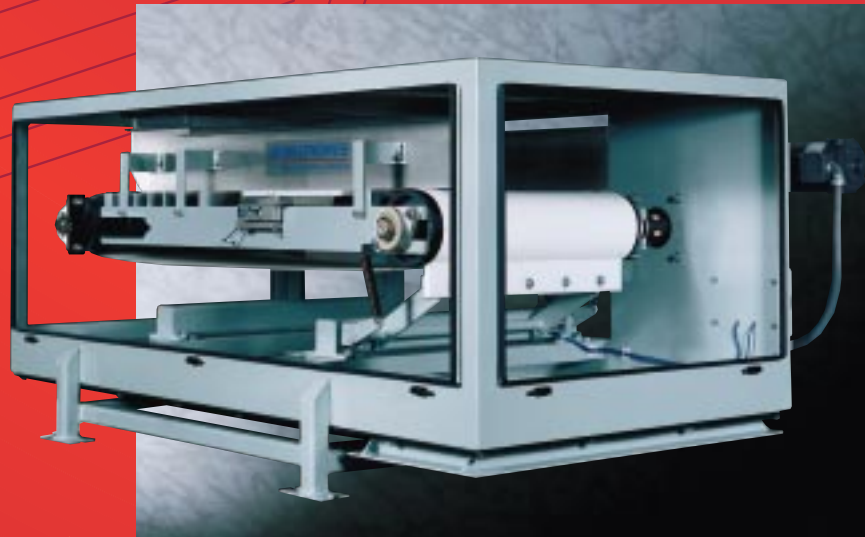




Autoweigh Feeder Series 600

A New Generation of Weigh Feeders



 **MILLTRONICS**
Mass Dynamics Division



Providing Cost Effective Weigh Feeding Solutions

Easy to Maintain

The Milltronics 600 Series, with its unique design, simple construction, quick belt removal and slider system, simplifies maintenance requirements.

Its cantilevered mechanical design provides for quick belt removal and ease of maintenance. Its overall design eliminates areas of material build-up that can cause product contamination and weighing inaccuracies.



UHMW sliders cannot become gummy, sticky or non-turning, are easier to clean and require virtually no maintenance.

Direct coupled, shaft-mounted motor and reducer assemblies reduce maintenance by eliminating chains and sprockets.

Externally mounted load cells allow for easy access and serviceability.

Pre-set, factory adjusted, mechanical overload stops prevent load cell damage from incidental overload.

Flexibility

The design of the unit allows for easy customization to meet exact application needs. It is available in stainless and mild steel. Custom lengths, belt types, inlet configurations, drive types and more are easily incorporated into the design without creating unreasonably long lead times or excessive manufacturing costs.

Custom configured units can usually be delivered within 4-6 weeks.

Versatile and Reliable

Milltronics' 600 Series Weigh Belt Feeders are designed for use in dry bulk material applications where producers have low to medium capacity requirements, at a cost effective price.

Field tested and proven in hundreds of applications, the 600 MS (mild steel) is ideal for use with chemicals, powders, or any granular product handling applications not requiring washdown. The 600 SD (sanitary duty) is designed for the food industry where high pressure washdown is required.

The 600 Series allows end users to improve blend consistencies, reduce downtime, improve accountability and record keeping, blend continuously, eliminate inaccuracies and inefficiencies, improve profitability and automate production processes at weighing accuracies of $\pm 0.5\%$.



Stainless or Mild Steel Construction

The 600 Series is available in mild steel (600 MS) or stainless steel (600 SD), open or enclosed construction, with constant or variable speed motors. The 600 SD is constructed of 304 stainless steel with food grade ratings on all belting materials, gear reducer oil and pulley lagging. It meets or exceeds all USDA and FDA requirements for materials of construction.

The system design eliminates areas of material build-up that can cause weighing inaccuracies and product contamination. Tensioning and belt removal can be assisted with quick release tension adjustment assemblies.

