

# Tank & Vessel Weighing



Integrated Tank Assembly • Single & Double Ended Mounts • LeverMount®



# Tank Weighing Assemblies

Innovative design, and tough construction define the Tank Weighing Assemblies from GSE. The complete product line offers operational safety, quick installation, overload protection, and steelwork misalignment tolerance. Stainless steel, hermetically sealed load cells are available.

## Integrated Tank Assembly (ITA)

The ITA is an innovative self-contained low profile weighing assembly with an integrated load cell and mounting assembly. The ITA design allows up to 3° off its axis without affecting weighing accuracy. The durable, stainless steel hermetically sealed construction prevents intrusion from moisture or chemicals; providing years of service in the most severe environments. Integral to the ITA design is uplift restraint and side load protection, eliminating the need for check rods or stabilizing hardware in most applications.

### FEATURES

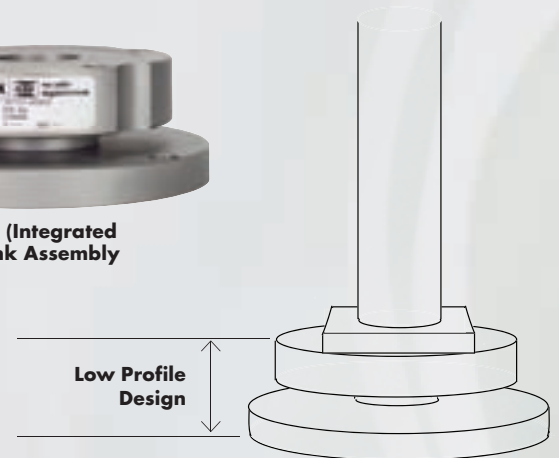
ITA Medium Capacity: 1000 lb–125000 lb  
(454 kg–56699 kg)

ITA Heavy Capacity: 150000 lb–450000 lb  
(68039 kg–204116 kg)

- Stainless steel base plate (medium capacity only)
- Square steel painted base plate (heavy capacity only)
- Low profile, self-checking
- Integrated load cell and mount
- Hermetically sealed IP66/IP68
- FM approved load cells
- NTEP approval pending
- Installation leveling plate option available



ITA (Integrated Tank Assembly)



## Model 6600 Single-Ended Mount Model 6700 Double-Ended Mount

GSE's single- and double-ended tank mounts are engineered for medium to high capacity tank, bin, and hopper applications. The self-centering, and self-checking design ensures greater accuracy and repeatability; making them ideally suited for process control operations.

### FEATURES

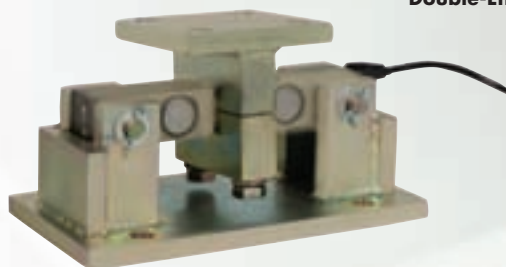
Single-Ended Mount Capacity: 1000 lb–10,000 lb  
(454 kg–4536 kg)

Double-Ended Mount Capacity: 2000 lb–5000 lb  
(907 kg–2268 kg)

- Application versatility
- Single-Ended: Stainless steel or yellow zinc-plated mild steel
- Double-Ended: Yellow zinc-plated mild steel
- Stainless steel or alloy steel load cells
- Matched output sensitivities
- Hermetically sealed IP67
- High Eccentric load tolerance
- 0.03 % accuracy class
- Self-centering and self-checking



Model 6600 Series  
Single-Ended Mount



Model 6700 Series  
Double-Ended Mount



## Model 7300 LeverMount®

The innovative LeverMount® design allows rapid loadcell installation, minimizing production downtime. The column and top plate secures the load; eliminating the need for dummy load cells or jacks during installation. The hardened steel load button and saddle design concentrates the vertical load for increased accuracy. The stable three-point mounting prevents rocking or twisting caused by uneven surfaces. The slotted saddle allows for thermal expansion and contraction which eliminates errors caused by temperature changes, and allows for steelwork misalignment. Tangential, Radial, or Offset Mounting.

