

# FAIRBANKS®

## S C A L E S



**OMNICELL®**

**WEIGHING ASSEMBLIES FOR TANKS, VESSELS & HOPPERS**

Fairbanks Omnicells turn any liquid or bulk solid container into a highly accurate scale. Capacities from 100 to 200,000 lbs.

**Fairbanks.com**

# OMNICELL® WEIGHING ASSEMBLIES FOR TANKS, VESSELS & HOPPERS



## Omnicells: What are they and how do they work?

Omnicell is a trade name used to describe Fairbanks Scales' complete line of weighing assemblies. A weighing assembly is essentially a load cell combined with special mounting hardware. When combined in this manner, the weighing assembly can then be placed on or under almost any type of container or vessel, turning it into an accurate scale.

In simple terms, the mounting hardware bears the full weight of a container's load, then transfers the load to the load cell. The load cell measures the applied force and sends this information to a scale instrument, which displays a weight reading and other information for the system operator.

## Who needs Omnicells?

Omnicells are used by nearly all industrial sectors. Here are a few of the liquid or bulk solid products that are typically weighed by Omnicells:

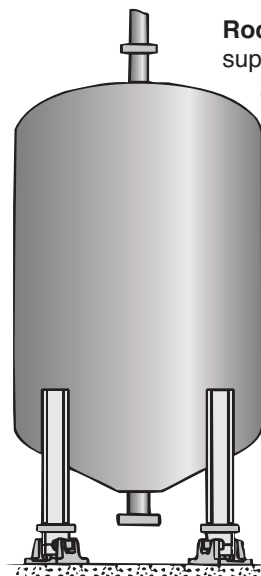
- Agricultural grains, seed (corn, cotton, soybean, wheat, etc.) and feed (cattle, horse, dog, cat, sheep, etc.)
- Food and drink ingredients including flour, glucose syrup, ethanol, fruit juices, and a variety of edible oils (peanut, olive, canola, coconut, avocado, sesame, etc.)
- Plastic or biomass pellets
- Fertilizers, herbicides and insecticides
- Minerals and mined products such as charcoal, sulphur, nickel, copper, iron ore, etc.
- Paint and stains
- Concrete and cement

## Superior Omnicell design results in greater performance

The heart of the weighing assembly is the load cell. Fairbanks uses single- or double-ended "shear beam" designed cells in all low-to-medium weight capacity Omnicell models, and canister compression cells in its heavy weight model, the 9120. These designs have proven superior to other load cells in a number of ways. Most notably, they have a lower sensitivity to adverse loads (shock loads), a high tolerance for dynamic forces and vibrations, they have sealing for environmental protection, and they offer tremendous flexibility in a variety of applications.

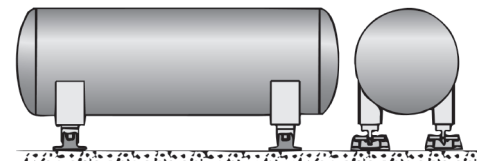
**Single-ended shear beams** are supported on one end with the weight applied on the opposite or "shear" side. Combined with our mounting hardware, single-ended shear beams provide an accurate, economical choice in the low-to-medium weight ranges (100 to 10,000 lbs).

**Double-ended shear beams** are supported on both ends with the load applied in the middle. They are an excellent choice in the medium-to-heavy weight ranges (1,000 to 75,000 lbs), offering proven accuracy and built-in self checking. They are virtually immune to side load forces.



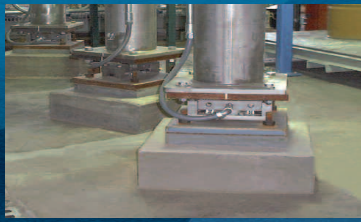
**Rocker column compression canisters** are supported on the bottom load button and load is applied on the top load button. These cells are ideally suited for high accuracy weighing in the mid-to-extreme weight ranges (15,000 to 200,000 lbs) and are commonly applied to agricultural silos, batching vessels and holding vessels.

*(Left) A typical Omnicell installation on a vertically oriented, cylindrical tank. Vessels can also be square or rectangular in shape, and horizontal in orientation (below).*



## Which Omnicell is right for my application?

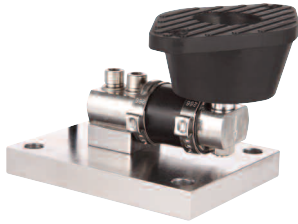
There are many variables that influence the type of Omnicell best suited for an application. There are numerous sizes and types of containers, a variety of materials to be weighed, commercial (NTEP) and non-commercial applications, and industrial environments that range from hostile, washdown to dry, hazardous and everything in between. Fairbanks Omnicells come with a variety of different features designed to meet one or more of these requirements. This enables you, with the assistance of an authorized Fairbanks representative, to select the right type of Omnicell for your particular application.