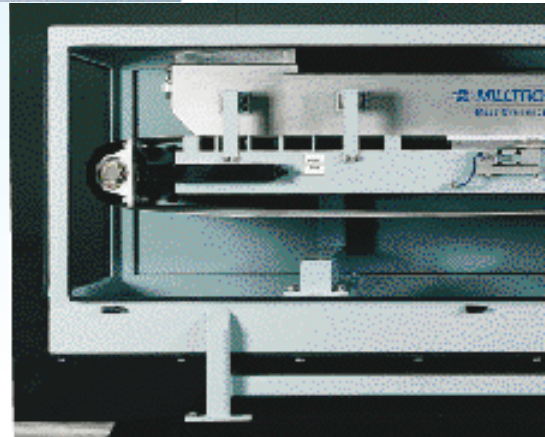


How It Works

The weigh feeder is used to deliver an accurate mass flow rate of material. The material is profiled by an adjustable mechanical shear gate which fixes the correct material bed depth for a given material particle size. The feed rate is then maintained and adjusted by varying the speed of the belt.

The system consists of three components: weight and speed sensing, integration and control, and the mechanical conveying system.

Using the belt load and the belt speed sensors, small incremental totals of weight are measured and then the flow rate is calculated. The measured flow rate is compared against the desired flow rate and the on board PID controller makes necessary corrections to the belt speed.



Rugged Design

At the heart of the system is a rugged stainless steel platform weigh deck, with a UHMW plastic slider bar assembly that mounts directly to corrosion resistant, sealed platform load cells.

Our unique "direct load" design eliminates all intermediate mechanical suspension and allows material weight to be directly applied to the load cells.

This design minimizes zero drift, normally caused by intermediary suspension components and allows for the use of very sensitive, precision load cells with very little "dead load".

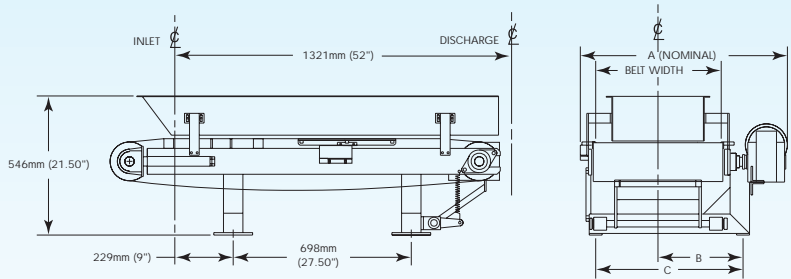
A sturdy, rigid frame further ensures stable and repeatable results and maximizes resolution and weighing accuracy.

