



MACRO

The differential dosing scale, MACRO, is an extremely accurate measuring instrument for gravimetric weighing of powdery products. A precise dosage, excellent sanitation and a large capacity range characterizes this extraordinarily reliable differential dosing scale.

SWISCO



FLOUR



FEED



BRAN



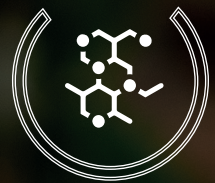
INGREDIENTS



SUGAR



STARCH



DIFFERENTIAL DOSING SCALE

MACRO

Type	Hopper Liter	Dia-meter mm	Height mm	Flour measuring t/h	Flour dosing t/h	Semolina measuring t/h	Semolina dosing t/h	Bran measuring t/h	Bran dosing t/h
130	150	500	1485	0.1 – 4.9	0.1 – 3.6	0.15 – 6	0.15 – 5	–	–
160	200	500	1560	0.4 – 17	0.4 – 12.5	0.5 – 20	0.5 – 15	0.18 – 7	0.18 – 5
210	300	600	1775	0.9 – 33	0.9 – 33	1.0 – 40	1.0 – 40	0.38 – 14	0.38 – 14
245	400	600	2150	1.4 – 50	1.4 – 50	1.5 – 58	1.5 – 58	0.58 – 20	0.58 – 20

Our differential dosing scale MACRO is used for an accurate gravimetric dosage of powdery products into a continuous product stream. Thanks to innovative servo technology, flour, semolina or bran with a very large capacity range can be reliably measured or regulated. The differential dosing scale can

be applied as an input or control scale. It can be used for the production of mixes and for the provision of a total quantity in a manufacturing or logistics process. These differential dosing scales are well accessible and easy to clean. The control unit is extremely reliable and user-friendly.



Energy-efficient servo drives

Metal detectable connections

Good accessibility for cleaning

High-quality measuring cells

Straightforward touch screen

IOT compatible control

DENSITY

As a mass flow controller, the GRANO differential dosing scale with the DENSI additional equipment doses a selectable output, registers the total weight and simultaneously measures the density of the product in the weighing container. As a mass flow meter, product flow and product density are measured online. The quality of the data for in-plant process monitoring can be improved by measuring the product density, because the measurement of the mass flow depends on the product density. An innovative control system allows easy calibration of the density measurement and accurate comparison with empirical values determined in the la-

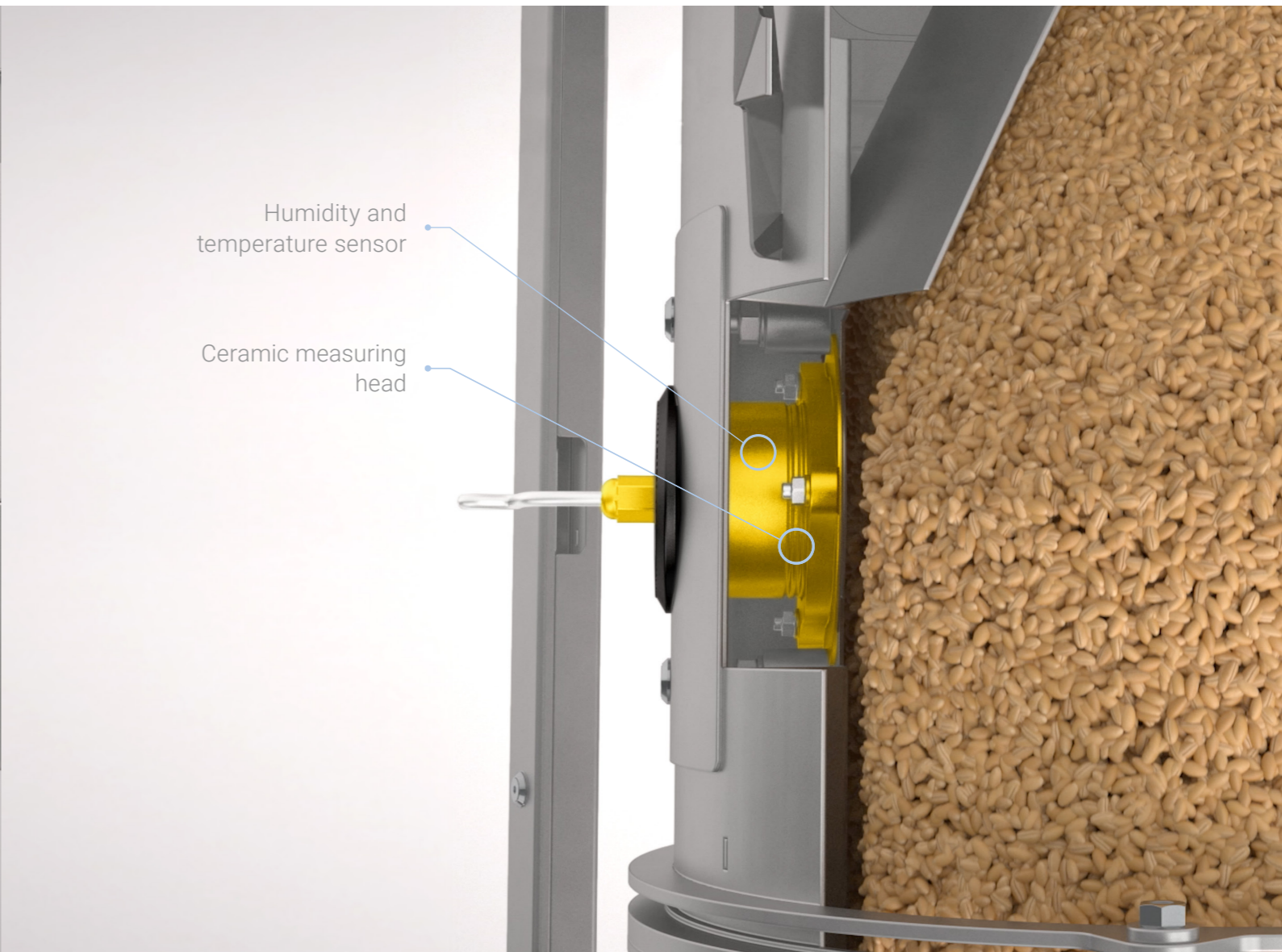
boratory. The measurements of mass flow and density are suitable for optimising and continuously monitoring internal processes online. The DENSI add-on equipment is also suitable for retrofitting existing GRANO differential weighfeeders if the installation conditions permit a higher installation height.

