

ProFlo



ACCURATE AND RELIABLE Continuous Mass Flow Measurement of Bulk Solids

The APEC ProFlo meter is to dry products what a Coriolis meter is to liquids. It measures the actual mass of any flow-able solid with densities of from 10 to 100 lbs. per cubic foot and flow rates of from 700 to 7000 cubic feet per hour. Products such as whole and ground grains, extruded products, snack foods, nuts, rice, dried beans and spices can all be measured.

How Accurate?

Field trials show and users confirm an accuracy of +/- 0.5% full scale. If it will flow, the ProFlo will accurately measure it.

How to integrate?

It is recommended that some sort of pre-feed device be used for introducing dry products into the ProFlo, primarily to reduce wear on the shield and rails. Pre-feed devices may be belt, rotary or vibratory feeders, variable gates or drag and screw conveyors. The overall height of the unit including the mild or stainless steel enclosure is only 18 inches. Analog, serial and Ethernet interfaces are standard. Others are typically available for a small additional cost.

Ease of Calibration and Maintenance

The ProFlo meter comes with calibration weights that are hung outside of the unit. No feeling around inside for hooks or eyes. No chance of dropping the test weight into downstream equipment. Wear surface items typically last three years or more of continuous use. When it comes time to replace consumables the entire unit hinges open for easy access. Standard hand tools are all that is required. A calibration check can typically be done in less than five minutes.

Heavy Duty Construction

All product contact surfaces are 304 Stainless Steel. Enclosures may be mild steel or wash-down duty stainless steel. The plate to sensor connection is designed so that should product back up in the unit, the sensor will not be damaged. There are no moving parts. The electronics and HMI are housed in a separate enclosure. Up to sixteen units may be controlled by one HMI.

Connectivity

APEC offers a number of connectivity options for remote monitoring by us or your plant personnel so that should something go wrong, you'll know it as soon as it happens instead of hearing about it from your customers first.

Applications

Receiving bulk ingredients by ship, rail or truck
Dry Flow measurement on a continuous blend line
Metering dry ingredients into a batch mixer

Options

Air purge for extremely dusty environments
Intrinsically safe electronics
Moisture and protein measurement
Integrated pre-feed devices

ProFlo VERSUS the Competition



ProFlo

Machine is not damaged by product backing up into the meter.

Can be calibrated from the outside. You don't have to open it up and come in contact with the materials.

All controls are off the shelf, Allen Bradley components.

Controls allow you to linearize the response for variety of bulk densities.

Can be counterweighted. This allows you to run very light density materials.

Competition

When materials back up into the meter it causes breakage of the linkage lever and linkage wire.

Cannot be calibrated from the outside.

Controls use proprietary boards that become obsolete quickly.

Limited by material density. Light density materials have issues with accuracy.

Cannot be counterweighted. The weight of the measuring plate doesn't allow enough precision.

QR CODE to
ProFlo Page



APEC

Automated Process Equipment Corporation

PROCESSING THE INGREDIENTS FOR SUCCESS
+1 (616) 374-1000 • www.apecusa.com