



systems
associates,
inc.

Railcar Weighing Systems



Systems Associates, Inc. provides:

- Standard and custom railcar weighing systems
- Scale equipment along with complete installation and on-site service as required
- Full turnkey construction available for a trouble-free scale system installation
- Assistance with site selection for accurate systems with lasting value
- design team to assure your system meets the exacting requirements of the application



COUPLED-IN-MOTION SCALE SYSTEM

SAI Weighing Systems

A business decision to invest in a scale is almost always based on financial return. With weighing charges averaging \$200 per railcar, your return on investment can be measured in months, not years. Look at the other benefits of weighing:

Catch overloads before they leave town saves overload penalties, demurrage charges, delivery delays, and offloading costs.

Accurate and timely weighing for billing freight charges and product invoicing.

Monitor railcar weights for lost product in transit, weight agreement verification, and railcar utilization.

Systems Associates offers the complete solution for weighing railcars with our NP Series of modular weighbridges, both static and in-motion instrumentation, and data handling technology.



TWO SP1226 STATIC SCALE SYSTEMS

The NP Series of weighbridges install above grade and do not have confined space restrictions of other designs. In fact, the SAI weighbridge has the lowest profile available.

In addition to the weighing equipment, SAI can provide a complete turnkey installation. Our service capabilities includes a factory trained staff of field technicians ready to help with the installation and maintenance of your new system.

SAI railcar weighing systems are used by all Class I Railroads, many regional and short line rail-

roads, and industrial users. All of our systems meet or exceed the requirements of the AAR Scale Handbook, NIST Handbook 44, and the NCWM National Type Evaluation Program.

SAI will assist with all site approvals required by the servicing railroad. Our sales and engineering team will consult with you regarding the optimum site selection to provide the most accurate and reliable weighing system possible.

Whether your application requires a standard or custom design, SAI is your best choice for railcar weighing systems.

Our Scales Set the Industry Standards

SAI manufactures a full range of railcar weighing systems to meet your requirements.

COUPLED-IN-MOTION

These systems are designed to weigh complete trains or cuts of cars as they pass over the weighbridge at speeds up to 10 miles per hour. Intelligence built into the system will automatically select the weighing direction, initiate the weighing logic, sense the train speed, detect engines, and record railcar weights. Systems of this type can be designed to operate in both directions and completely unattended. Train information is recorded in real time and is stored for further processing as the application may dictate.



Model 7430



Operator Interface

STATIC

Many railcars are weighed while spotted or stopped on a full length scale. Our tandem weighbridge arrangement utilizes two weighbridge platforms, separated by a section of track, for the most economical full length weighbridge installation. Any combination of NP Series weighbridges can be used to accommodate the specific length, or range of lengths, of railcars to be weighed. These scales are best suited in applications where a limited number of cars are weighed daily or in conjunction with a car loading or unloading operation.

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SCALE IN WEIGH MODE INBOUND
MAXIMUM WEIGHING SPEED: 06.0 MPH
BEGIN 06:22 A 02/22/97
CALIB REF: 010000 lb
ZERO TEST: 000000 lb
READY TO WEIGH
SEQ CAR NUMBER GROSS TARE NET STATUS
ENGINE
001 SAIX 465142 263000 63100 199900 LB 03.8 MPH
002 SAIX 37622 262900 61200 201700 LB 03.8 MPH
003 SAIX 396783 263100 62400 200700 LB 04.1 MPH
004 SAIX 298563 263300 61800 201500 LB 04.2 MPH
005 SAIX 205735 265200 61600 203600 HEAVY 04.2 MPH
006 SAIX 487296 261700 61100 200600 LB 04.2 MPH
007 SAIX 893478 262800 61600 201200 LB 04.3 MPH
008 SAIX 892645 262400 61900 200500 LB 04.3 MPH
009 SAIX 738356 262700 60900 201800 LB 04.5 MPH
010 SAIX 980389 263100 62900 200200 LB 04.5 MPH
011 SAIX 983497 263200 61900 201300 LB 04.5 MPH
SCALE IN STANDBY MODE
ENDING 06:28 A 02/22/97
WHEEL COUNT : PE CL1 CL2 SE
0048 0048 0048 0048
ZERO TEST: 000000 LB
GROSS TOTAL: 02893400 LB
TARE TOTAL: 00680400 LB
NET TOTAL: 02213000 LB
    
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Management Report

STATIC/ MOTION COMBINATION

Coupled-in-motion weighing is the most efficient method of weighing railcars. Static weighing has the highest accuracy. The Static/Motion Combination system provides the economy of coupled-in-motion weighing with the added ability to single draft static weigh specific cars when required. Simple commands allow the operator to initiate weighing in either mode. The weight report indicates the method of weighing.



