

# FAIRBANKS<sup>®</sup>

## S C A L E S



## 2000 SERIES

MODULAR ABOVEGROUND RAILROAD TRACK SCALES

Pit-free aboveground track scale that economically integrates with standard U.S. rail configurations.

**Fairbanks.com**

# 2000 SERIES

## MODULAR ABOVEGROUND RAILROAD TRACK SCALES

*A simple design concept that dramatically reduces expenses traditionally associated with building a rail scale.*

Fairbanks Scales has more than 180 years of engineering and design expertise invested in producing the best weighing solutions in the world. The 2000 Series Rail Scale is one such solution, boasting reduced cost for construction, maintenance and operation through a flexible modular system that integrates easily with standard rail configurations.

From basic weighments to sophisticated data tracking, the 2000 Series handles a variety of applications easily and cost effectively.

*Fairbanks' track scale instruments are designed to facilitate a wide range of weighing application outputs, from standard reporting capabilities to complex data tracking.*



The 2000 Series also meets or exceeds all structural, sectional and accuracy requirements of the American Association of Railroads, the National Institute of Standards and Technology, and the Cooper E80 rating system.



### REDUCED MAINTENANCE AND OPERATIONAL COSTS

Eliminating the underground pit from the scale design has tremendous advantages for rail scale operators looking at safely saving time and money. Confined space regulations don't apply to the 2000 Series, so up-time is rarely interrupted. Standard maintenance is safely, quickly and easily accomplished above grade.

### STURDY, MODULAR CONSTRUCTION

By anchoring the rail directly on steel I-beam girders, the 2000 Series offers a sturdier platform than can be achieved by unsupported rail-spanning cross beams. Coupling the sturdy design with checking, to keep the platform square, the 2000 Series is a solid floating platform. The scale's decks are fully covered with removable steel plates for safety and to ensure fully-protected and fully-accessible load cells and electronics. Like all Fairbanks designs, the 2000 Series features an open bottom that eliminates corrosion caused by trapped moisture.

### REDUCED CONSTRUCTION COSTS

A simple design concept drastically reduces expenses traditionally associated with building a rail scale.

Set just below the rail, the 18½" end-wall height design accommodates the low profile scale while providing ample access to load cells and electronics without the need for an expensive pit. Furthermore, the modular nature of the scale minimizes the size of crane needed for installation.

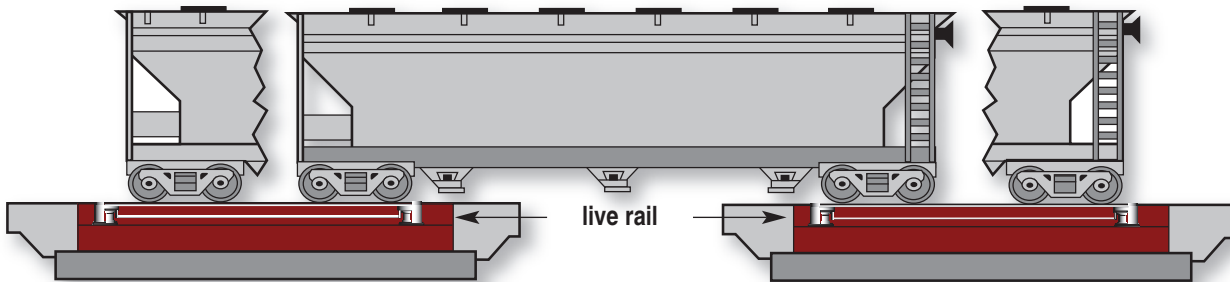




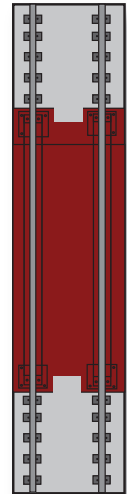
Left — Fairbanks' 2000 Series track scales are an economical alternative to full length track scales. These modular, low profile, above ground scales are sized and placed only where they are needed, under the trucks of the rail car. The modular style decks are easy to install and can be used with any size rail to accommodate various rail car sizes.

