



VISHAY  
PRECISION  
GROUP



Product Overview

## Tuffer™ Loader Scales

### Evergreen Weigh

A Brand of VPG On-Board Weighing



Revere  
Transducers



SI TECHNOLOGIES®

### Tuffer™

Tuffer™ Weigh-In-Motion Loader Scales will provide the information needed to load maximum weights faster, and keep trucks moving without going to a central scale location and back to the pit. This means you get increased productivity on every load, every day. On-board scales make it easier and faster to load accurate weights every time, and Tuffer is designed to do the job and survive the rugged environments found in quarry and other loading operations.

The Tuffer can be installed on most loaders, giving you the opportunity to increase your capability and efficiency while eliminating material loss due to overloading. Accurate loading also eliminates stops at public scales, and overload fines that reduce profits.

With installation of the optional printer, you can get all the weight data printed in the cab, saving time and money.



Tuffer comes complete with all parts required for installation.

### Benefits

- Load maximum legal loads at the loading point the first time loaded—haul more tons per trip
- Save time loading, waiting to check weigh, and reloading—haul more loads per day
- Eliminate overweight fines
- Reduce commercial scale fees
- Stop hauling free tonnage and giving material away—weight in excess of the contracted weight

### Features

- User-friendly, menu-driven format
- Second loader setup available
- High accuracy weigh-in-motion scale
- Fits loaders of most brands and sizes
- Display of individual lifts and total truck loads
- Storage of ten cumulative totals in memory
- Easy installation, calibration, and operation
- System operation without need to remove hand from the lifting lever
- Large, easy-to-read, liquid-crystal display provides user prompts on screen
- Quick-release mounting for secure storage at night or use on other loaders

### The System

The Tuffer Weigh-in-Motion loader scale is designed to operate on most types and sizes of loaders. The system uses pressure sensors to measure changes in hydraulic pressure that are directly proportional to the load being lifted. The output of the pressure sensors is interpreted by the digital meter, mounted in the cab of the loader near the operator. The meter's easy-to-read LCD with built-in back light, displays the individual lift weights and cumulative total by material, truck, or other preferences. Internal firmware provides on-screen user prompts throughout all functions, making operation fast and friendly. Tuffer is equipped with a two-second last bucket tip-off function that makes it faster and easier to get the loaded weight correct the first time.

### Optional Printer

A tape printer is available as an option. The printer uses standard, 2.25-inch adding-machine paper, and requires 12 Volts to 24 Volts dc power. The printer displays time and date, a 12-character truck ID and loader ID, the truck total, and the long load.



# Weigh-in-Motion Loader Scales

Increase Productivity – Load Out and Haul More Tons

## Specifications

### Meter

- Dot matrix liquid crystal display
- 12 Vdc to 28 Vdc power
- Impact-resistant, cast-aluminum housing
- 8.5 in W x 3.8 in D x 5.4 in H
- Operating temperature 0°F to +120°F
- Built-in radio frequency interference protection

### Pressure Sensors

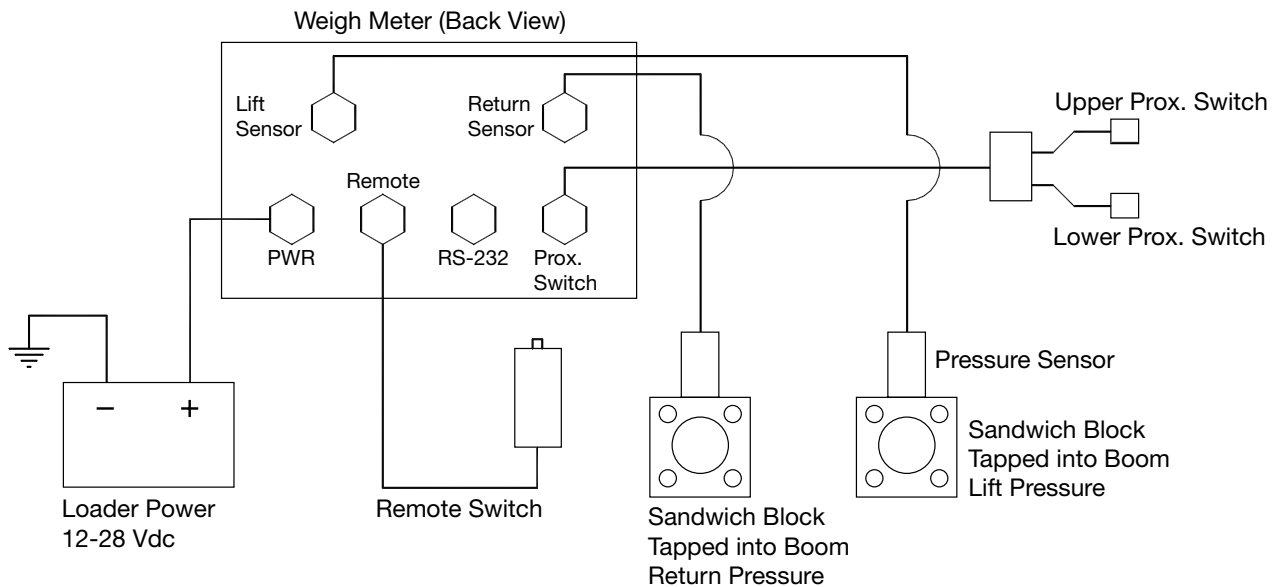
- 25,000 PSI minimum burst pressure
- Two strain gage pressure transducers
- Stainless steel construction

### Hydraulic Hose

- Two 10-foot hydraulic hoses
- 23,000 PSI minimum burst pressure

### Printer (Optional)

- 42-column impact tape
- Impact resistant cast aluminum housing
- 12 Vdc to 28 Vdc power
- Uses 2.25-in adding-machine paper
- Dimensions: 6 in W x 7 in D x 4 in H
- Displays: 12-character truck ID and loader ID, truck total, and long load
- Long-life ribbon cartridge is inexpensive and available at most office supply stores



## Installation

We have a Dealer Network of factory-trained dealers who can install the Tuffer at your facility. They provide the installation, operator training, and after-sales service, if required.