

MOTION CONTROLS • BELT CLEANERS CONVEYOR CONTROLS • LEVEL CONTROLS

Conveyor Components Company Division of Material Control, Inc.

AIRMATIC

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SAFETY STOP CONTROL

PC MODEL Stop Control Switch

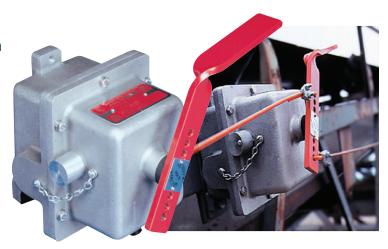
A rugged compact safety switch that provides a quick positive shut-off of dangerous equipment in emergencies or normal operation. It is actuated by cable pulled by endangered personnel. The output contacts of the Model PC can control up to two (2) separate circuits, one for machinery shutdown and one for alarm.

Safety minded operators of conveyors, production lines, elevator equipment, assembly lines, material handling systems, cranes, etc. consider it a must for employee protection.

RS MODEL Cable Operated Safety Stop Switch

RS Safety Stop Switch for immediate shutdown of conveyor system at Sand and Gravel Facility.

- Rugged Duty Switch providing quick, positive shut-off in emergencies
- UL listed and CSA certified for general purpose and explosion prove environments
- Arm position identifies actuation of unit.





RSB MODEL Stop Control Switch

- Acts as an emergency stop pull cord control on conveyors and other moving machinery that incorporates built-in broken cable detection
- Extension springs, attached to opposite ends of the pull cable, keep cable under constant tension
- The operating handle is held in the center vertical position with the internal switch in a normally closed condition
- If the cable is pulled or the cable breaks, the handle rotates to release the switch lever





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MOTION & SPEED CONTROL

BSD MODEL Belt Speed Detector

Model BSD is a TRACTION ACTION[™] Motion Control that indicates when a conveyor belt has slowed or quit moving altogether. It can be used as an overspeed, underspeed, or zero speed control. The output of the Model BSD can be wired into a PLC or DCS, or to the optional RMS controller (or MSD controller) which has a relay to control up to two separate circuits, one for machinery shutdown and one for an alarm.

BSD Belt Speed Control can shut down rotating equipment before damage is encountered. It provides protection for interlocked conveyor belts, especially if one of the belts fails due to overloading or quits due to tearing. Also prevents material backup or plugged chute.

No drilling or tapping of tail pulley shaft required, unit is shielded between top and bottom of conveyor belt, and the unit can be placed anywhere on the conveyor belt.



BSD MODELS AVAILABLE

MODEL	DESCRIPTION	SHIP WT.
BSD-2S	TRACTION ACTION™ motion control, includes 12mm 2-wire (RMS-12S) inductive sensor and wheel target. Does not include optional RMS-G controller.	18 lbs.
BSD-3S	TRACTION ACTION™ motion control, includes (MSD-12S3) 12mm 3-wire inductive sensor and wheel target. Does not include optional MSD-800 controller.	18 lbs.
BSD-0S	TRACTION ACTION™ motion control, sensor not included. Does not include optional Controller.	18 lbs.



TECHNICAL FEATURES

- The RMS-12S (2 wire) sensor works with the RMS-G series Controller, while the MSD-12S3 (3 wire) sensor works with the MSD-800 series controller
- The RMS-G Controller is available in a NEMA Type 4 polycarbonate housing, while the MSD-800 controller is a panel-mount plastic housing with display
- Both controllers are available in either a 120 VAC, 240 VAC, or 24V AC/DC power input. Specify input voltage upon ordering
- The sensor can be used in outdoor environments and is connected to the controller(s) with Belden 8442 or 8760 or similar
- Each inductive sensor is supplied with 6 feet of electrical cable. Field splice for longer lengths
- The maximum separation distance between controller and sensor is 200 feet
- Each controller has a dry, unpowered relay rated for 5A @ 120 VAC, 240 VAC
- 6 targets are built into the wheel assembly. The wheel is replaceable if necessary
- The operating temperature range is -13°F to 140°F (-25°C to 60°C)
- No drilling or tapping of tail pulley shaft necessary. Mounts between the conveyor belts







