



# Solids Material Handling

**Dynamic Weighing**

**Conveyor Switches**

**Level Detection**

**Monitoring Accessories**

**Weigh Belt Feeders**

**Tramp Metal Detection**

**Bulk Solids Sampling**



## Dynamic Weighing



### Model N-61 Belt Scale System

Model N-61 Belt Scale System is designed for all purpose weighing applications in harsh industrial environments. The Model N-61 allows you to control feed rates to crushers, screens, stockpiles and other processes with a guaranteed accuracy of +/- 1%. The heavy duty all in one design is easily installed. It is suitable for your non-critical and lower valued applications when you still require an instantaneous flow rate and totalization for your process control and productivity needs.

For additional information and specifications go to <https://bulkprosystems.com/n-61-belt-scale/>



### Model N-62 Belt Scale System

Model N-62 Belt Scale System is designed for all purpose weighing applications in harsh industrial environments. It allows you to control feed rates to crushers, screens, mills, stockpiles and other processes with a guaranteed accuracy of +/- 0.5%. It can help you automate your production output, inventory or load-out and provide you with crucial information for the running of your plant.

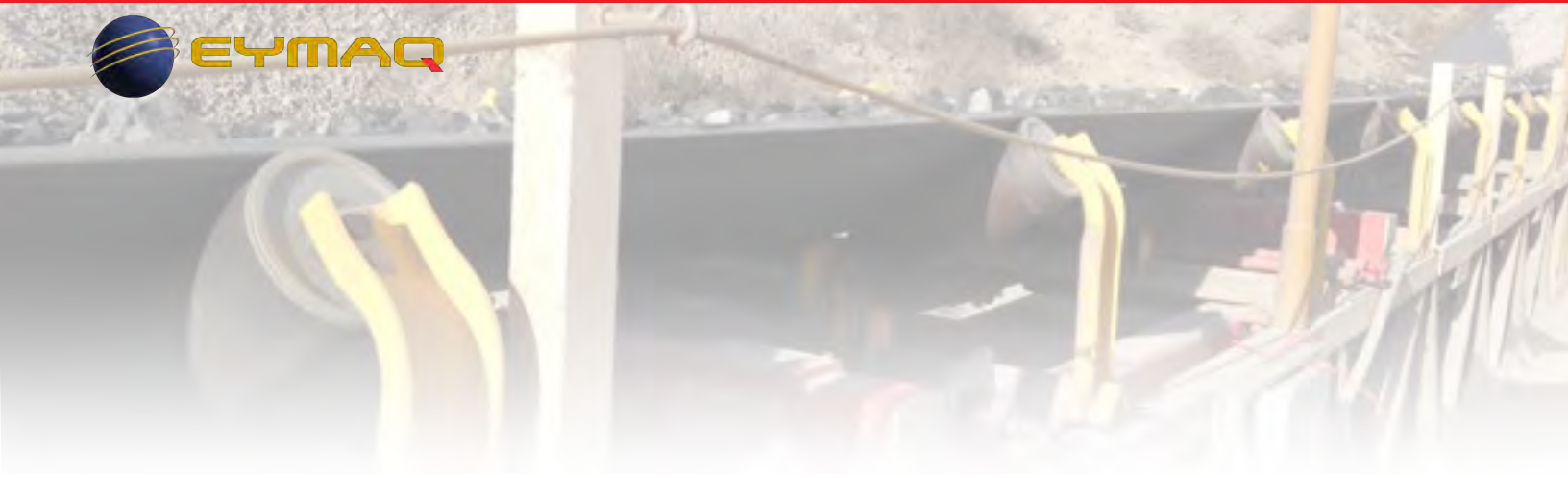
For additional information and specifications go to <https://bulkprosystems.com/n-62-belt-scale/>



### Belt Scale Systems Integrator

The 6000 Series Microprocessor Based Integrator is used to process the readings from the load cells and speed sensor. It integrates these two readings and gives you an instantaneous flow rate and totalization. It also takes the speed pulses from the digital speed sensor and gives you a belt speed. The integrator is used with all the [Bulk Pro Systems weighframes.](#)





### Model N-65 Modular Belt Scale System

Model N-65 Belt Scale System is suitable for applications where price, delivery and ease of installation are key factors. This economical belt scale system provides crucial information for the successful management and efficient operation of your plant. The Bulk Pro Systems Model N-65 Belt Scale System is designed for most weighing applications in harsh industrial environments. The Model N-65 allows you to control feed rates to crushers, screens, stockpiles and other processes with a guaranteed accuracy from  $\pm 1/2\%$  to  $\pm 1/5\%$ .

