

We are standing right by your side!

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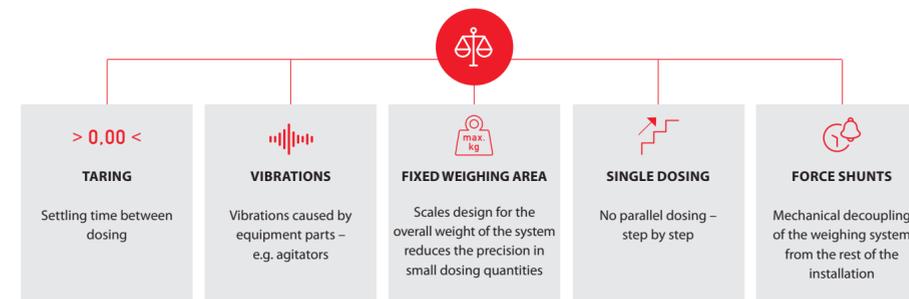
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## GRAVITUBE® compensates all weak points of traditional measurement methods

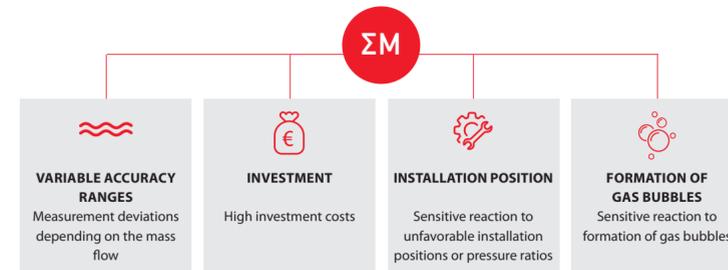
The correct choice of the measurement method has always been a central quality factor in the processing technique. Both the reliability of the production equipment and the perfect quality of the end product are determined by the measurement method. The decision maker is confronted by the traditional methods in the entire engineering process as the following aspects need to be considered: technical advantages and disadvantages, additional costs regarding technical equipment and increased operating costs of the installed production equipment. Normally, he would settle for a number of compromises.

**GRAVITUBE® breaks the production process free from all disadvantages and disruptive factors of the established measurement methods.**

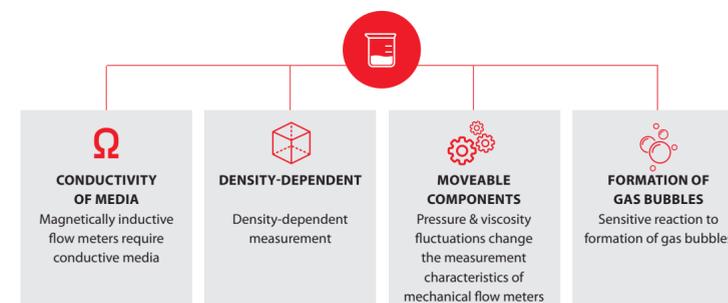
### Disruptive factors in weighing technique



### Disruptive factors mass flow measurement



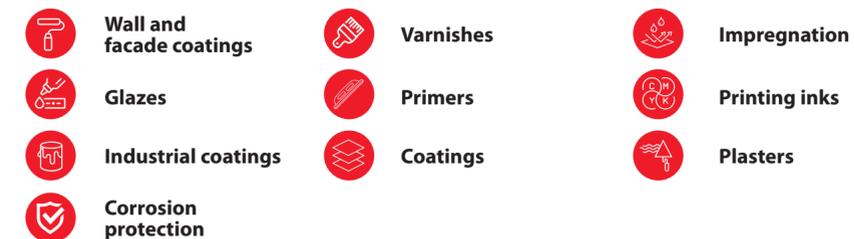
### Disruptive factors volumetric flow measurement



## Effective use in the paints & coatings industries

GRAVITUBE® is used in different segments of the paints & coatings industries and it has considerable advantages for the various challenges in the production process.