MOTION & SPEED CONTROL



BSDC MODEL Belt Speed Detector The Model BSDC is a compact version of the heavy duty "traction action" motion control that indicates when a conveyor belt has slowed or quit moving altogether. The unit can be adjusted as an overspeed, underspeed, or zero speed control. The output of the Model BSDC can be wired into a PLC or DCS, or to the optional RMS controller (or MSD controller) which has a DP/DT relay to control up to two separate circuits, one for machinery shutdown.

CMS MODEL Compact Motion Switch



 Protects rotating equipment including belt conveyors, rotary feeders, and screw conveyors

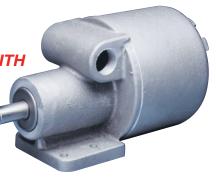
• Senses overspeed or underspeed, even zero speed

Available in rugged aluminum or cast iron housing for full protection.



CMS Compact Motion Switch safeguards main conveyor feeding material from Crusher.







CMS-DSPO MODEL Compact Motion Switch The Model CMS-DSPO is a direct drive control that indicates when rotating equipment has ceased to turn. The output contacts of the Model CMS-DSPO can control up to two separate circuits, one for machinery shutdown and one for an alarm. A pulse output (12 pulses per revolution standard, 50 pulses per revolution optional with special disk) is also provided.





MOTION & SPEED CONTROL



MAG-NEAT-O Magnetically Coupled Motion Control

Designed for easy installation, the MAG-NEAT-O[™] is a magnetically coupled motion sensor that when paired with Conveyor Components Company controller Model's RMS or MSD can be programmed as an over speed, under speed or zero speed device. The MAG-NEAT-O[™] is a speed switch that uses a uniquely designed magnetic coupler to attach the unit to the roller shaft on your conveyor. This coupler is connected to a target that rotates in unison with the roller shaft of a conveyor. A target is then read by a proximity sensor that communicates pulses into a PLC or optional MSD or RMS-G controller which has a relay to control up to two circuits.

MSD MODEL Dual Speed Motion Control



- MSD Sensor has separate rugged RPM sensor enclosed in a heavy duty cast aluminum housing.
 - Dual speed control with two signal set points that acts as both a motion sensor and a digital tachometer
 - Protects valuable equipment such as conveyors, bucket elevators, and rotary feeders

RMS MODEL Non-contact Motion Monitoring System

System Includes: Controller, Sensor, Sensor Mounting Bracket, and Target Disk.

- Provides means to shut-down rotating equipment before damage is encountered
- Can control up to two (2) separate circuits, one for machinery shut-down and one for an alarm





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RMS Non-Contact Motion Switch uses remote mounted inductive sensor to monitor speed.







DAMAGE & MISALIGNMENT DETECTION

DB MODEL Damaged Belt Detector

The DB detector warns of impending belt failure due to rips, punctures, or sharp objects protruding through belt fabric.

Belt problem detected when an object or piece of damaged belt hangs below belt's surface and sweeps away one or both cables. Can be reset!



A pair of DB Damaged Belt Detectors mounted with cable underneath.

- Early warning system for damaged belts
- Economical and easy to install

FS MODEL Flow Switch

Model FS is fully adjustable. The paddle and counterweight assemblies can be positioned at various points along the shaft and rotated to any angular position.

The shaft itself will adjust laterally. Inside, the actuating cams can be rotated so that switch actuation will occur at pre-determined points.



If flow stops, paddle pivots and actuates FS switch

FS Flow Switch in position to indicate any interruption in flow of material along a fast moving belt.