For additional information and specifications go to <https://bulkprosystems.com/n-65-belt-scale/>



### Model N-64 Precision Belt Scale System

Model N-64 Precision Belt Scale System is designed for all high speed, high capacity belts which require precision accuracy. 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  $\pm 0.25\%$  (2 idler) to  $\pm 0.125\%$  (4 idler). It can help you automate your production output, inventory or load-out and provide you with crucial information for the running of your plant.

For additional information and specifications go to <https://bulkprosystems.com/n-64-belt-scale/>



### Belt Scale Systems Speed Sensor

The N60 Speed Sensor operates in conjunction with any N series belt scale, providing a pulse signal to the integrator to calculate belt speed. The N60 is a direct coupled, brushless, digital pulse generator which give a series pulse. Each pulse from the speed sensor represents one unit length of belt travel, the pulse frequency is proportional to the belt speed. The Model N60UB uses a heavy duty urethane wheel that rides along the return belt while a proximity switch sends out speed pulses which are received from targets mounted in the wheel.



## Conveyor Switches



### Model SS-2 & SS-3 Pull Cord Switches

Pull Cord switches are conveyor accessories designed to interlock with conveyor shut down systems in the event of maintenance or emergency.

The robust die cast aluminum housing with epoxy based powder finish and all stainless steel hardware makes them suitable for most heavy industrial applications. Model SS-3X is CSA Approved and Model SS-2C is CE Approved.

For additional information and specifications go to

<https://bulkprosystems.com/pull-cord-switch-ss2/>

<https://bulkprosystems.com/pull-cord-switch-ss3/>



### Model BM-2 & BM-3 Belt Misalignment Switches

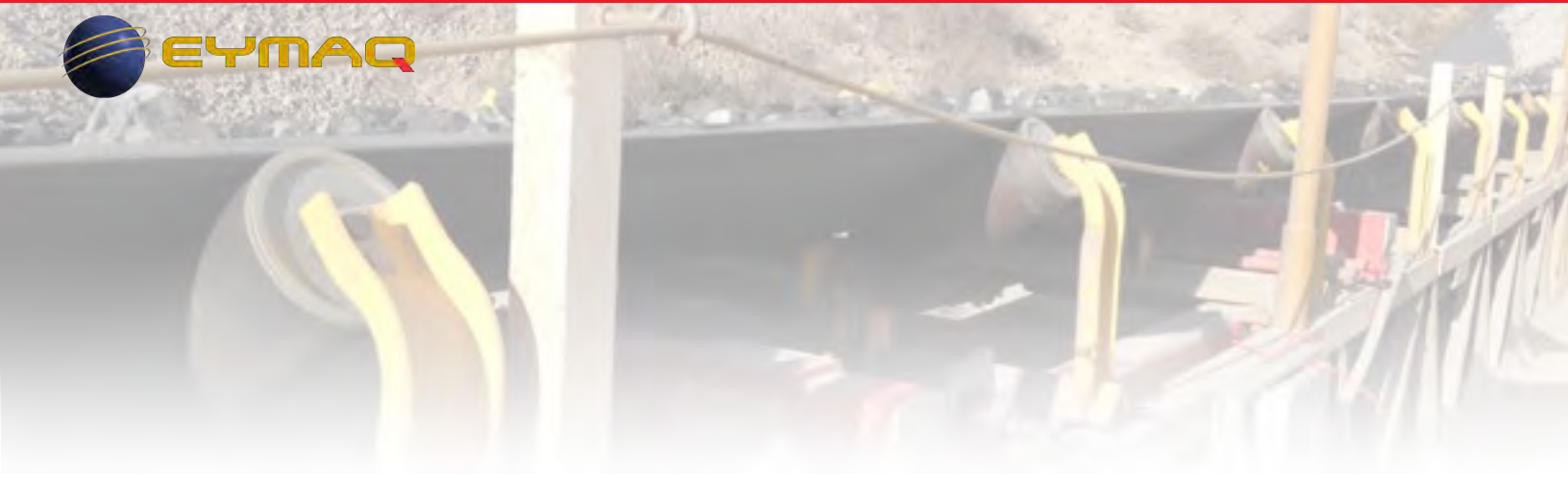
Belt Misalignment switches are conveyor accessories designed to alarm and/or shut down conveyor systems in the event of a conveyor belt misalignment.

