



**REMBE**® Kersting GmbH

# MEASURING WEIGHING SAMPLING

of bulk material



Made in   
Germany

Consulting. Engineering. Products. Service.

# Measuring Weighing

## Flow metering

In the bulk materials industry accurate flow metering is decisive for increasing productivity. With its use the exact quantity of the flowing material is provided. The influencing power, flow speed and further indicators ultimately provide by means of an appropriate measuring transmitter an exact measurement result. A suitable flowmeter for optimisation of the measuring accuracy varies from application to application. Whether grain, coal or stone – REMBE® Kersting delivers the suitable product to you.



## Silo weighing | machine monitoring

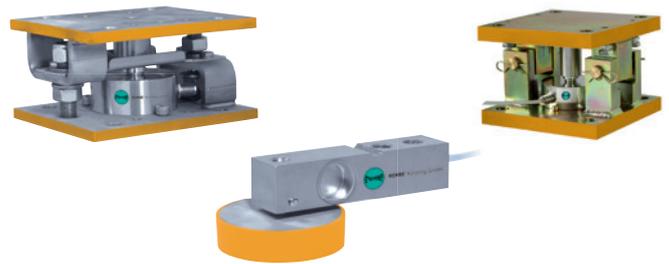
### Strain Gauges

The MicroCell and L-Cell are strain gauges for cost-optimised mass measurement for beam- and skirt-supported silos. The measuring cells are used to capture the masses of bulk solids and fluids. The advantage of these REMBE® Kersting strain gauges lies in their complication-free and cost-reducing retrofitting capability within existing processes; simple attached directly onto the supports and frames and you immediately receive an overview of your fill level.



### Loadcells

The reliability and reproducibility of level measurement for powders and bulk materials based on loadcells in a dynamic assembly module. The central demands of modern production; saving on raw materials, reducing costs and reaching the boundaries of accuracy – all these met with REMBE® Kersting loadcells. The evaluation units secure accurate results in level measurement and guarantee a process-assured measurement.



## Transmitter

Whether the conveyor belt at a mine or a silo in agriculture, the transmitter is suitable for every application – static or dynamic. The evaluation units convert measuring values and achieve exact weights using reference weights – a must for every bulk materials process.



EVA HighEnd  
for dynamic measurement



ADAM HighEnd  
for static and dynamic measurement



## SAMPLING OF BULK MATERIALS

To ensure compliance with international quality standards and end-to-end traceability, quality assurance requires constant product monitoring. Representative sampling plays an important role in this. Every process is individual and therefore makes high demands on sampling.

REMBE® Kersting specialises in the development and manufacturing of specific valves and proven systems for manual and automated inline sampling.

REMBE® Kersting samplers are used worldwide in the cement, chemical, pharmaceutical and food industries:

- **At good receiving** to check the delivered quality.
- **In production** for precise process control (IPC).
- **During filling/loading** process for output control.



individual control



## OVERVIEW OF YOUR BENEFITS

### 10 good reasons to choose samplers from REMBE® Kersting

1. Precise process management.
2. Avoidance of waste and rework.
3. Avoidance of complaints and return deliveries.
4. Traceability and protection against unjustified claims.
5. Occupational safety and hygiene.
6. Highest sample quality – cross contamination prevented.
7. Easily integrated into a wide variety of installation situations.
8. Small installation dimensions, flexible in design and dimensioning.
9. Materials: stainless steel, food-grade polymer materials.
10. Easy cleaning and maintenance, low operating costs.





## SAMPLING

### During loading | unloading

Sampling is as essential in mining as it is in pharmacy. In order to ensure application-targeted continuous quality control, the following application is depicted for these processes.

### Application

Sampling of bulk materials with the pneumatic **auger sampler** | 1, which can be installed anywhere, works easily and reliably and always guarantees representative samples of any quantity with the connected **pinch valve** | 2.

Easy to use with a **“JoyStick”** | 3, which controls both the auger sampler and the pinch valve.

The **sample collector** | 4 is hermetically sealed for maximum protection against dust and dirt during operation. **Good sample – good process!**

## SHIP UNLOADING

### Onward loading onto rail and truck

#### C-LEVER®

Flow metering for bulk materials 1 – 800 m<sup>3</sup>/h.

Functionality:

- robust and patented measuring method
- very accurate mass flow metering of bulk material
- Measurement is free falling
- Measuring accuracy of up to 99.5 % (minimum flow rate 50 kg/h, minimum material density 0.3 t/m<sup>3</sup>)



We would be pleased to provide you with data sheets and CAD models or prepare an individual offer for you.  
Contact us: T +49 2961 7405-300 | F +49 2961 7405-349 | [info@rembe-kersting.de](mailto:info@rembe-kersting.de)



## Automatic Sampling



### Automatic sample handling

#### SAMbutler

Secure process control for the entire sampling. Connection to contamination-free conveyor systems and analysis options such as particle size, bulk density or moisture.

- Continuous quality assurance without manual intervention
- From sampling to packaging
- Various analysis options with feedback to the process control system
- Fully automated



#### SAMbutler Midi

The SAMbutler Midi reduces the time and effort required for taking representative samples.

- Timed sampling due to automatic processes
- less effort for the employee
- reliable quality control



### Truck sampling

#### SAMtruck

Automatic truck sampling for grain, excavated soil, recycling material and substitute fuels

- Quality assurance for incoming and outgoing goods
- Direct to the laboratory connection
- various analysis options
- fully automated
- time saving due to the three-axis portal system

REMBE® Kersting offers the solution for sampling toxic substances. We would be pleased to provide you with a bespoke offer. T +49 2961 7405-300 | F +49 2961 7405-349 | [info@rembe-kersting.de](mailto:info@rembe-kersting.de)



## Inline Sampler

### Cup Sampler



For collecting a sample in a drop tube. After retraction, the cup is tipped and the sample is emptied into a container.