## Applications

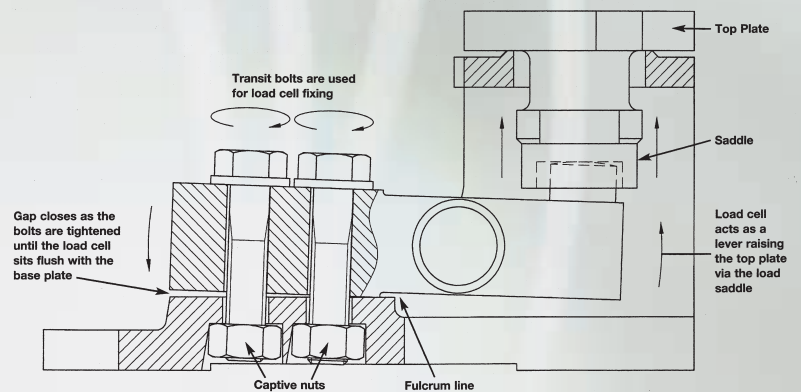
Tank, Hopper, & Vessel Weighing  
Packaging and Bagging Systems  
Big Bag Weighing Machines  
Batching, Blending, and Mixing



### LeverMount® Mounting Configurations



### LeverMount® Column and Top Plate



## LeverMount® Lite Tank Assembly

### FEATURES

Lite Tank Assembly

Capacities: 20 lb, 50 lb, 100 lb, 200 lb, 250 lb, 400 lb, 500 lb  
(9 kg, 23 kg, 45 kg, 91 kg, 113 kg, 181 kg, 227 kg)

- Jackless load cell installation
- Integral uplift and tip protection
- Tangential, radial, or offset mounting
- Ideally suited for severe environments
- Cast 316 stainless steel construction



LeverMount®  
Lite Tank Assembly

## LeverMount® Medium & Heavy Tank Assemblies

### FEATURES

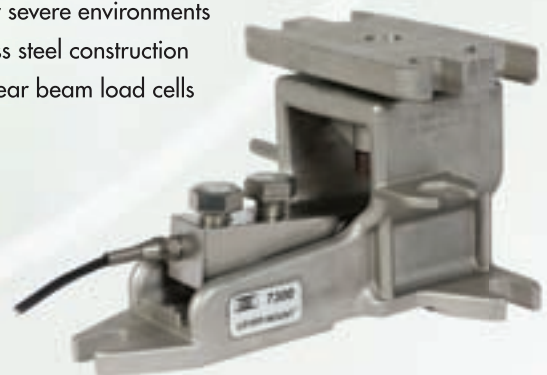
Medium Tank Assembly

Capacities: 1000 lb, 2500 lb, 5000 lb (454 kg, 1134 kg, 2268 kg)

Heavy Tank Assembly

Capacities: 5000 lb, 10000 lb (2268 kg, 4536 kg)

- Jackless load cell installation
- Integral uplift and tip protection
- Tangential, radial, or offset mounting
- Ideally suited for severe environments
- Cast 316 stainless steel construction
- Single-ended shear beam load cells