The heavy duty rugged design makes them suitable for most industrial applications, requiring longterm reliable equipment. The action of a belt misalignment switch can save you money by reducing downtime and maintenance costs. Model BM-3X is CSA Approved and Model BM-2C is CE Approved.

For additional information and specifications go to

<https://bulkprosystems.com/belt-misalignment-switch-bm2/>

<https://bulkprosystems.com/belt-misalignment-switch-bm3/>



### Model BD-3 Belt Damage Detector Switches

Belt Damage Detector (BD-3) switches are conveyor accessories designed to interlock with conveyor shut down systems in the event of a damaged belt.

This simple system will shut down the conveyor belt and protect you from costly repairs and downtime due to belt damage. Model BD-3X is CSA Approved and Model BD-3C is CE Approved.

For additional information and specifications go to <https://bulkprosystems.com/belt-damage-detector/>



### Model PS-2 & PS-3 Position Switches

The Position Switch is utilized to monitor the position of heavy moving machinery such as a gravity take-up or a tripper car. Once the roller actuator arm is moved from its normal position the two (2) micro switches are tripped.

The micro switches can be used to send an alarm to the controls system or operator telling it or them to either shut off or move the piece of heavy machinery. Model PS-3X is CSA Approved and Model PS-2C is CE Approved.

For additional information and specifications go to <https://bulkprosystems.com/position-switch-ps2/>  
<https://bulkprosystems.com/position-switch-ps3/>



## Point Level Detection



### Model PL Paddle Level Switches

Model PL Paddle Level Switch is an economical paddle level switch designed for point level detection in dry bulk materials. Incorporated into the design of the PL is a magnetic drive that has been proven by decades of use. A 1 rpm synchronous motor rotates the paddle which utilizes a magnetic drive. As the product in your application builds up to the paddle its movement becomes impeded and the resulting motor torque activates the output switches which stops the motor and gives you an alarm. A spring mechanism reactivates the motor and returns the switches to their normal state when the product moves away from the paddle.

For additional information and specifications go to <https://bulkprosystems.com/paddle-level-switch/>



### Model TF Tuning Fork Level Switches

Model TF Tuning Fork Level Switch is ideal for level control of powders and fine grained solids, especially those with low bulk densities. The TF incorporates a piezoelectric crystal that vibrates the fork at its natural frequency. When the fork comes in contact with material the vibration is dampened and the switch changes state. As the fork becomes free of material the switch changes back to its normal state. Featured in the TF is user selectable fail-safe operation of the contacts. This unit is not affected by vibration from conveying systems, motors or the movement of material. It can be mounted in any position and is available with factory built extensions for mounting on top of the storage vessel.

For additional information and specifications go to <https://bulkprosystems.com/tuning-fork-level-switch/>



### Model CL Capacitive Level Switches

Model CL Capacitive Level Switch is ideal for level control of bulk materials, powders and liquids. The CL capacitive level switch does not have any moving parts. It will not jam, wear or break and requires no maintenance. State of the art sensing technology in the CL, using impulse RF admittance measurement combined with an active guard provides excellent level measurement and stability while not being sensitive to material build-up. This technology also provides immunity to external RF sources like walkie-talkies and cell phones as well as minimal interference with radio communication or other electronic systems.