- Maximum product protection.
- Sample size determinable by cup size.
- Drop tube cross-section remains fully intact.

### Auger Sampler



To convey material from the process to a downstream sample collective system. Typical applications are samplings on silos, storage tanks of bagging plants or transport vessels.

- Also suitable for materials that are difficult to trickle or change their flow behaviour.
- Reverse flow for draining sampler – always guarantees fresh samples.
- Drive either pneumatically, electrically or manually.
- Use under pressure or vacuum.

### Sampling Port and Probe



These samplers provide the flowable powder or granules with an alternative route during sampling that leads to a sample bottle.

- Fixed or variable sample volumes per actuation.
- Drive either pneumatically or manually.
- Use under pressure or vacuum.
- Particularly product-friendly sampling.

### Plug Sampler



Plug samplers transport a defined amount of the product by means of a plug from the process into a downstream sample collection system. Typical use in the sampling of a material from pre-containers, e.g. at bagging plants.

- Drive either pneumatically or manually.
- Also usable with pressure or vacuum.

### Sample Collection Systems



Transport to a laboratory usually follows after sampling. In order to protect both the sample and the employees from contamination, the use of professional sample collection systems is recommended. We offer a variety of solutions for a wide variety of requirements and containers.

- No risk of contamination .
- Simplified transport; lower operating costs.

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## Inline Sampler

### Sampling Valve for pneumatic Conveying Lines



For sampling in pneumatic conveying lines. The existing pressure is used to deliver small amounts at high frequency intervals to a sample collection bottle. The collected sample represents the total flow rate.

- Abrasion is avoided.
- No direct intervention in the process line.

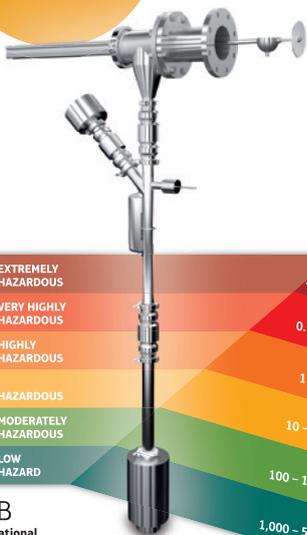
### Moist Product Sampler



The pneumatic sampler SMARTwet has been specially developed for the “moist product” application area. It is connected directly to the process by means of a weld-on flange or clamp connection. To remove material, the sampling port moves into the process while rotating and takes up material; Subsequently the sample is pressed through a plug in the sampling tube into the outlet port of the sampler. Different collection systems can be adapted here such as bottles or a liner system.

- Sampling of pasty media.
- Materials: stainless steel and Hastelloy C22.
- No contamination from stripping the sample chamber.

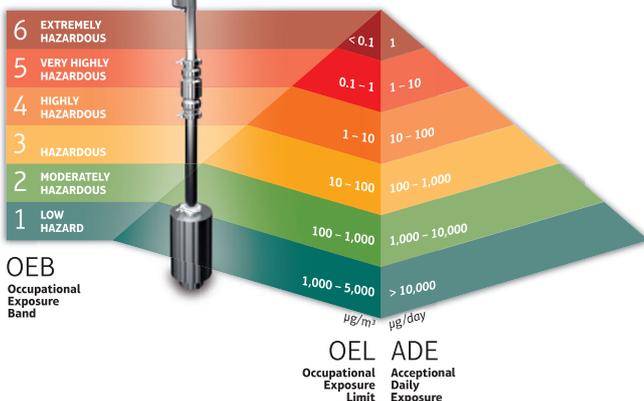
OEB-Level 4 according to PED and TA-Luft.



### Containment sampler

Sampling in the containment area presents users with major challenges. On the one hand the system always has to be closed due to the toxic media it contains; on the other hand it has to be opened for sampling.

With its automated inline sampling system, REMBE® Kersting offers maximum safety and comfort in order to increase efficiency in process management. The sample collection point and the extraction point are separated from the process by pneumatic pinch valves. The individual samples are collected in an endless tube and packed for safe transport to the laboratory.



### Benefits

- No release of toxic substances.
- Maximum product protection.
- Guaranteed leak-tightness in the process.
- Sample size determined by cup size.

# REMBE® Alliance

In addition to REMBE® Kersting GmbH and numerous satellites in Italy, Finland, Brazil, USA, China, Dubai, Singapore, South Africa and Japan, these companies operate under the umbrella brand REMBE®

## Measuring. Weighing. Sampling



### REMBE® Kersting GmbH

T +49 2961 7405-300  
info@rembe-kersting.de  
www.rembe-kersting.de

## Pneumatic Conveyor technology | Drying



**simar**  
Mitglied der REMBE Alliance

T +49 7042 903-0  
info@simar-int.com  
www.simar-int.com

## Safety technology



### REMBE Fibre Force GmbH

T +49 2961 7405-350  
info@argusline.de  
www.argusline.de

## Explosion safety | Pressure relief



### REMBE GmbH Safety+Control

T +49 2961 7405-0  
info@rembe.de  
www.rembe.de



### REMBE Research+Technology Center GmbH

T +49 2961 7405-390  
info@rembe-rtc.de  
www.rembe-rtc.de



### REMBE Advanced Services+Solutions GmbH

T +49 2961 7405-700  
info@rembe-services.de  
www.rembe-services.de

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