

## Torsion Spring-Balance Units 788 Series

Considered the “workhorse” of the industry, the OPW Engineered Systems 788 Series Torsion Spring-Balance Units are designed for precise, automatic control. These robust units are available in four sizes, depending on the load to be lifted. Each unit consists of a torsion spring made from high tensile alloy steel with excellent fatigue-resistant properties. The spring winds tight as the arm is lowered, providing a counter torque, which balances the arm. The units are available in right-hand or left-hand versions. The turning radius range is a minimum of 15” on a 2” arm; and a maximum of 25” on a 6” arm.

### Key Design Features

- Torsion springs constructed of specialty treated, high tension alloy steel
- Each assembly is fully adjustable within its operating range
- Major parts are cast in high strength ductile iron: Includes spring housing and other structural components
- Oil-impregnated bronze bearing carries spring load: Eliminates ferrous-to-ferrous contact, minimizes wear, ensures smooth operation
- Lifting lever pivots at each end on stainless steel pins: Prevents corrosion build up and allows arm to move freely
- Special adjustment prevents excessive downward travel of loading arm
- Seven separate adjustment positions limit upward travel of loading arm: Operator sets at desired position to prevent arm from hitting overhead obstructions
- Protective, unbreakable plastic cover keeps dirt and foreign objects from main spring: Prevents tampering and allows for ease of inspection/adjustment
- Lockdown unit, (788-L and 788-LLH) secures arm in down position during loading: This optional unit prevents jetting of liquid when drop tube is lifted from tank. Locks in any of three positions between horizontal and 15-degree below horizontal

**Caution:** Do not use torsion spring-balance assemblies in overloaded or underloaded conditions. Please consult factory before modifying a loading arm to ensure spring unit has proper lifting capacity for your application.



## 788 Torsion Spring-Balance Unit

The 788 Torsion Spring-Balance Unit is designed for lighter lifting applications such as drum filling. This compact, yet strong unit is ideal for smaller diameter pipe and can be used to support hoses, especially lightweight vapor type. While the 788 is designed for lighter duty, it is still manufactured of the same high quality, long-lasting components. It has the treated, high tension alloy steel spring, bronze bearings and ductile iron housing. Built to handle a wide range of light duty lifting.

Spring Capacity	Lifting Moment	
	Inch-Pounds	Meter-Kilograms
Low	2000 to 3800	23 to 44
Medium	3800 to 6400	44 to 74
Medium-High	6400 to 8600	74 to 99
High	8600 to 13,000	99 to 155

**IMPORTANT:** OPW products should be used in compliance with applicable federal, state, provincial, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the environment and materials to be handled. OPW MAKES NO WARRANTY OF FITNESS FOR A PARTICULAR USE. All illustrations and specifications in this literature are based on the latest product information available at the time of publication. OPW reserves the right to make changes at any time in prices, materials, specifications and models and to discontinue models without notice or obligation.