For additional information and specifications go to <https://bulkprosystems.com/capacitive-level-switch/>

### Model DLS Diaphragm Level Switches

Model DLS Diaphragm Level Switch is ideal for level control of bulk solids and powders. The DLS Diaphragm Level Switch has a unique, patented Magnetic Linkage that isolates the electrical compartment from the controlled product, reducing maintenance and improving sensitivity. The sealed switch compartment and sealed leads yield the most reliable operation. Wide selection of diaphragms and switches are available with choices of flange or suspension mounting to fit your specific application.

For additional information and specifications go to <https://bulkprosystems.com/diaphragm-level-switch/>



### Model SL20-8 and SL29-115 Tilt Switch Probe and Control

Model SL20-8 and SL29-115 Tilt Switch Probe & Control provide simple alarm output for both dry bulk materials or liquids (when used with a float ball accessory). The rugged non-mercury probe is suspended vertically over a material pile, bin or conveyor belt and as the material level rises to tilt the switch approximately 15° from vertical in any direction, an alarm output signal is activated. Various attachment accessories are available for the probe, such as wear paddles and float balls. A Model SL-23-8C mercury probe is CE Approved and is designed to wire directly to a PLC/DCS system, eliminating the need for an additional control unit.

For additional information and specifications go to <https://bulkprosystems.com/tilt-switch/>



### Model PLR-100 Insert-A-Cell System

The PLR-100 Insert-A-Cell system is a continuous level measurement system designed to monitor the product level in storage bins, silos and tanks. The unique system does this by measuring the strain on the support structure as the weight changes within vessel. This is accomplished by utilizing cylindrical strain sensors that become part of the support structure.

For additional information and specifications go to <https://bulkprosystems.com/continuous-level/>



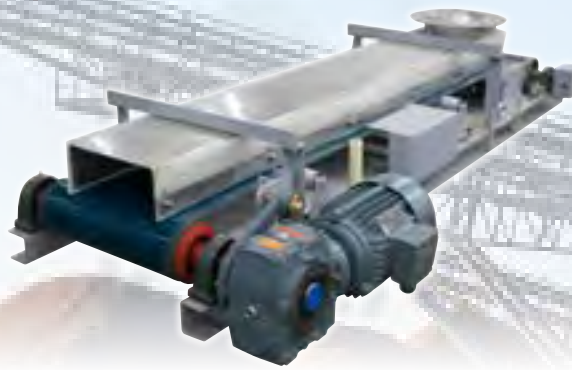
### Model Microwave Point Level BPR61/T61

The Microwave Point Level (BPR61/T61) is the transmitting unit, the BPR61 is the receiving unit of the microwave point level system for level detection of bulk solids and liquids. Typical applications are the detection of bulk solids in silos, bunkers and crushers as well as of liquids in pipelines and vessels. The non-contact measuring principle has no direct contact with the medium and ensures continuous wear-free and maintenance-free operation.

For additional information and specifications go to <https://bulkprosystems.com/microwave-point-level/>



## Weigh Belt Feeders



### Model F-51 Weigh Belt Feeder System

Model F-51 Weigh Belt Feeder is designed for high accuracy on materials with low flow rates and bulk densities. Its can be used in both food grade and industrial environments.

The Model F-51 allows you to accurately control the feed rate of your process with a guaranteed accuracy of  $\pm 0.5\%$ . It can help you automate your blending system, assure precise feeding of additives, give you better process control and provide you with crucial information for the running of your plant.

