Rail Car Loadout Systems
Beyond Weighing Technology
Kanawha Scales & Systems (KSS) is the world’s leading manufacturer and supplier of high-speed rail car loadout systems. Since the introduction of batch loadout technology to the coal industry in the late 1970’s, Kanawha Scales & Systems has designed, built and installed over 80% of all loadout systems worldwide. Clients who establish a relationship with Kanawha Scales & Systems are assured of receiving well-conceived, intricately planned and thoroughly tested systems. KSS provides the experience, flexibility, and state-of-the-art technology that only a world leader can deliver for batchweigh and coal loading systems. We offer peace of mind and confidence that our system and support will consistently exceed your expectations.

KSS software allows you total control to manage your loadout operations.
The Industry Innovator

Kanawha Scales & Systems has been responsible for most of the industry’s innovations since the advent of loadout technology. A continuous pursuit of excellence in product development and testing, coupled with bold vision, has created:

- Dustless Gates
- User friendly loadout software based on Microsoft Windows
- Histograms for monitoring both operator and system performance
- Integration of radio frequency tag technology
- Ability to edit on-line without interrupting the loading operation
- Application specific design for dustless loadout chutes
- Electronic file and EDI transfer of loadout manifest
- Electronic fax capability built into software
- Optional reclaim controls and blending
- Built-in rail car database
- Built-in road / junction database
- Multiple batch ability
- Sophisticated reporting capability
- Flexible integration of PLC and HMI platforms
- UHMW slide bar design for gate support. Reduces maintenance and extends life by elimination of cam followers
- Comprehensive support services

Customized solutions
24 hour technical support

Key System Components

Dustless Gates
KSS has perfected a truly dustless and easily serviceable control gate. Double-blade slide-gate design assures quick response and reaction to control signals for the most accurate cut off target weight possible, assuring consistent batches, car after car.

Load Cells
Specially designed, self-aligning, mounting arrangement utilizes a dual ended shear beam load cell and parallel link suspension providing the highest weighing accuracy.

PLC Control
Programmable Logic Controllers, coupled with a color graphics operator interface panel, can control reclaim, blending and other associated systems from the loadout control room.

Dustless Chute
Kanawha Scales & System’s unique design on the telescoping, traversing chute has solved the age-old problem of “belching” and “dusty” chutes.

Computer System
The use of a high speed, state of the art computer utilizing Microsoft’s Windows provides user-friendly screens with powerful pull down menus.

Automatic Car Identification
Automatic input of rail car serial numbers are accomplished by integration of patented RF tag reader systems.

Calibration System
Built in certified test weights, traceable to NIST standards allow for easy testing from the control panel, assuring accurate weighing performance for every train.
**Typical Loadout Configuration**

Kanawha Scales & Systems designs your entire loadout from the ground up, customized to meet your specific needs. While each loadout is unique, the basic components are configured to the requirements of your operations.

In addition to meeting all NIST H-44 requirements and specifications, the KSS loadout system and loadout software has received Certificates of Conformance #95-095 (BWS-9000) and #95-035 (BWC-8000) from the National Type Evaluation Program of the National Conference On Weights and Measures and pattern approval in both China and Australia.

**Custom Configuration**

All components are configured to meet your specific needs.

- Primary Sampler
- Secondary Sampler
- Optional Coal Analyzer
- Sample Crusher
- Tertiary Sampler
- Sample Reject Gate
- Discharge Gate
- Sample Container
- Hydraulic Power Unit
- Control Room
- Surge Bin
- Air Exchange Ducts
- Charging Gates
- Weigh Bin
- Load Cells
- Certified Test Weights
- Transversing Telescoping Chute
**Sophisticated Reporting Capabilities**

*BatchMaster®* offers sophisticated manifest detail and reporting of information that is unmatched in the industry. Manifest data can be configured to report a variety of information. *BatchMaster®* also features a histogram profile that offers a real-time analysis of loading performance. This KSS innovation is an invaluable tool in effectively evaluating overall system performance.
A Company of Excellence

Founded in 1954, Kanawha Scales & Systems (KSS) has grown into one of the largest independent scale suppliers in the world. KSS remains committed to comprehensive client support and total solutions to industries worldwide. KSS is a market leader, serving companies requiring the most sophisticated integrated weighing technology.

As a recognized leader in weighing equipment sales and service, our products, services and people deliver enhanced performance and continuous technological innovations around the globe.

Kanawha Scales & Systems is your technology solution for today’s weighing demands!

Versatility & Flexibility

KSS Products

Truck Scales
Custom Weighing Scales
Railroad Scales
Crane Scales
Belt Conveyor Scales
Check Weighing Scales
Counting Scales
Drumming Scales
Bench Scales
General Warehouse Scales
Batching Scales
Data Collection and Vehicle Tracking Systems
Truck Loading Systems

KSS Services

Blending & Beltline Control Systems
Complete Preventive Maintenance Programs
Software Engineering & Development
Mechanical & Structural Design Engineering
Hydraulics Design Engineering
General Facility or Operations Control & Monitoring
Railroad Loadout Controls
Truck & Belt Conveyor Scale Installation, Maintenance, Repair
Truck Scale Data Collection and Management Systems
Online Coal Analysis Systems