- Immediate warning of any interruption in the flow of material
- Mounts on all types of feeders, hoppers, chutes, and conveyors





DAMAGE & MISALIGNMENT DETECTION

TA MODEL Belt Alignment Control

- Protects conveyor belts from damage due to misalignment or runoff
- Sounds an alarm for minor problem or shuts-down belt for major event
- Roller is adjustable up to 90° in both directions and is positioned approximately 1" from the conveyor belt. Control actuation points adjustable 0° to 45° by changing the actuating cam(s)
- Available with general purpose or explosion proof construction. Epoxy coated cast aluminum housing available

Adjustable Roller Arm set to intercept belt at its midpoint.





Pair of TA Conveyor Belt Alignment Switches used near head and tail pulleys.



Aluminum housing with red powder-coated roller.

TA-TPS MODEL Tripper Position Switch The Model TA-TPS is a tripper position switch, which is a heavy duty limit switch commonly used to aid in positioning of the "tripper" on a conveyor with multiple discharge points or discharge chutes. The output contacts of the Model TA-TPS can control up to two separate circuits, one for machinery shutdown and one for an alarm.









BK MODEL Belt Cleaner The Model BK (BELT-KLEEN) rubber protects valuable conveyor belts. It has a straight, smooth edge and improves the cleaning effectiveness of wiper style belt cleaners. Available in rolls up to 500 feet long, or cut to length at no extra charge. Used as standard wiper material on all our rubber wiper style conveyor belt cleaners.

BR MODEL Rotary Brush Belt Cleaner



- Increases productivity and lowers maintenance costs with its electric motor and helically shaped open face brush
- A good choice for use as a stand-alone belt cleaner and makes an excellent secondary belt cleaner

BR Brush Style Belt Cleaner comes complete and ready to install. Simply bolt or weld to conveyor frame and hook-up to power source.

BR Brush Frame is rigidly constructed to ensure even brush / belt pressure and contact.



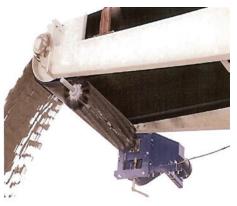
A "BEST BUY" IN BRUSH TYPE BELT CLEANERS!



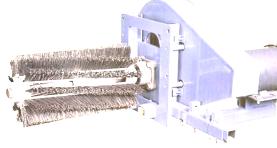




BRC MODEL Cantilever Rotary Brush Belt Cleaner



- 1. BRC Cantilever-Mount Cleaner is a motorized-style cleaner for use in a variety of heavy-duty applications
- 2. Works in wet or dry applications as well as on a variety of organic materials and metal fines
- 3. Cantilever-Mount motor can be mounted left or right-handed and can be installed, adjusted, and maintained from one side



Cantilever-Mount powered brush of BRC Cleaner turns in the opposite direction of belt in order to throw dislodged material back into discharge stream.

INSTALLATION FROM ONE SIDE . . . ADJUSTMENT FROM ONE SIDE . . . MAINTENANCE FROM ONE SIDE.

CW MODEL Single Blade Counterweight Belt Cleaner

Counterweight units can be hung from conveyor frame as shown or bolted directly to conveyor discharge chute with optional flange mounting.

- Counterweight u bolted directly to
- Rubber blade-type primary belt cleaner for a wide range of application
- Counterweighted arms keep the rubber wiper in constant, firm contact with the belt to remove product build-up
- Ideal for moderate material build up
- Available for all belt sizes 12" through 60"
- Unit adjusts in field to any size conveyor frame







CWD MODEL Dual Blade Counterweight Belt Cleaner

- Fitted with dual blade assembly, it gives the belt a "double sweep" for extra cleaning effort
- Blade pressure can be changed by moving weight on arm
- For applications where material build-up is heavier, the MODEL CWD is the choice
- Can be field adjusted to fit any size conveyor frame
- Provides even pressure across entire belt width



EFFECTIVE AND EASY TO INSTALL

DTP MODEL Diagonal Plow Belt Cleaner

The DPT is used to prevent foreign material from being caught between the belt and the tail pulley. These Plow Cleaners deflect material off the belt before damage is done to the belting or tail pulley.