For additional information and specifications go to <https://bulkprosystems.com/weigh-belt-feeders/>

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### Model F-52 Weigh Belt Feeder System

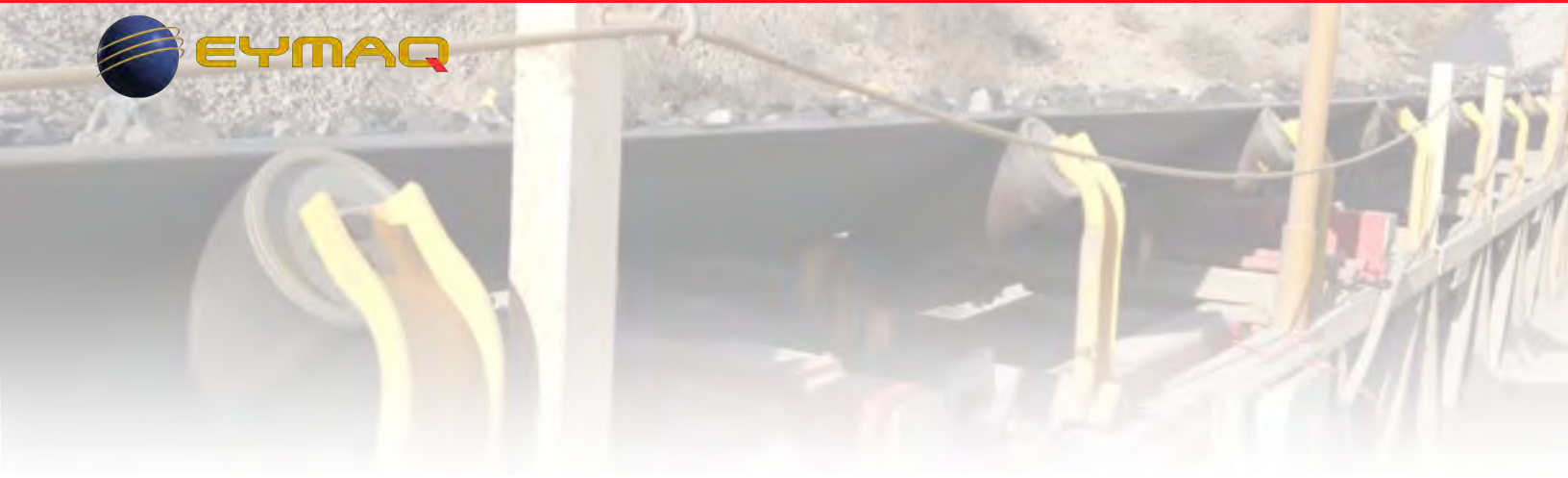
The Model F-52 Weigh Belt Feeder is designed for high accuracy on materials with intermediate flow rates and bulk density. It is built for heavy industrial environments.

The Model F-52 allows you to accurately control feed rates to your process with a guaranteed accuracy of  $\pm 0.5\%$ . It can help you automate your blending system, provide more efficient process control and provide you with crucial information for the running of your plant.

For additional information and specifications go to <https://bulkprosystems.com/weigh-belt-feeders/>







### Model F-53 Weigh Belt Feeder System

Model F-53 Weigh Belt Feeder is designed for precise accuracy on materials with high flow rates and bulk densities in your most demanding applications.

The Model F-53 allows you to accurately control feed rates to your process with a guaranteed accuracy of  $\pm 0.5\%$ . It can accommodate flow rates over 1000 TPH and belt loadings of 300 lbs/ft. It can help you automate your crushing system, provide more efficient process control and provide you with crucial information for the running of your plant.

For additional information and specifications go to <https://bulkprosystems.com/weigh-belt-feeders/>



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### Model F-54 Volumetric Belt Feeder System

Model F-54 Volumetric Belt Feeder is designed for precise feeding of materials with high flow rates and bulk densities in your most demanding applications.

The Model F-54 allows you to accurately control feed rates to your process where there is no need to gravimetrically weigh material. They are commonly used to replace vibratory and rotary type feeders where inconsistent flow rates are common. It can accommodate flow rates over 1000 TPH and belt loadings of 300 lb/ft.

