

as it lessens, the crew can align a step-block in a timely manner. A step-block or large wooden timber is used to create a new tipping axis. This helps prevent load “flopping” when the center of gravity passes the tilt-up corner.

Disassembly and Demolition

A third valuable place to use a Dyna-Link is during disassembly or demolition work. If a rigging crew knows that a motor and gear box on a bolted and grouted base weighs 4,500 pounds, then the Dyna-Link can be placed between the crane hook and the load rigging to help prevent overload to the equipment. Sometimes the alignment rods or cement grout underneath the load's base are not sufficiently separated from the base. In effect the base is still secured to the building's floor. The Dyna-Link will provide a live tension readout to the rigging crew. If the value in tension exceeds the known weight, the crew will need to find ways to separate the base from its mounting location (by jack hammer, concrete saw, cutting torch, hydraulic spreader jack, or other means). The photo at left shows a Dyna-Link between the hoist hook and the rigging.

Training and Demonstration

A crane-hook-suspended Dyna-Link can be a helpful tool for training crane operators to be “smooth.” With the peak-hold function activated on the Dyna-Link, an operator can be signaled to lift a load, move it horizontally, and lower it to a pre-approved landing point. It is not unusual for the dynamic weight to momentarily peak to a value of 10-50 percent above the known suspended weight. The peak-hold function maintains the highest captured reading on the dynamometer since it was last cleared. If the operator swings (boom crane) or travels (bridge crane) and stops abruptly, the dynamometer can register a very high peak value. It helps the trainer demonstrate to the operator the need to manage the crane speed, acceleration, and deceleration carefully. All of this type of dynamic handling needs to be well within the crane and rigging's capacity, which is generally less than 25 percent of the allowable rating in its configuration. ■

MSI Measurement Systems International™
A RICE LAKE WEIGHING SYSTEMS COMPANY

The MSI-7300 Dyna-Link 2 digital tension dynamometer is a trusted tool

Test engineers, crane operators, riggers, surveyors, and staging professionals who want to rig it right depend on MSI-7300. Through advanced technology of the new MSI ScaleCore™, a highly integrated weight-processing unit with 24 bit A/D conversion, Dyna-Link 2 provides new and improved performance features.

Long-range viewing is enhanced by a large five-digit, 1.22 inch (31 mm) LCD with resolution settings up to 5,000 divisions and precision accuracy over a wide range of capacities. Peak digital processing with low power consumption provides up to 200 hours of operation from standard flashlight batteries during typical use.

The MSI-8000 RF Remote Display interfaces with MSI Weighing Systems by incorporating the MSI ScaleCore weight-processing unit; the MSI-8000 RF Remote Display communicates with the MSI-7300 Dyna-Link 2 and the MSI-3460 Challenger 3. The compact, handheld indicator provides remote scale control capabilities and a large five-digit, 1.25 inch (32 mm) liquid crystal display. The user-friendly keypad includes Power, Zero, Tare, Print, and two configurable function keys.



MSI-8000 RF Remote Display

The MSI-8000 interfaces to peripheral devices including printers, PCs, and scoreboards, and is integrated via a combination RS-232 serial and charging port. Optimum digital processing with low power consumption provides up to 24 hours of continuous operation from an integrated lithium ion battery. Anticipated useful RF range is up to 100 feet for line-of-sight applications. ■



MSI-7300
Dyna-Link 2