LeverMount®  
Heavy Tank Assembly

# Specifications

	<b>Integrated Tank Assembly</b>	<b>LeverMount® Lite</b>	<b>LeverMount®</b>	<b>Mild Steel Single Ended Mount</b>	<b>SS Single Ended Mount</b>	<b>Mild Steel Double Ended Mount</b>
<b>PERFORMANCE</b>						
Capacities (lb)	Stainless Steel: 1000 lb–125,000 lb Mild Steel: 150,000 lb–450,000 lb	20 lb–500 lb	Medium Duty: 1000 lb, 2500 lb, 5000 lb Heavy Duty: 5000 lb, 10,000 lb	Mild Steel Single Ended Mount: 1000 lb–10,000 lb	Stainless Steel Single Ended Mount: 1000 lb–5000 lb	Double Ended Mount: 2000 lb–5000 lb
Rated Output	3 mV/V ± 0.10 %	2 mV/V ± 0.20 %	3 mV/V ± 0.25 %	3 mV/V ± 0.25 %	3 mV/V ± 0.25 %	3 mV/V
Non-linearity of Rated Output	± 0.05 %	± 0.02 %	± 0.025 %	± 0.02 %	± 0.025 %	± 0.03 %
Non-repeatability of Rated Output	± 0.05 %	± 0.02 %	± 0.02 %	± 0.01 %	± 0.02 %	± 0.01 %
Creep (30 minutes)	± 0.03 %	± 0.017 % of applied load	≤ 0.03 in 20 minutes	≤ 0.03 ± 0.025 % FSO	≤ 0.03 in 20 minutes	± 0.03 in 20 minutes
Temp Effect on Zero Balance	± 0.0015 % / °C	0.0023 % / °C	<± 0.026 % / 10 °C	<± 0.0010 % FSO / °F	<± 0.026 % / 10 °C	± 0.0015 % FSO / °F
Temp Effect on Span	± 0.0008 % / °C	0.001 % / °C	<± 0.015 % / 10 °C	<± 0.0008 % / °F	<± 0.015 % / 10 °C	± 0.0008 % of load / °F
Compensated Temp Range	10 °F to 110 °F (-12 °C to 43 °C)	14 °F to 104 °F (-10 °C to 40 °C)	14 °F to 104 °F (-10 °C to 40 °C)	14 °F to 104 °F (-10 °C to 40 °C)	14 °F to 104 °F (-10 °C to 40 °C)	14 °F to 104 °F (-10 °C to 40 °C)
Operating Temp Range	10 °F to 110 °F (-12 °C to 43 °C)	-22 °F to 176 °F (-30 °C to 80 °C)	-4 °F to 140 °F (-20 °C to 60 °C)	0 °F to 150 °F (-18 °C to 65 °C)	-4 °F to 140 °F (-20 °C to 60 °C)	0 °F to 150 °F (-18 °C to 65 °C)
Safe Overload F.S.	150 %	150 %	150 %	150 %	150 %	150 %
Ultimate Overload F.S.	300 %	300 %	300 %	300 %	300 %	300 %
Input Resistance / Impedance	350 ± 3 Ohm*	380 ± 10 Ohm	385 ± 5 Ohm	343–357 Ohm	385 ± 5 Ohm	686–714 Ohm
Output Resistance / Impedance	350 ± 3 Ohm*	350 Ohm	350 ± 3 Ohm	349–355 Ohm	350 ± 3 Ohm	699–707 Ohm
<b>ELECTRICAL/WIRING</b>						
Excitation Voltage	10–15 VAC/VDC	10–15 VAC/VDC	10–15 VAC/VDC	15 VAC/VDC Max	15 VAC/VDC Max	25 VAC/VDC Max
Cable Length	25 ft (7.62 m)	9.8 ft (3 m)	16.5 ft (5 m)	20 ft (6.1 m)	20 ft (6.1 m)	25 ft (7.62 m)
Excitation +	Green	Blue	Red	Red	Red	Red
Excitation –	Black	Black	Black	Black	Black	Black
Signal +	White	White	Green	Green	Green	Green
Signal –	Red	Red	White	White	White	White
<b>CONSTRUCTION</b>						
Material	Load Cell: Stainless Steel Hermetically Sealed IP66 / IP68 Base Plate: Stainless Steel (Mild Steel for 150K–450K capacity only)	Load Cell: Stainless Steel Hermetically Sealed IP68 Mount: Cast Stainless Steel	Load Cell: Stainless Steel Hermetically Sealed IP67 Mount: 316 Cast Stainless Steel	Load Cell: Alloy Tool Steel Mount: Mild Steel	Load Cell: Stainless Steel Hermetically Sealed IP66 / IP68 Mount: Stainless Steel	Load Cell: Alloy Tool Steel Mount: Mild Steel or Stainless Steel
Dimensions	Capacity in lb (pounds) 1K–10K: 1.37" x 4.5" 20K–50K: 2.53" x 7.0" 60K–125K: 3.12" x 8.0" 150K–225K: 4.75" x 10.0" x 10.0" 250K–450K: 6.40" x 11.0" x 11.0"	Lite Capacity: 6.63" x 3.94" x 3.15" Medium Capacity: 7.8" x 5.2" x 4.33" Heavy Capacity: 10.63" x 7.48" x 6.18"	Medium Capacity: 7.8" x 5.2" x 4.33" Heavy Capacity: 10.63" x 7.48" x 6.18"	Medium Capacity: 5.12" x 1.25" x 1.25" Heavy Capacity: 6.75" x 1.5" x 1.5"	Medium Capacity: 5.12" x 1.25" x 1.25" Heavy Capacity: 6.75" x 1.5" x 1.5"	Medium Capacity: 7.5" x 1.25" x 1.25" Heavy Capacity: 8.75" x 1.94" x 1.44"
Approval	FM, NTEP Pending	NTEP	NTEP, FM	NTEP, FM	NTEP, FM	NTEP, FM

\*Nominal

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