For additional information and specifications go to <https://bulkprosystems.com/weigh-belt-feeders/>



## Monitoring Equipment



### Model PL72-115 Speed Monitoring Systems

Model PL70-115 Speed Monitor is used for accurate sensing of Under Speed, Over Speed and Zero Speed conditions on rotating shafts, pulleys or other rotating equipment within your plant. It's programmability provides a versatile product with adjustable start up and alarms delays, and programming functions while providing both a discrete relay and 4-20mA output for rate. It will help you increase production reduce downtime and provide you with vital information to the operation of your plant.

For additional information and specifications go to  
<https://bulkprosystems.com/speed-monitor/>

### Model PL60 Under Speed Switches



Model PL60 Under Speed Switch is used for accurate sensing of Under Speed conditions on rotating shafts, pulleys or other rotating equipment within your plant. This system will protect your valuable machinery from costly downtime, inform you of current operating conditions and provide you with an alarm if there is any variation from your user supplied operating parameters. It will help you increase production reduce downtime and provide you with vital information to the operation of your plant. The PL-60 also comes standard with a 4-20mA output for linear speed.

For additional information and specifications go to  
<https://bulkprosystems.com/under-speed-switch/>



### Model BPMS-1 Magnetically Couple Speed Switch

Model BPMS-1 Speed Switch is used for accurate speed monitoring and zero speed detection, conditions on rotating shafts, pulleys or other rotating equipment within your plant. It is also suitable as a speed sensor for belt scale applications. It has one of the most innovative designs for installation today. It utilizes a magnet for attachment to the rotating shaft. Tapping the pulley and coupling the speed sensor is no longer required. Simply apply the speed sensor to the shaft and a strong magnet holds it in place, wire it up and you are ready to go.

For additional information and specifications go to  
<https://bulkprosystems.com/speed-switch/>

### Model 50 Tramp Metal Detector

Model 50 Tramp Metal Detector is tough and reliable, designed to detect and discriminate between conductive materials and metals, both magnetic and non-magnetic, ferrous and nonferrous tramp metal. Compatible with fabric or steel core conveyor belts, the Model 50 provides protection to downstream processing equipment by detecting the presence of potentially damaging metal objects.

For additional information and specifications go to <https://bulkprosystems.com/model-50-detector/>

### Model 100 Tramp Metal Detector

Model 100 Tramp Metal Detector, when installed on a conveyor system, provides protection to downstream processing equipment by detecting the presence of potentially damaging metal objects. It is designed to detect all types of tramp metal, ferrous and non-ferrous. Metal splices and or repair clips can be used with the metal detectors. The Model 100 is prefabricated to fit onto most standard CEMA conveyors. The aperture is adjustable up to 22", which will accommodate a maximum burden depth of 18".

For additional information and specifications go to <https://bulkprosystems.com/model-100-detector/>

### Model 5500 Tramp Metal Detector

Used to detect small pieces of metal, the Bulk Pro Systems Model 5500 Tramp Metal Detector is well suited for rugged environments. It will detect both magnetic and non-magnetic metal and is not affected by most process materials. Proven dependable under adverse conditions such as dust, moisture and vibrations, Bulk Pro Systems Model 5500 provides years of trouble free reliable operations.

For additional information and specifications go to <https://bulkprosystems.com/model-5500-detector/>



### Primary Sweep Sampler

Sweep Sampling Systems are an economical and simple tool to get samples of material from a moving conveyor belt. They can be installed on either horizontal or inclined conveyors. There are thousands of sweep samplers installed worldwide. Sampling Systems can range from simple stand alone single stage unit to multiple stage systems that incorporates crushing, secondary sampling and reject handling. They are utilized in a variety of industries worldwide for sampling sand, gravel, crushed stone, coal, coke, DRI and a variety of other ores.

For additional information and specifications go to <https://bulkprosystems.com/sampling-systems/>

## Engineered Sampling Systems



## BULK PRO SYSTEMS

will provide the highest quality, competitively priced, defect free bulk material handling products and services that meet our customer's requirements by the promised delivery date. Bulk Pro Systems provides a premier class of industrial in-motion weighing, level detection, safety/conveyor monitoring and sampling products utilized worldwide in a variety of industrial markets.



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SYSTEMS L.L.C.

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