IN-MOTION SYSTEMS

FAIRBANKS SCALES

SETTING THE INDUSTRY STANDARD SINCE 1830

- MANAGEMENT
- COST CONTROL
- SAFETY
- PEACE OF MIND

Checking the weight and weight distribution of a truck before it leaves a terminal ensures that the vehicle complies with weight and dimension regulations. Fairbanks® Scales and International Road Dynamics Inc. are working together to produce weighing products, like the Slow Speed WIM System, that make this process simple, reliable and affordable.

SLOW SPEED WIM SYSTEM

FOR FREIGHT TERMINALS

Fairbanks®-IRD's Slow Speed Weigh-In-Motion (SSWIM) System is a high accuracy, low speed weighing approach ideally suited for commercial fleet axle weight monitoring and axle compliance. At the core of the system is the Model 4020 Slow Speed WIM Scale.

The Model 4020 Scale can accurately weigh vehicles at speeds between 0 and 12 mph (0 and 20 km/h). Its low operation cost, ease of installation and high accuracy make it the ideal choice for checking truck weights, including axle compliance and bridge formula compliance.

DESCRIPTION

The Model 4020 Scale utilizes two shear beam load cells for weight measurement. Since each scale is approximately 10 ft. x 2 ft. (3 m x 0.610 m), only one scale is required per lane. Each scale is mounted flush with the road surface and has a depth of no more than 7 inches (175 mm). The 4020 scale is completely waterproof and functions in all weather and operating conditions.

SLOW SPEED WIM SCALE FOR FREIGHT TERMINALS

LOW LIFE CYCLE COST

The Model 4020 Scale provides a low-cost alternative to traditional static weigh scales. The Model 4020 Scale is designed specifically for Weigh-In-Motion and provides axle weighing capabilities at the cost of a traditional static scale. Maintenance costs are low and life cycle costs are attractive. Typically, a Model 4020 Scale System can be installed and maintained for less than the regular maintenance of a static scale.

SYSTEM OPERATION

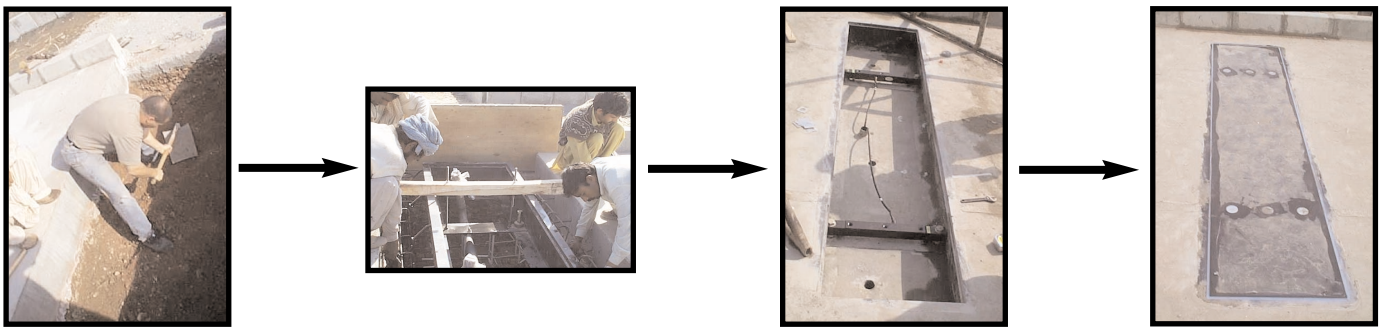
The SSWIM System includes the Model 4020 WIM Scale, in-road sensors, a processor unit, a driver display and a printer. The system operates in both slow speed WIM and static scale modes. In the WIM mode, the operator directs the truck to roll over the scale at a low speed. In static mode, the truck must stop with each set of axles on the scale. The individual axle weights are calculated and displayed on the processor screen. When the weighing operation is complete, the system will perform weight compliance checks. The user then has the option of printing a ticket for weight verification. This data is stored in a database should further analysis be desired.

ACCURACY

The Model 4020 Scale exceeds the ASTM E 1318-02 Type IV specification for accuracy. In summary, the ASTM E 1318-02 Type IV specification requires that the WIM system weighs vehicle operating at speeds from 0-10 mph (0-16 km/h) with an accuracy of:

- >5,000 lbs (2,300 kg)±250 lbs (100 kg);
- >12,000 lbs (5,400 kg)±500 lbs (200 kg);
- >25,000 lbs (11,300 kg)±1,250 lbs (500 kg);
- >60,000 lbs (27,200 kg)±2,500 lbs (1,100 kg);

The Model 4020 Scale increases in accuracy with a decrease in speed. When in a static scale mode, it will measure the GVW with an accuracy of ±0.5%. When used as a dynamic scale, accuracy is between ±1 and 2%.



QuickFacts™

FAIRBANKS SCALES Made with IRD TECHNOLOGY
International Road Dynamics Inc.

08/04 100091