

# **MULTICOR® S – Mass Flow Measuring**



MULTICOR<sup>®</sup> S – Mass Flow Meters and Feeders with Highly Accurate Coriolis Technology

we make processes work

# **Everything Accurately Measured and Fed**

Whenever it comes to continuous metering, control and feeding of significant material amounts, the MULTICOR<sup>®</sup> S Mass Flow Meters and Feeders are the systems of choice.





MULTICOR® S operating principle

## **Mass Flow Measurement with Coriolis Force**

The material enters into the MULTICOR®'s rotating measuring wheel in free fall. Through centrifugal force, the material particles are forced outward along the guide vanes. On the measuring wheel - through the acceleration in circumferential direction – the Coriolis force acts on the material. As a measured variable, this force is directly proportional to the gravimetric feed rate also with varying bulk density and grain size.

#### **Definition of forces:**

- Fc = Coriolis force
- Fr = Frictional force
- Fz = Centrifugal force

#### **Compatible, Flexible, Accurate**

Equipped with a controlled prefeeder, a screw or rotary feeder, the MULTICOR<sup>®</sup> S system is ideal for feeding applications with the highest demands on accuracy.

For measurement value, the INTECONT® Plus or DISOCONT® weighing electronics are available. The combination of MULTICOR® S and DISOCONT® in MechaTronic design can be directly coupled to any commercial host system via fieldbus connection.

MULTICOR<sup>®</sup> S with rotary feeder

MULTICOR® S is designed as an enclosed measuring system for metering feed rate and process data accurately and economically. By applying Coriolis technology, ±0.5% accuracy and repeatability can be achieved. Through Coriolis technology, the Schenck Process MULTICOR® S system handles balancing, batching, blending, throughput and consumption measurement.

- Igh measuring and feeding accuracy of ±0.5% related to actual feed rate
- Easy installation through direct incorporation into material flow
- Low maintenance costs
- Not affected by external conditions
- Dust-tight stainless steel offering

# **Typical applications:**



- Feeding of polymer powders for the manufacture of basic plastic resins
- Granules flow measurement
- Feeding of TPA powders in polyester plants
- Measurement of the flow of grain in mills
- Mass flow metering in in-plant transport, and in the detergent and fertilizer industries



## PASS:

Customised to meet your requirements, our comprehensive Process Advanced Service System provides you with the best service:

- Service around-the-clock
- Over 30 service points
- Over 180 service specialists
- Expert training for customers

To make the lives of our customers as simple

as possible, our service products have been split into 4 levels that reflect the various stages of the product life cycle and enable us to provide a targeted customer service.

# **MULTICOR® S**

Below you will find an overview of the various types of configurations and feed rate ranges of the MULTICOR®S measuring and feeding systems

	Feed Rate Range			
Туре	S 40	S 80	S 160	S 260
Max. vol. feed rate	40 m <sup>3</sup> /hr	80 m <sup>3</sup> /hr	160 m <sup>3</sup> /hr	260 m <sup>3</sup> /hr
Max. mass flow	20 t/hr	60 t/hr	150 t/hr	100 t/hr
	Basic Configuration			
Туре	S 40	S 80	S 160	S 260
Max. material temperature	130° C	130° C	130° C	130° C
Adm. operating pressure	20 mbar	20 mbar	20 mbar	20 mbar
Accuracy	± 0.5 %	± 0.5 %	± 0.5 %	± 0.5 %
Inspection hole				
Stainless steel configuration				
	Options			
Туре	S 40	S 80	S 160	S 260
Explosion-proof gas/dust configuration				
Wear protection / lining Measuring wheel / system				
Inert gas blanket				

### **Highest Quality and Precision**

Precision and quality is the cornerstone of our corporate philosophy. This is illustrated through the design of our MULTICOR® systems and our comprehensive service concept. Strict quality control prior to shipment, installation and commissioning along with a proactive after-sales support program reinforce our commitment to precision and quality.









Schenck Process is the global market leader of solutions in measuring and process technologies in industrial weighing, feeding, measuring and automation.

Schenck Process develops, manufactures and markets a full range of solutions, products and turnkey systems on the basis of combining process engineering expertise, reliable components and field-proven technology.

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