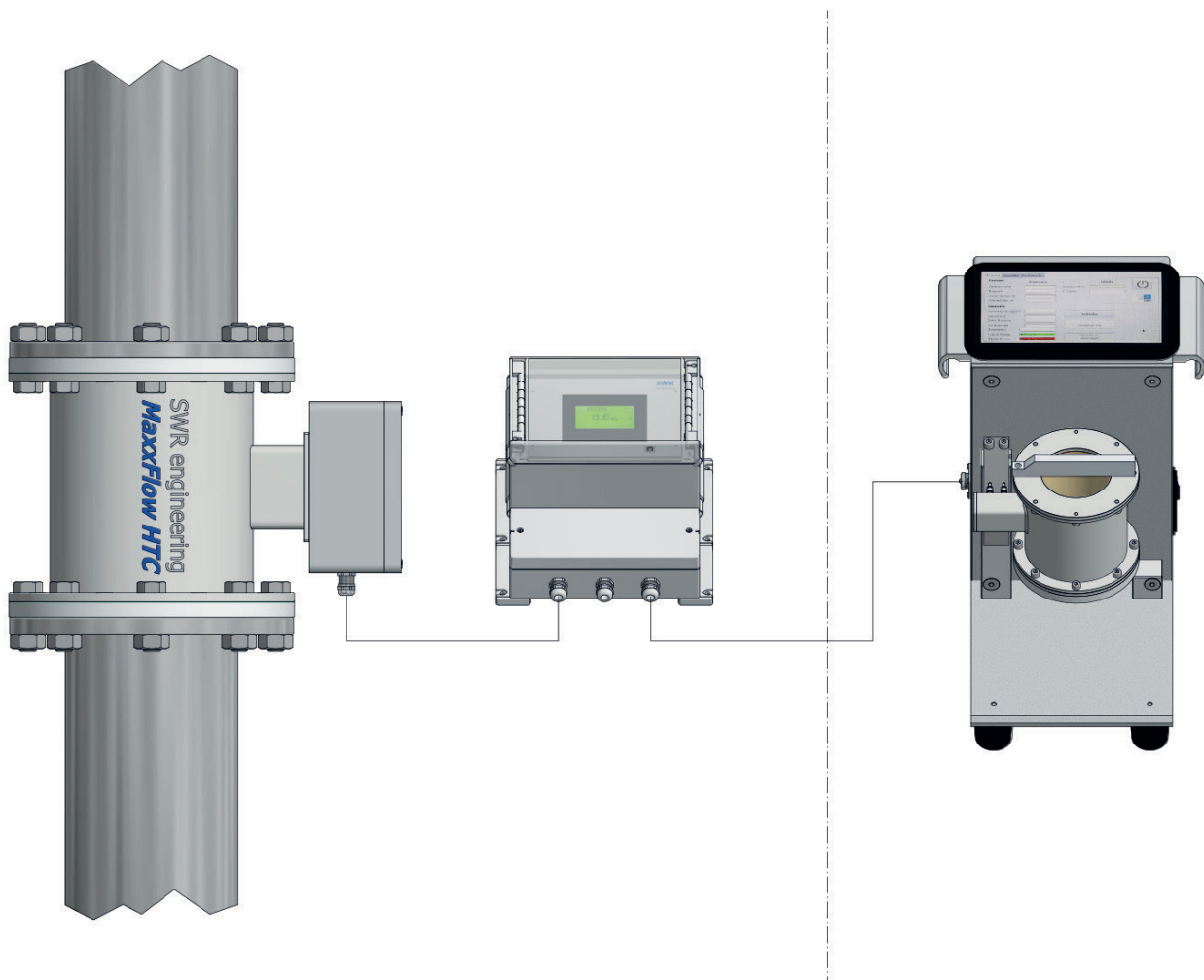
Function

The MaxxCal is used wherever various solids or solids, with changing bulk density are conveyed. By comparing between MaxxCal and MaxxFlow HTC, there is no need to stop the process for calibrate the measuring signal. The MaxxCal can be installed up to 300 m away from the MaxxFlow HTC transmitter. It is only necessary to install a two-wire ModBus connection for the adjustment between the transmitter and the MaxxCal. The MaxxCal is filled manually with the material to be measured. A slider on the top of the measuring tube ensures that a reproducible filling level is maintained.

The measuring tube is installed on a load cell. The true bulk density is calculated from the measured weight and the defined volume of the measuring tube.

In addition to the bulk density, the sensor determines the electrical behaviour of the material. A correction factor is calculate from these two values and sent to the MaxxFlow HTC measurement system.

The calibration between the calibration unit and the measuring unit used in the process is performed by the touch display on the MaxxCal. The currently measured bulk density is displayed on the MaxxCal and transferred to the MaxxFlow HTC via the push of a button. The MaxxCal also displays the currently measured bulk weight of the material without a connected sensor. This allows the MaxxCal to be used as an autocalibration unit and for regular checking of the bulk density.



Technical data

Housing	Aluminium / powder-coated steel panel / stainless steel
Power supply	230 V AC, 50 Hz
Power consumption	30 W
Fuse	230 V AC 1 A T
Inner pipe	DN 70 / Ceramic
Protection category	IP 60
Sample volume	ca. 0.5 l
Total weight	11.4 kg
Dimensions (W/H/L)	360 x 265 x 360 mm
Ambient temperature	0 ... + 40 °C
Relative air humidity	20 % ... 75 %

More information	
Handling	7" touch panel control element
Connection	ModBus connection for communication with the MaxxFLOW HTC transmitter
Scale	max. 4.3 kg (max. loading 7 kg, sensor weight 2.7 kg)
Ambient conditions	room with low dust concentration, stable straight underground