### Use in segments



## Significant savings potentials by means of GRAVITUBE®

### EFFECTIVE USE OF MATERIAL DUE TO DOSING ACCURACY

⊕ GRAVITUBE® shows dosing accuracies of **0,1 %** and thus reduces the use of raw material and additives by **5 %**

### FALLING PRODUCTION COSTS BY MEANS OF FASTER PROCESSES

⊕ Acceleration of manufacturing process by more than **35 %** compared to half-automatic or manual dosing

### SAVINGS IN SERVICE AND MAINTENANCE

⊕ Reduction of service costs by **80 %** due to elimination of maintenance costs regarding dosing pumps and weighing units

### REDUCTION OF INVESTMENT COSTS

⊕ The investment costs with GRAVITUBE® are reduced by **50 %** compared to equivalent measurement methods

### ERROR PREVENTION BY MEANS OF FULL AUTOMATION

⊕ Wide range of savings potentials can be gained as incorrect dosing by the human factor is avoided

#### Make your own evaluation:

- | Discard and new production of batch preparation
- | Production interruption
- | Disposal
- | Complaint / Recall
- | Consequences and image loss



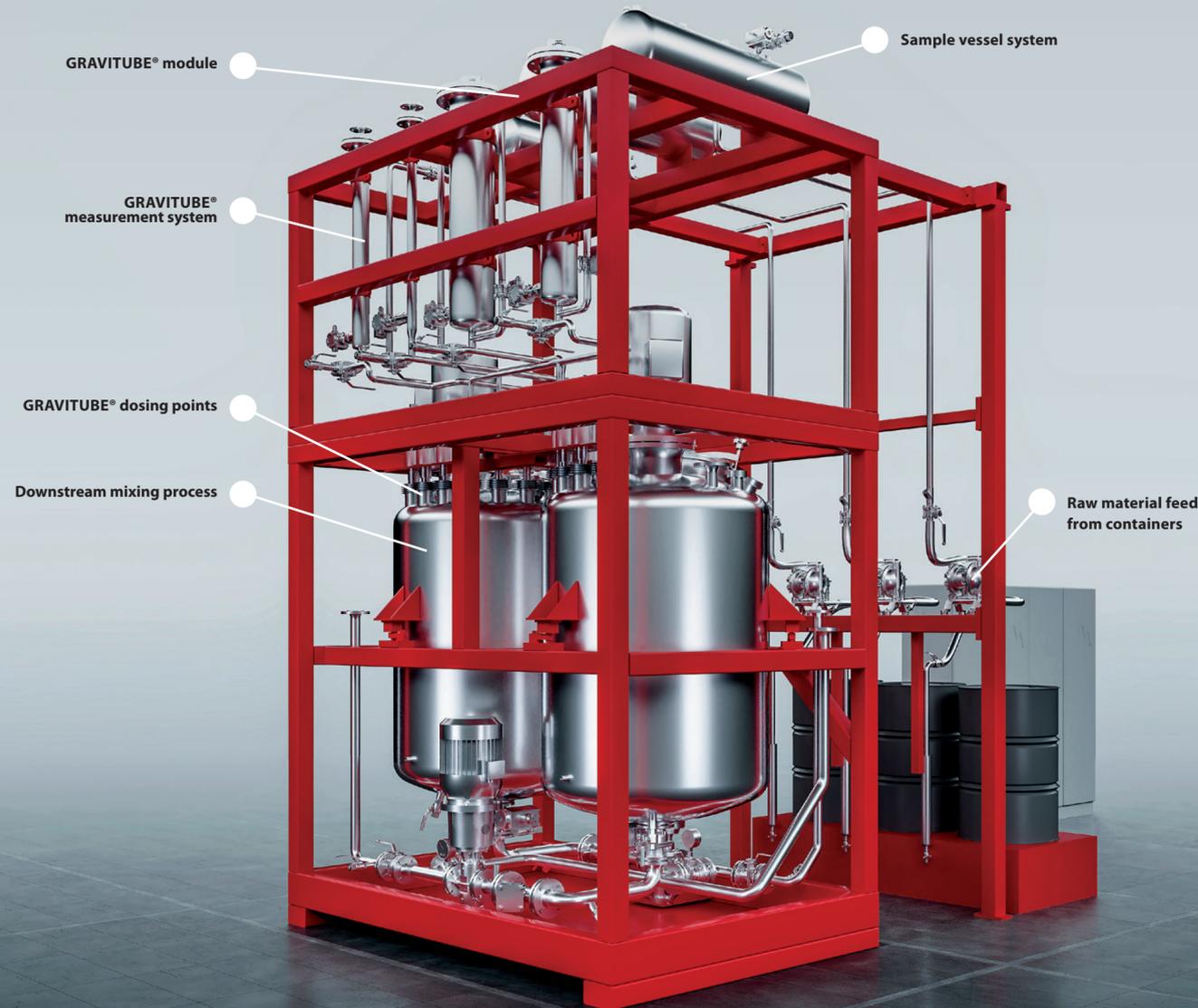
Dosing 4.0

GRAVITUBE®

How to dose the smallest quantities quickly, accurately, full-automatically and reproducibly

# GRAVITUBE®

Dose even the smallest quantities quickly and precisely



## GRAVITUBE® guarantees a high level of efficiency in your dosing process.

GRAVITUBE® is a world debut product developed by Keil in the field of dosing systems. GRAVITUBE® effortlessly doses even the smallest amounts – and much more precisely than many other dosing systems. The calibration phase is not necessary with this system. The product mix is available immediately at the start of production, which means that valuable time is saved in the process and efficiency is increased. GRAVITUBE® is extremely durable thanks to its robust design and best suited to the raw environment of industrial production facilities.

The system can be easily integrated into fully automatic dosing processes. It is even possible to set up pressurised systems. GRAVITUBE® is also very easy to configure for specific intended purposes, such as with heated systems, internal coatings or special materials. Since there are no mechanical measuring systems used in the GRAVITUBE®, the system is particularly low-maintenance, low-wear and economical.