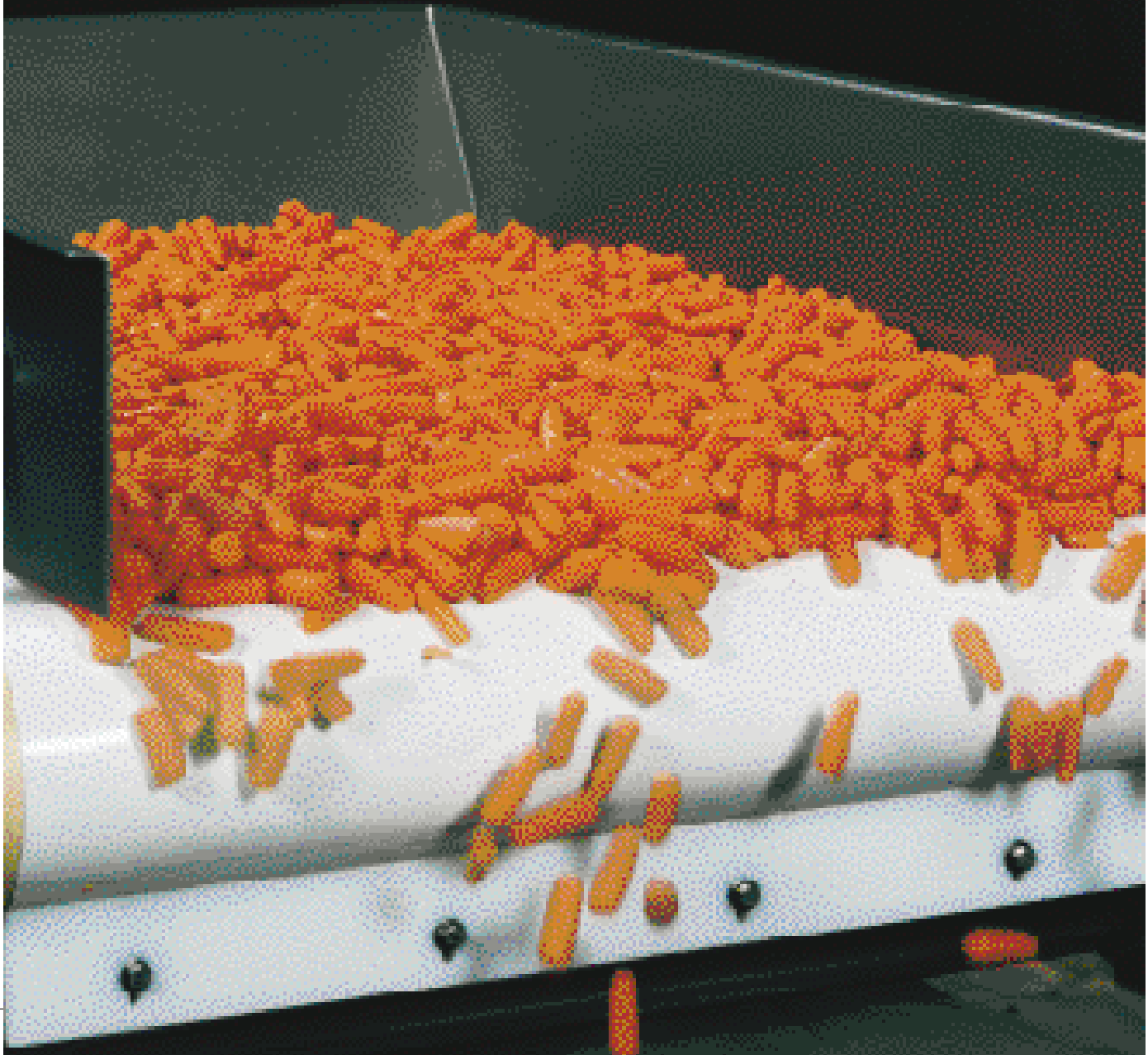
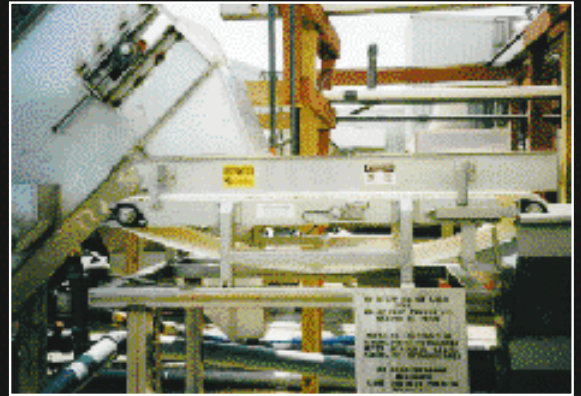
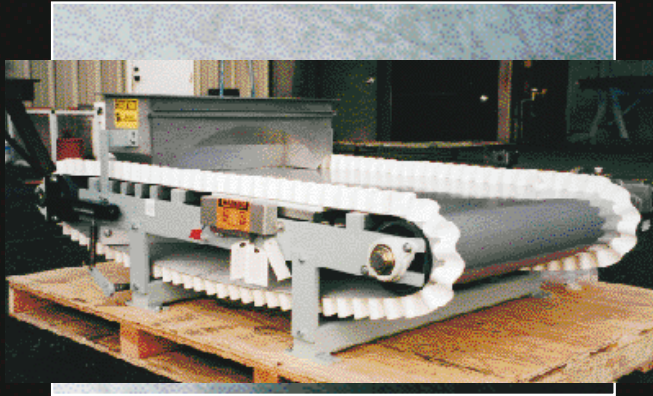
State-of-the-art, microprocessor based electronics provide quick and easy set-up, calibration and operation.



600 SD Dimensions

For dimensions of belt width see Open Unit table overleaf.