The DPT Diagonal Plow-Style Belt Cleaner reduces the chances of belt damage and punctures by removing foreign material from the inside of the conveyor belt. These cleaners are helpful where belts are being overloaded or skirting is worn. Diagonal plows are specifically designed for reversing (bi-directional) conveyor belts, or shuttle conveyors.









FA MODEL Spring Arm Belt Cleaner

FA's multi-bladed spring arm design provides the ability for each blade to work independently to remove carryback.

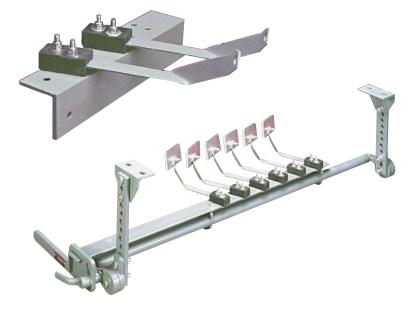
- **Pays for itself** by reducing clean-up and maintenance expenses
- New float action spring design greatly increases spring and blade life

HOW "FLOAT ACTION" WORKS

A "sandwich" is constructed from two pads of high quality rubber. The spring arm is then allowed to "float" between them. Two bolts through the rubber and arm clamp fasten the assembly securely to the spring support angle. The rubber then absorbs the majority of the springs flexing, thereby increasing its life.



FA Belt Cleaner can be easily maintained from under the belt or through a chute door.







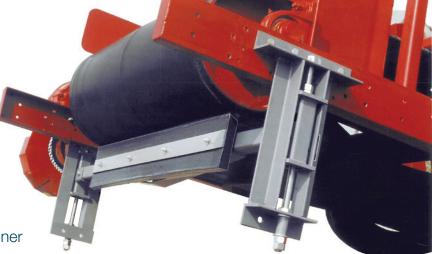




HS MODEL Brush AssemblyThe Model HS is a helical shaped stand alone brush assembly for use on conveyor belts to remove excess buildup and material carryback. The brush can be mounted and driven using various methods, including from the head pulley using a sheave/pulley & belt arrangement. In addition to cleaning conveyor belts, the Model HS has been used to clean sawdust from plywood sheeting, remove excess fiber from fiberglass boards, remove coffee fines from roaster drums, and excess concrete from newly formed concrete bricks and blocks..

LP-S MODEL Spring Loaded Belt Cleaner

- The newly engineered LP-S is a heavy-duty, spring-loaded, rubber wiper type cleaner
- 80 durometer Belt-Kleen rubber specifically designed for maximum cleaning effectiveness
- Compact size makes it perfect for areas where installation space is critical
- Blades automatically adjust for wear
- Blade tensioned into place using the standard adjusting hex nut, or the optional ratchet tensioner
- Spring system keeps proper blade to belt contact for positive cleaning pressure
- Adjustable "stops" keep framework from contacting the belt







Conveyor Components Company Division of Material Control, Inc.

BELT CLEANERS



PT & HPT MODEL V-Plow Belt Cleaners

Prevents materials from being caught between tail pulley and belt. Material droppings and foreign objects are diverted from belt before reaching tail pulley. V-type design plow cleaner prevents belt misalignment and is compact in size.

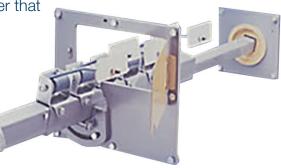
MODEL PT V-Plow Cleaner permits field adjustment of wiper blade pressure. Adjustable compression springs hold the blade in continues firm contact with the belt. Our long wearing Belt-Kleen is used as standard wiper material. Comes equipped with 1/2" thick x 4" wide Belt-Kleen rubber. If larger size rubber blade is desired, specify on order.

MODEL HPT HD V-Plow Cleaner with 1" x 6" 80 durometer rubber and beefed-up structural components. Especially useful for rugged mining applications and constant use conveyors.

SPECIAL MODELS of both Plow Cleaners are available for use on reversing conveyor belts. A diagonal plow with single blade is also available.