## GRAVITUBE®

### EFFICIENT DOSING

- ⊕ High-precision dosing (< +/- 0,1 %)
- ⊕ High reproducibility
- ⊕ Measuring principle based on mass
- ⊕ No interfering influence on measuring due to density fluctuation
- ⊕ No interfering influence due to tare weights
- ⊕ No interfering influence due to gas bubbles in product
- ⊕ No mechanical decoupling required
- ⊕ No calibration phase required

### FLEXIBILITY

- ⊕ Simple integration into fully automatic processes
- ⊕ Simple construction of multi-systems for parallel dosing of several recipe components
- ⊕ Applicable for a wide temperature range
- ⊕ Exactly tailored for each dosing task
- ⊕ Easy adjustment to new dosing parameters
- ⊕ Optimal for the use in Ex-areas

### HIGH CUSTOMIZING SCOPE

- ⊕ Heated systems
- ⊕ Pressurized blanket
- ⊕ Integrated rinsing systems
- ⊕ Special materials and coatings

### RELIABLE, ECONOMIC AND MAINTENANCE FREE

- ⊕ Resistant to contamination
- ⊕ Resistant to vibrations
- ⊕ Maintenance-friendly basic concept
- ⊕ No electromotive drives in measuring and dosing system
- ⊕ Wear-free components
- ⊕ Minimum spare parts stock required
- ⊕ Closed system

### SAFETY

- ⊕ "Hands-off" handling with hazardous substances
- ⊕ Reduction of emissions
- ⊕ Protection of employees



Efficiency  
*by your side*

## Keil Anlagenbau – open for the best solutions.

For more than 40 years, Keil Anlagenbau has been specialized in the conception, planning, manufacture and installation of equipment for the storage, conveyance and dosing of fluid, gaseous and solid materials including substances hazardous for ground water. It is this special experience that brings real advantages and added value for our customers. Only those who know their field of expertise in detail and the special requirements of the specific industrial sector can be a reliable partner that sees eye to eye with its customers.

This is our great strength: to understand the challenges of a solution – to excel in its implementation. How can it be possible? Our engineers and product designers uncover the real equipment potential at the planning stage already. For this reason, we can frequently offer solutions that are more effective: in energy consumption, by means of longer running times, avoidance of degraded material and lower costs of service and maintenance. In other words: those working with Keil Anlagenbau have efficiency by their side.