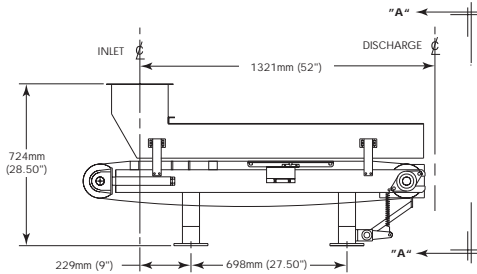
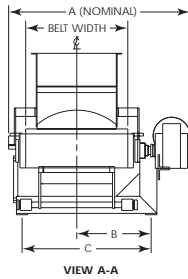
Specifications

Accuracy ±0.5%
 Operating Temperature -10°C to 40°C (14°F to 104°F)
 Materials Mild Steel or Stainless Steel.
 Load Cells Two corrosion resistant platform type with mechanical overload protection (aluminium or stainless steel).
 Output Non-linearity ±0.03%. Non-repeatability 0.02%.
 Speed Sensor C-flange mounted magnetic pulse generator, adapted between motor flange and reducer input flange. Optical encoder optional.
 Framework Precision machined, stainless or mild steel. Cantilevered design for easy belt removal.

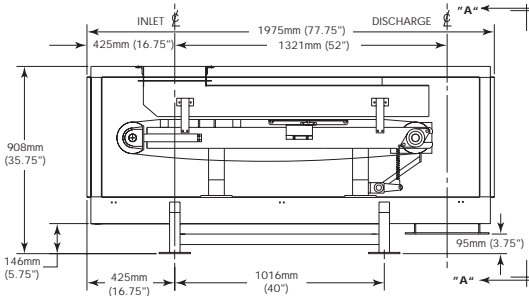
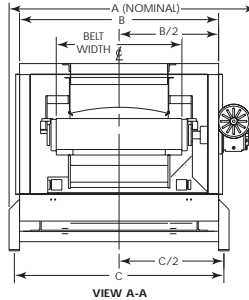
Pulleys 152mm (6") diameter with 6mm (1/4") Urethane lagging
 Belt Tension Screw type, telescoper module with 152mm (6") travel (mild or stainless steel).
 Belting Polyester carcass with polyurethane top cover and static control with vulcanised endless finger splice for maximum weighing consistency (standard). Variety of different belts for specific applications (optional).
 Drive 1/3 horsepower TEFC AC or DC motor with shaft mounted helical/worm gear reducer. Larger motors and motorized pulleys available.
 Belt Cleaning UHMW blade type with spring tensioning at head pulley. Return plow optional.

600 Dimensions

OPEN CONSTRUCTION



ENCLOSED CONSTRUCTION



Open Unit

Belt Width	A	B	C
305mm/(12")	660mm/(26")	257mm/(10.13")	425mm/(16.75")
457mm/(18")	813mm/(32")	333mm/(13.13")	578mm/(22.75")
610mm/(24")	965mm/(38")	410mm/(16.13")	730mm/(28.75")
762mm/(30")	1118mm/(44")	486mm/(19.13")	883mm/(34.75")
914mm/(36")	1270mm/(50")	562mm/(22.13")	1035mm/(40.75")

Enclosed Unit

Belt Width	A	B	C
305mm/(12")	899mm/(35.38")	660mm/(26")	711mm/(28")
457mm/(18")	1051mm/(41.38")	813mm/(32")	864mm/(34")
610mm/(24")	1203mm/(47.38")	965mm/(38")	1016mm/(40")
762mm/(30")	1356mm/(53.38")	1118mm/(44")	1168mm/(46")
914mm/(36")	1508mm/(59.38")	1270mm/(50")	1321mm/(52")

Shipping weight 140 kg (300 lbs.) to 230 kg (500 lbs.) maximum.

*Standard components include belt weigh bridge, speed sensor, test weights, integrator and packaging.

Our continuous program to improve our products may result in changes to design and specifications without notice.

Mass Dynamics is dedicated to the sales and development of continuous weighing and motion sensing instrumentation. Launched in 1997 as a new business division of Milltronics Ltd., Mass Dynamics offers a range of belt scales, solids flowmeters, weigh feeders, acoustic sensors and motion sensing equipment. Designed to withstand the sustained rigours of heavy primary industries, these products have proven their reliability in a wide range of harsh applications including the mining, mineral processing and cement industries. They are also used extensively in wet and dry food processing and petrochemicals.



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A joint venture in Singapore, a sales office in Brazil and distributors in 56 countries.

Internet: <http://www.milltronics.com>

Printed in Canada

Representative

35759750 NA

35759751 A4

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