## 2000 Series Railroad Track Scale Module - Weighing Configurations

Single Draft weighing system diagram - Side view cutaway

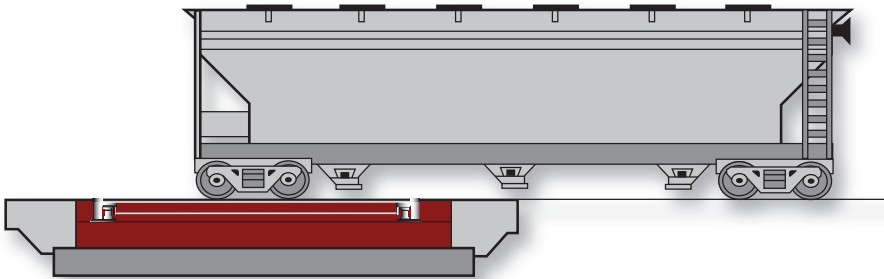


Aerial view



The Single Draft system illustrated above shows how a rail car is weighed using two 2000 Series rail modules. Modules come in a variety of lengths for compatibility with a variety of rail car sizes. See graph below for standard configurations.

Dual Draft weighing system diagram - Side view cutaway



Fairbanks 2000 Series Module Configurations

Single Draft	Dual Draft
12' 6" & 12' 6"	12' 6"
12' 6" & 25'	25'
25' & 25'	

In a Dual Draft system the front and rear axles of the rail car are weighed separately. The scale instrument combines the two weights to calculate the total car weight. This method is slightly less accurate than the single draft system and rail car loading cannot be monitored.

### ACCURATE, RELIABLE LOAD CELLS

Think for a moment about the intense shocks that result from repetitive rail car traffic. Delivering reliable, accurate weighments under the extraordinary mass of rail traffic can be challenging for even the most robust load cells.

Fairbanks fully-electronic 2000 Series Track Scales use a 100 percent stainless steel rocker column load cell with a 110,000 pound capacity. A true hermetically sealed cable entry eliminates any moisture intrusion that can damage load cells. In fact, the Series 2000 rail scale load cells offer an industry leading IP69K enclosure rating. Fairbanks load cells include Armour Guard stainless cable jacketing as a standard feature to prevent any damage to the conductors.



This cell has a true hermetic seal at its cable entry point and is constructed of 100 percent stainless steel.

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## MODULAR ABOVEGROUND RAILROAD TRACK SCALES

Weighing Solutions for the World Since 1830

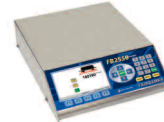
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### SPECIFICATIONS

- Sectional capacity . . . . . 85 tons per section
- Nominal capacity:
  - Single module (12' - 6") . . . 85 tons
  - Double module (25") . . . . . 170 tons
  - Module under structure . . . Open bottom
- Module construction . . . . . Welded steel I-beam
- Shipping weight . . . . . 5,500 lbs per module
- Load cell data:
  - Capacity . . . . . 110,000 lbs
  - Type . . . . . Rocker column
  - Material . . . . . Stainless steel
  - Protection . . . . . IP69K complete hermetic seal with glass-to-metal header at cable entry
  - Resistance . . . . . 1,000 ohms
  - Output . . . . . 2.0 mV/V
  - Approvals . . . . . NTEP CC# 97-078, Factory Mutual
- Approaches . . . . . 25' minimum concrete, each end
- Design rating . . . . . Cooper E-80 loading
- Accessories . . . . . Weight instruments, ticket and report printers, driver assist terminals, traffic signals, remote displays
- Approvals . . . . . NTEP CC No. 01-016, MC# AM-4954

### ACCESSORIES

Scale Instruments



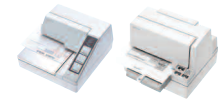
Driver Assist Terminals



Remote Displays



Ticket printers



Traffic Signals



*Fairbanks FB2550 Instrument with smart sectional controllers that feature encapsulated electronics.*



### INTALOGIX® TECHNOLOGY

Real world problems such as lightning can wreak havoc on your scale. Fairbanks has developed an industry-leading technology, Intalogix®, to protect your scale from mother nature. Intalogix is a standard feature of your 2000 Series Railroad Track Scale.

In addition to the highest level of protection against lightning strikes and power surges, Intalogix also has the capability to digitally isolate each individual load cell, so the operator will be immediately notified of any problem, enabling fast analysis by an on-site technician or via ethernet connection with some Fairbanks instruments.

Your Fairbanks Scales Authorized Representative is:

Call toll-free for the representative nearest you:

**(800) 451-4107**

Call between 8:00 a.m. – 5:00 p.m. Central Time

Corporate Offices: 821 Locust • Kansas City, MO 64106 • (816) 471-0231

Internet Address: <http://www.Fairbanks.com>

