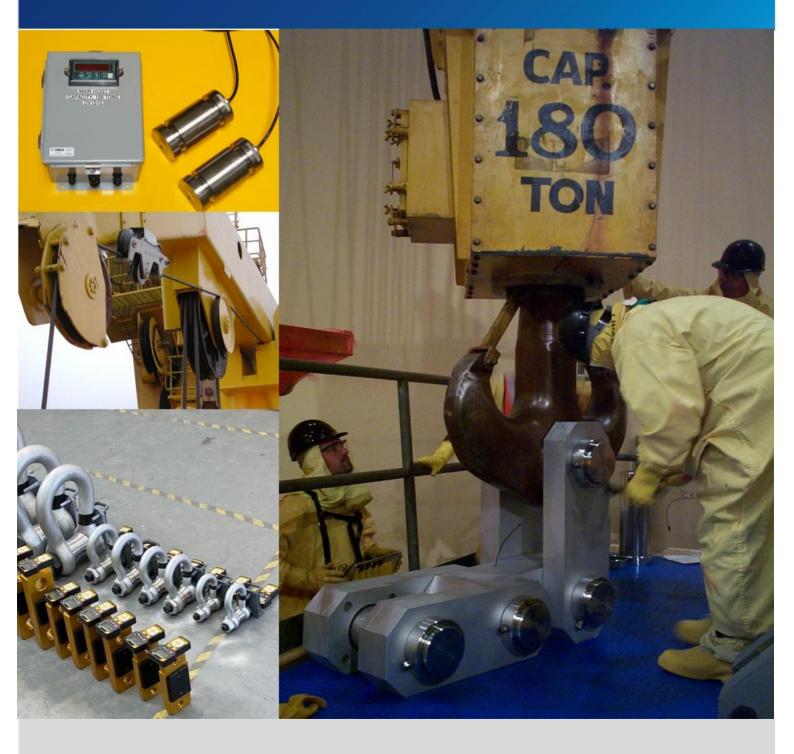
Load Monitoring Solutions



# Monitoring & Measurement Systems Crane & Hoist Systems



Buoyancy & Ballast

www.uniquegroup.com

### Load Measuring Solutions

# Load Measuring & Monitoring System For Cranes & Hoists

Water Weights manufactures and sells high integrity load monitoring systems for all types of cranes; including equipment on military vessels and yards where MIL STD apply.

With over 25 years experience in the crane industry, we have extensive knowledge of customer requirements and desired functionality. Building on this experience, we design and build crane load monitoring systems that are high quality, reliable, easy to install, calibrate and maintain. Our systems provide real time measurement of critical components and assemblies to support either the daily operation and long-term maintenance of the crane.

**Applications include:** 

Above-the-hook (sheaves, drums. trolleys) Below-the-hook (links, shackles, canisters, beams) In-the-hook block (trunnion, sheave pin, hook) Rope dead-end (A2B, wedge socket, clamp-on, line rider) Cabled or wireless telemetry





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# Load Measuring & Monitoring System For Cranes & Hoists

## **Engineered systems for**

- Real time load measurement during lifting operations
- Load indication via multiple displays such as operator consoles, large digit scoreboards, wireless handheld displays, and robust LED, LCD and visual graphics displays.
- Overload protection with alarms and relays for visual and audible indication, as well as safety lock out of overloaded equipment.
- Integration of boom angle data to derive load moment within the designed crane operating envelope
- Measurement of crane travel and line payout for detailed analysis of operating parameters and history tracking of lift information
- Continuous monitoring and logging of a wide range of sensors as well as interpretation of information collected, to determine equipment usage and ongoing maintenance and inspection requirements

### Load Accuracy Throughout the Range

Crane monitoring systems utilizing a two-point calibration make it impossible to ensure that the load indicated is accurate at any point in the envelope, other than at zero and 100% capacity.

Water Weights takes calibration a step further by employing a multipoint calibration over the span of the crane capacity. By calibrating at least 6 points in the range of the crane this method accounts for any nonlinearity in the load cell, wire rope, or crane support structure itself. This method does ensure that the monitoring system is accurate across the full range of the crane capacity.





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