



Strain Systems

Europe GmbH



The **StrainCell** 360° strain sensor to a weighing of silos and industrial facilities afterwards.



Calculation of tonnage in containers or silos operates in long detours. Therefore it needs a complex calculation of geometric and bulk solid specific factors in reference to the distance. Gerhard Middendorf's 25 years of experience in fill level measurement not only justify the foundation of **Strain Systems Europe GmbH**, but rather shows, that the operator has no interest in inconvenient processes and complicated formulas. Finally there is only one point of interest: the tonnage. Evaluation electronics directly transforms strain and compression in tons. The display only shows which is relevant: How many tons were obtained? How many are present? How many can be refilled?

StrainCell solves another prevalent problem in sensors, the influence of temperature to measured values! Through her system technical and physical structure and by the centred attachment, the **StrainCell** includes strength influences of 360°. **StrainCell** consists of the

interiority of a load cell. Thereby **StrainCell** is far superior to all strain gauges and L-shaped sensors. Through a measurement accuracy of 1-3% or better, **StrainCell** is the perfect alternative to expensive load cell technologies, with that it's the most precise measurement of it's kind - worldwide!





Accomplishments

- Measuring error < 1% possible
- Perfect alternative to load cells
- Compensation of measuring errors through Temperature fluctuations
- 360° measurement

Features

- Complete solution for weight capture of your silo or terminal
- Intelligent electronic for display of weight or weight approval
- Less assemblage installation
- Easy calibration
- Remote control
- Menu access protection
- Analog 0-20mA or 0-10V output
- Ethernet, RS-232/458, BCD or USB interface
- CE certified
- 2 years warranty



Turning silos to scales!

StrainCell

Data

Max. Workload	21 kg/qmm
Received Workload	3,5 kg/qmm
Sensibility	0,755 mV/V/0,7kg qmm
Variance	1-3% at full-scale deflection
Input Voltage	5-12 V
Current consumption by 12 V	12 V 10 mA
Weight	15g
Fielding-temperature	-35° - +66° C
Temperature-dependent Sensibility Modification	< 0,036%/°C
Wire	4 Conductor, shielded
Cable length	1,85 m

Connecting

Function

Red	+ Supply
Black	- Supply
Green	+ Signal
White	- Signal
Shield	Ground



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sensor

case

StrainCell Input Voltage 5-12 V

StrainCell Fielding-Temperature -35° - +66° C