

# Mechanical Floor Stand Tank and Hopper Scales

## Custom Designed and Manufactured to Meet Any Specification

**Cardinal Hopper and Tank Scales** are designed for use in wineries and breweries, soap, oil, paint, glass, chemical, and mineral plants, or wherever a liquid or material portioning device is needed. These scales are excellent for inventory control, for weigh-in or weigh-out operations, for blending or proportioning of any liquid or free-flowing material.

Tanks and/or hoppers are usually furnished by the customer. Cardinal tank and hopper scales can be supplied in a wide range of sizes and shapes to fit almost any individual tank or hopper. The scales are designed so that the hopper or tank legs can be mounted directly on the scale girder chairs or on the fabricated steel weighbridge, whichever is preferred.

The shallow construction of the Cardinal scale makes it ideal where minimum headroom is available. Complete blueprints are furnished on each installation to insure that the scales will fit the proposed tank or hopper.

All Cardinal tank and hopper scales incorporate the link suspension bearing system. Link suspension bearings absorb impacts and provide a free-floating platform. The levers are constructed of structural steel shapes and extra heavy seamless steel tubing to give greater strength than much heavier materials of comparative low tensile strength.



**Horizontal Tank with End Discharge** - The tank shown above is an example where the scale is mounted beneath the tank with an end discharge. Tank saddles are mounted directly to the scale girder chairs. If desired, tank saddles could be mounted to the scale weighbridge instead of directly to the scale.



**Vertical Tank with Flat Bottom** - Scale is shown above with flat bottomed tank and side discharge. Main lever arms are connected under the tank area. Scales of this type are generally designed for use with light gauge flat bottomed tanks supported on timber or steel plate decks mounted on a steel weighbridge. However, if desired, scales may be designed to accommodate heavier gauge tanks without a steel weighbridge by mounting tank supports directly to scale girder chairs.



**Vertical Tanks with Cone Bottoms** - The scales shown above are examples of vertical tanks or hoppers with center discharges. Levers are so arranged with a center hookup and transverse lever outside of the scales which leave a center opening to permit discharge. Support legs of the hoppers can be mounted directly to the scale girder chairs or, if desired, a steel weighbridge could be used under the hoppers.



Certificate of Conformance  
Number 88-011



Notice of Approval AM-5277  
for tank or hopper scales of more than 1,000 kg capacity and greater than 1.6 m square

Model	Capacity	Base	
		Splice Arm Total	Pipe Length
FS-1F	0 lb - 5,000 lb	3'	3'
FS-2F	5,000 lb - 7,000 lb	3'	3'
FS-2.5F	7,001 lb - 10,000 lb	4'	4'
FS-3F	10,001 lb - 20,000 lb	4'	4'
FS-4	20,001 lb - 30,000 lb	5'	5'
FS-5	30,001 lb - 50,000 lb	6'	6'
FS-6	50,001 lb - 60,000 lb	6'	6'
FS-7	60,001 lb - 80,000 lb	8'	8'
FS-8	80,001 lb - 100,000 lb	8'	8'
FS-9	100,001 lb - 150,000 lb	8'	8'
FS-10	150,001 lb - 200,000 lb	10'	10'
FS-11	200,001 lb - 300,000 lb	10'	10'