*Light Vessels / Conveyors / Feeders*

## 9101 FB SERIES

Capacities from 100 to 2,500 lbs



- Single-Ended Shear Beam
  - Stainless Steel Base Mount
  - Unique Neoprene Top Mount
  - Stainless Steel & Alloy Steel Load Cell
  - NTEP\* and FM\* Approved
- \* Models 500 lb capacity and greater

*Small Tanks / Hoppers / Reactors*

## 9102 FB SERIES

Capacities from 1,000 to 10,000 lbs

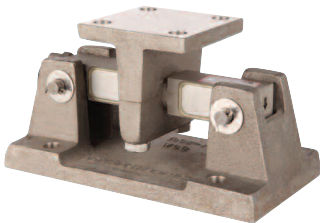


- Single-Ended Shear Beam
- Stainless Steel Base Mount
- Articulating Top Mount with Integral Height Adjustment
- Stainless Steel Load Cell
- NTEP and FM Approved

*Silos: Dispensing & Inventory Management*

## 9104 SERIES

Capacities from 1,000 to 75,000 lbs

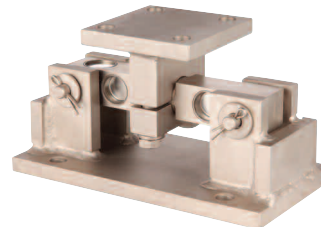


- Double-Ended Shear Beam
- Multi-Directional Self-Checking
- Ductile Iron & Stainless Steel Cast Mount
- Stainless/Alloy Steel Load Cell
- FM Approved

*Batch-Blend-Storage Vessels / Containers*

## 9104 FB SERIES

Capacities from 1,000 to 75,000 lbs



- Double-Ended Shear Beam
- Nickel-plated Mild Steel & Stainless Steel Mounts
- Stainless Steel & Alloy Steel Load Cell
- NTEP and FM Approved

*General Washdown / Reactors*

## 9106 FB SERIES

Capacities from 1,000 to 10,000 lbs

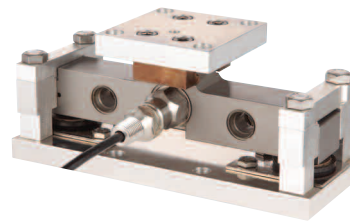


- Single-Ended Shear Beam
- Stainless Base
- Stainless Articulating Mount
- Stainless, welded Load Cell
- NTEP and FM Approved

*Heavy Washdown Tanks / Hoppers / Vessels*

## 9109 SERIES

Capacities from 1,000 to 50,000 lbs

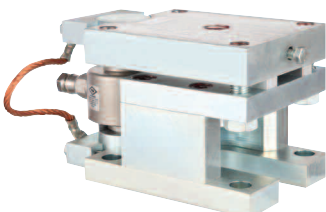


- Double-Ended Shear Beam
- Exclusive OmniMount System
- Stainless IP69K Load Cells
- NTEP and FM Approved

*Batching Plants / Ag Silos / Holding Vessels*

## 9120 SERIES

Capacities from 15,000 to 200,000 lbs



- Rocker Column
- Unparalleled Durability
- Stainless IP69K Load Cell
- NTEP and FM Approved

*Have a Custom Application?*

## CUSTOM OMNICELL

Specify your requirements

Engineers from Fairbanks Solutions Group can modify or create an Omnicell that's ideal for virtually any application.

Contact your Fairbanks Scales representative to discuss your unique weighing needs.

### OMNICELL® FEATURES AND CAPACITIES MATRIX

OMNICELL SERIES	9101 FB	9102 FB	9104	9104 FB	9106 FB	9109	9120
<b>NTEP Approved</b>	*	X		*	X	X	
<b>Non-Commercial</b>	X	X	X	X	X	X	X
<b>Factory Mutual</b>	*	X	X	X	X	X	X
<b>Stainless Steel Load Cell</b>	*	X	X	X	X	X	X
<b>Stainless Steel Mount</b>	X	X	X	X	X	X	
<b>Alloy Tool Steel Load Cell</b>	*		X	X			
<b>Alloy Tool Steel Mount</b>			X	X		X	X
<b>Capacities:</b>							
<b>45 - 500 lbs</b>	X						
<b>1,000 - 1,500 lbs</b>	X	X	X	X	X	X	
<b>2,000 - 2,500 lbs</b>	X	X	X	X	X	X	
<b>4,000 - 5,000 lbs</b>		X	X	X	X	X	
<b>10,000 - 11,250 lbs</b>		X	X	X	X	X	
<b>15,000 lbs</b>			X	X			X
<b>25,000 lbs</b>			X	X		X	X
<b>35,000 lbs</b>			X	X			X
<b>40,000 - 50,000 lbs</b>			X	X		X	X
<b>75,000 lbs</b>			X	X			X
<b>100,000 lbs</b>							X
<b>125,000 lbs</b>							X
<b>220,000 lbs</b>							X
<b>Custom Capacities</b>	X	X		X	X	X	X

\* Refer to Fairbanks.com or your local Fairbanks representative for additional information.



Fairbanks' exclusive **Intalogix® Technology** provides a unique advantage for Omnicell customers. Intalogix enhanced digital performance increases load cell signal strength, offers greater weight resolution (up to five times greater than analog systems), and it detects any abnormalities or deviation in performance. In short, Intalogix increases performance and decreases downtime. Ask your Fairbanks representative what Intalogix can do for your weighing operation.

Your Fairbanks Scales Authorized Representative is:

Call toll-free for the representative nearest you:

**(800) 451-4107**

Call between 8:00 a.m. – 5:00 p.m. Central Time

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