Railcar Identification

SAI Railcar Weighing Systems are composed of two main subsystems; the weighbridge and the instrumentation.

The weighbridges are available in three standard sizes:

- The NP1260 (12'-6" weighrail) is used with coupled-in-motion and tandem static scales.
- The NP2000 (20'-0" weighrail) is used with certain specialized in-motion applications and with tandem static scales.
- The NP2600 (26'-0" weighrail) is used with tandem static scales.

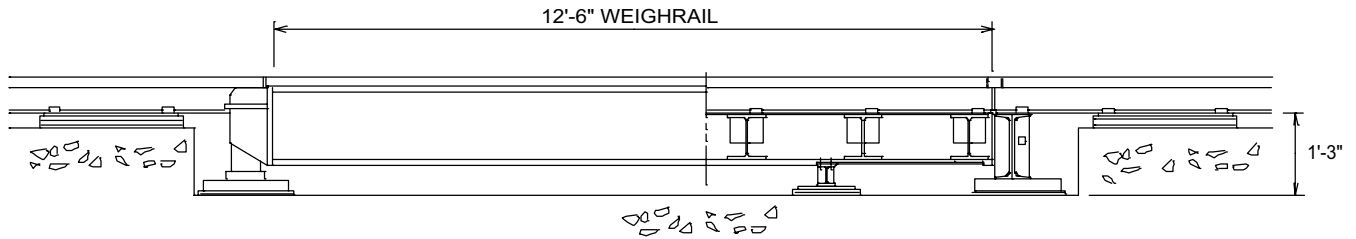
The sizes may be used in various combinations, depending on your requirements. The NP Series of weighbridges have been designed for Cooper E-80 axle load requirements.

The instrumentation is available in two basic models:

- The Model 7430 is used for in-motion weighing systems and has a wide assortment of options.
- The Model 530 is used for static weighing systems and is often accompanied by ScaleMaster PC software.

Railcar identification (AEI) may be added to any of these systems to provide a complete record for each car weighed. With this feature, the railcar weight and identification are automatically matched, recorded, and printed.

ScaleMaster PC software has been developed to transport your weight records directly into your business management system. Whether your application is manual or completely unattended, ScaleMaster captures, saves, and reports this critical information.



NP1260 WEIGHBRIDGE
With the Lowest Profile in the Industry

PRODUCT HIGHLIGHTS

WEIGHBRIDGES

NP1260 (12'-6" weighrail)
 NP2000 (20'-0" weighrail)
 NP2600 (26'-0" weighrail)
 Cooper E-80 Standard
 Standard Above Grade Design

WEIGHBRIDGE OPTIONS

Rail and Rail Fasteners
 Approach Rail Support Steel
 Rail Anchors and Insulators
 Cooper E-100 Available
 Flush Deck for Vehicle Traffic
 Custom Paint Systems and Steel Types

INSTRUMENTS

Model 7430 In-Motion Weighing System
 Model 530 Static Weighing System

INSTRUMENT OPTIONS

Bi-Directional Operation
 Automatic Turn-On
 Reverse Detection
 High Speed Weighing
 ScaleMaster PC Software
 Remote Scale Operation
 Host Computer Communication
 Automatic Railcar Identification
 Video Recording of Railcars
 Speed / Traffic Control Lights
 Voice Speed Communication
 Spare Parts Packages

ON-SITE SERVICES

Site Selection
 Installation Field Service
 Turnkey Construction
 Field Maintenance and Repair Service
 Field and Factory Training

Specifications subject to change without notice
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