

Model N-64 Belt Scale System

Bulk Pro
SYSTEMS L.L.C.



Model N-64 Belt Scale System



The Bulk Pro Systems Model N64 Precision Belt Scale System is designed for high accuracy custody transfer applications which require certification by a state agency. It is our most accurate belt scale system to within $\pm 0.125\%$. It can help you monitor production, confirm incoming product, load out and monitor product inventory. This belt scale system provides crucial information for the successful management and efficient operation of your plant.

Industries Served:

- Aggregate
- Asphalt
- Coal Mining
- Cement
- Power
- Paper
- Wood Products
- Chemical
- Mineral Mining
- Sand
- Precious Metals

The Bulk Pro Systems Model N-64 Precision Belt Scale System is designed for all high accuracy, high speed, custody transfer applications which could require certification by a state agency. Its heavy duty weigh bridge is widely accepted in harsh industrial environments. The Model N-64 allows you to accurately control feed rates to crushers, bunkers, boilers, stockpiles and other processes with a guaranteed accuracy of $\pm 0.125\%$. It can help you automate your production output, inventory or load-out and provide you with crucial information for the running of your plant.

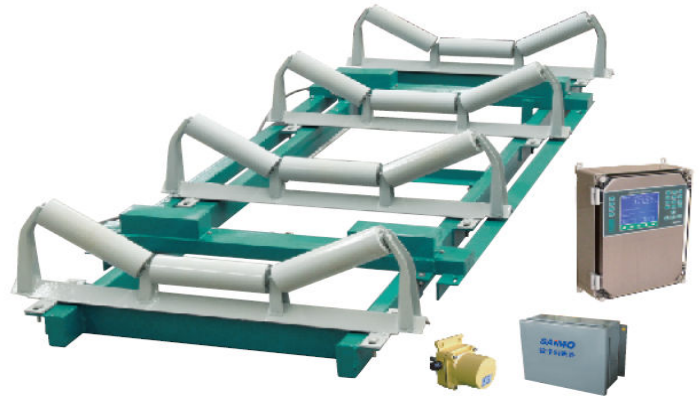
The Bulk Pro Systems Series N-64 incorporates either a three idler (N-64-3) or four idler (N-64-4) full floating weighbridge assembly and the Model N60 Belt Speed Sensor, the powerful microprocessor based electronics of the Bulk Pro Systems Model 6803 Integrator and the 6803D load cell digitizer. These weighbridges can be applied in conveyors with belt widths from 18" (450mm) to 96" (2,440mm).

The N-63 Belt Scale System is easy to install and can be mounted inside or out. It's heavy duty construction allows for installation in industrial and extreme environments. The N-64 weighbridge uses four load cells and a load cell digitizer which converts the analog signal from the load-cells to a digital value which gives it is precise performance. It's Strain gauge load cells are mounted in tension, ensuring reliable and precise performance. It has no pivots or moving easily worn parts and a robust steel tube construction that allows for minimal material build-up.

SPECIFICATIONS

Load Cell

- Single Point Strain Gauge
- Housing: Anodized aluminum
- Excitation: 10VDC \pm 5%
- Load cell output: 2.0 mV/V
- Nonlinearity: <0.03% FS
- Repeatability: <0.01% FS
- Hysteresis: <0.02% FS
- Operation temperature: -30°C~ +70°C
- Temperature Sensitivity:
 - Span 0.002% FS/°C
 - Zero 0.002% FS/°C
- Safe Overload: 200% of load cell capacity



6000 Series Integrator

- Enclosure, Field mount:
 - Outline dimensions: 296×399×132mm
 - Mounting hole dimensions: 280×247mm
- Enclosure, Panel mount:
 - Panel dimensions: 140×284mm
 - Outline dimensions: 295×154×203mm
- Temperature Rating:
 - Operating: -10 to 50 °C
 - Storage: -40 to 70 °C
- Power Requirements:
 - 120/220 VAC Switch Selectable
- Display Resolution:
 - LCD 320×240 pixels, English/Chinese language with graphs displayed on-screen: histogram, curve graph, etc.
- Keypad:
 - 25 operating keys. All keys provide tactile feedback
- Measurement Unit:
 - Tons, Kg
- Memory:
 - FRAM memory, data retention when power is interrupted or disconnected.
- Accuracy / Non-Linearity:
 - Less than 0.01% of net for load ranging from 0% to 105% of full scale.
- Circuit Construction:
 - 32-bit RAM Microprocessor, with built-in watchdog preventing system halt, 24-bit A/D converter, real-time clock system.
- Expansion Slots, 6
- Shipping weight:
 - Field Mount, 12Kg
 - Panel Mount, 8 Kg

6803D Load Cell Digitizer

- Function:
 - Convert the continuous analog signal from the load cell into the digital signal.
- Protection Class of Enclosure:
 - IP65
- Circuitry Structure:
 - 8-bit microprocessor, 24-bit A/D converter.
- Power Requirement:
 - 110VAC, 60Hz
- Communication:
 - RS-485 serial communication available for the 6801 integrator, with settable baud rate: 9600, 19200 and 115200.
- Calibration:
 - Not required
- Operating Temperature:
 - -10~50°C
- Zero Temperature Drift:
 - <0.15 μ V/°C
- Span Temperature Drift:
 - <5ppm/°C
- Isolation:
 - The input of loadcell and speed sensor is optically isolated from other circuits.

Model N60 Speed Sensor

The model N60 speed sensor is used for series N64, N63, N62 and N61 belt scales. Sensor is directly coupled to the conveyor tail pulley or any other pulley with a minimum of 15-30 degrees of wrap.

The speed sensor is a brushless pulse generator which gives a series pulse. Each pulse represents one unit of belt travel, the pulse frequency is proportional to belt speed.

- Die cast aluminum housing, weather proof.
- Brushless AC pulse generator requires no adjusting or replacement of brush.