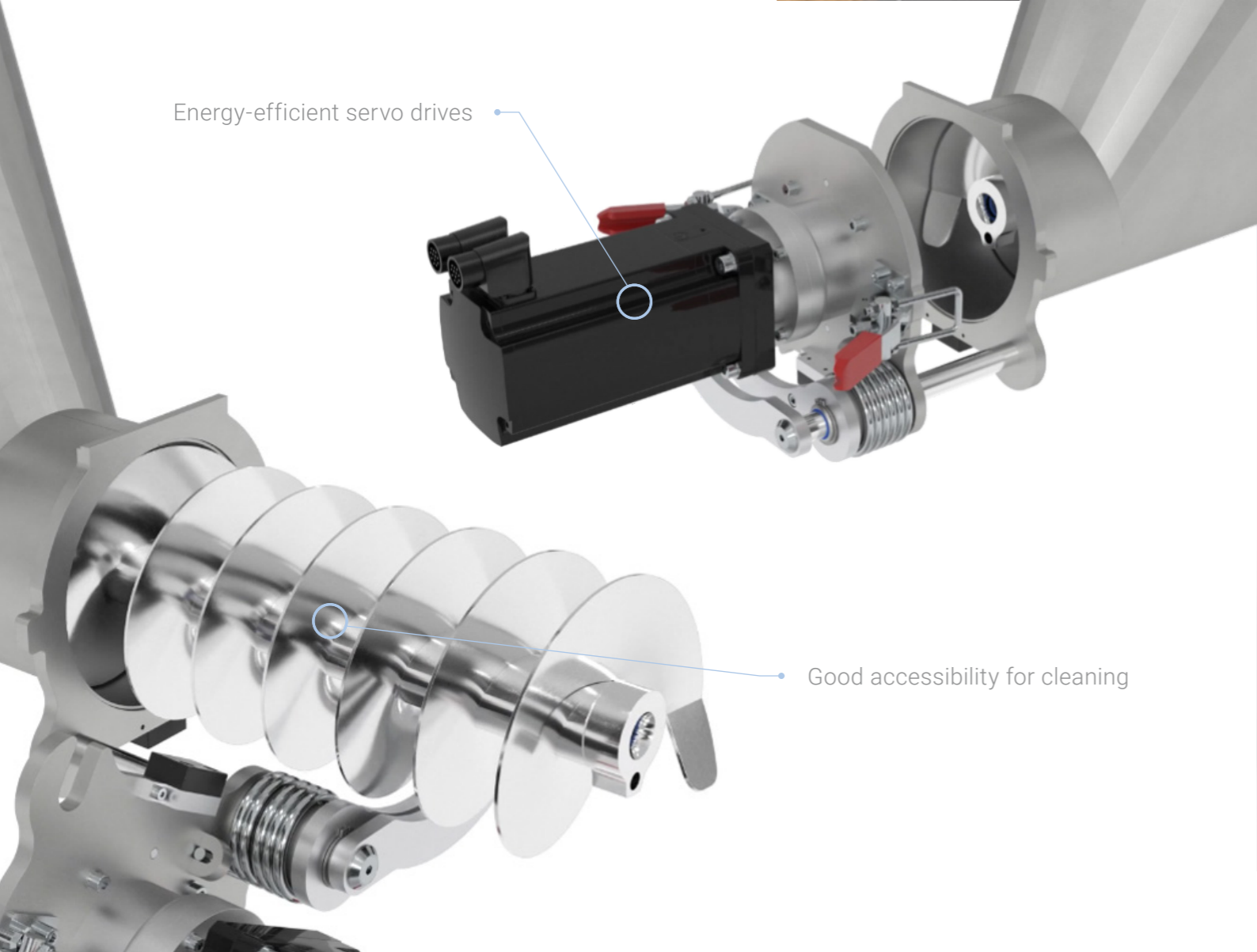
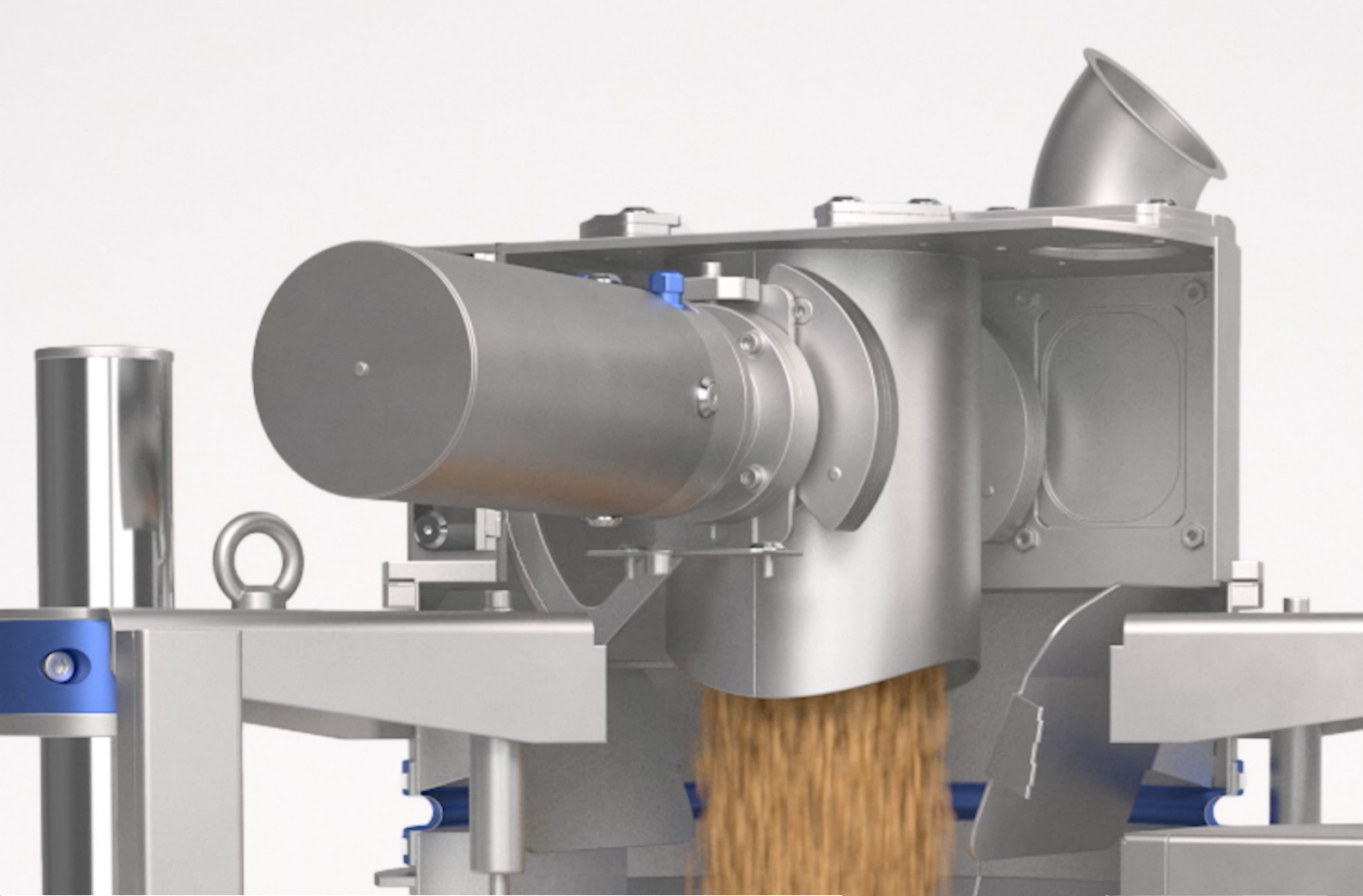


TEMPERATURE MOISTURE

The GRANO differential dosing scale with the additional MOIST sensor doses a selectable output as a mass flow controller, registers the total weight and simultaneously measures the moisture and temperature of the product in the weighing container. As a mass flow meter, the moisture and temperature are measured online in addition to the product flow. The quality of the data for internal process monitoring can be improved by measuring the product temperature and product moisture, because the measurement of the mass flow depends on the product moisture. An innovative control system allows easy calibration of the capacitive moisture

sensor and accurate comparison with empirical values determined in the laboratory. The measurements of mass flow, temperature and moisture are also necessary to determine an exact addition of the wetting water quantity or are suitable for optimising and continuously monitoring internal processes online. The additional sensor with ceramic MOIST measuring head is also suitable for retrofitting existing GRANO differential weighfeeders.





Energy-efficient servo drives

Good accessibility for cleaning



Force measurement

Energy-efficient servo drives

Volume and density measurement

Humidity and temperature measurement