RFA MODEL Spring Arm Belt Cleaners

- The Model RFA Cleaner is a sturdy coil spring-arm/blade cleaner that really gets down to work
- Model RFA permits independent adjustment of each blade arm to match the exact contour of the belt and apply just the right cleaning pressure to remove traces of carryover
- The unit operates on all types of conveyor belts and will not damage mechanical splices, vulcanized splicing or metal fasteners



THE CLEANER FOR TOUGH ABRASIVE MATERIALS!







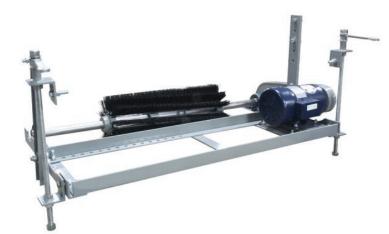
RLP MODEL Urethane Blade Belt Cleaner



Located at face of pulley, the RLP is a primary belt cleaner.

- Reduces amount of work required for under belt maintenance and material clean-up
- Provides cleaning required to reduce material build-up on idlers and rollers, which cause belt damage
- Roll-On/Roll-Off system for simple servicing

RLP's specially formulated urethane blade is mounted beneath head pulley to scrape away most types of carryback.



SBR MODEL Conveyor belt Cleaner

The Model SBR is a "small-sized" motorized brush style conveyor belt cleaner for use in heavy-duty quarry and mining applications to reduce the carryback of material. The Model SBR will work in wet or dry applications, as well as on a variety of organic materials and metal fines. The powered brush turns in the opposite direction of the belt in order to throw the dislodged material back into the discharge stream.





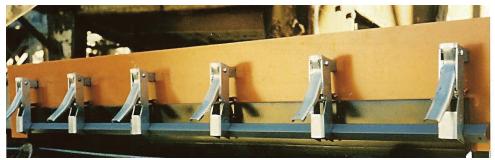
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BELT CLEANERS

SC MODEL Conveyor Belt Skirtboard Clamp

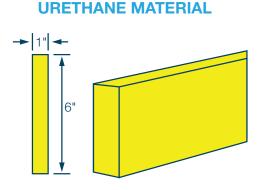


- Positive locking clamp keeps skirtboard rubber securely in place
- Quick release action makes adjustment a snap
- Accommodates any thickness of skirting material and eliminates need for skirtboard slotting



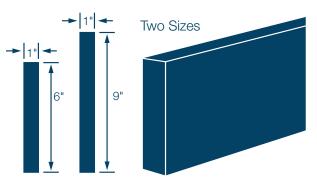
SC Skirtboard Clamp is a unique new clamping system to keep protective skirting rubber in place. Its simple toggle action holds rubber firmly, yet releases instantly for wear adjustment. No corroded bolts to fight and no springs to wear or break the SC clamp detaches quickly and easily without special tools.

BLADES & SKIRTING MATERIALS



- 90 durometer solid urethane planks
- Abrasion resistant
- Can be used as wiper blades or skirtboard
- Available in 1" thick x 6" wide x 72"(max length)
- Used as blade material on all our urethane wiper style belt cleaners

BELT-KLEEN SOLID RUBBER MATERIAL



- Belt-Kleen 80 durometer special compound solid rubber material
- Abrasion resistant for high performance
- Standard blade material on all rubber wiper style belt cleaners
- Available: 1" thick x 6" or 9" wide, in rolls up to 50' long







CT MODEL Tilt Level Control





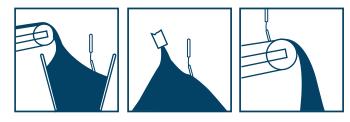
Comprised of control unit and detection probe, CT senses either presence or absence of material.



LEVEL CONTROLS

- Commonly used when other controls won't work due to bin vibration, or actual walls aren't available for mounting
- Can be applied in many ways such as a high level switch, plugged chute detector, pile high stacker control, material presence control, or high level indicator in a crusher box

TYPICAL INSTALLATIONS



ADVANTAGES

- Optional stainless steel probes to safeguard against corrosion
- Hanger fittings and mounting brackets available to permit easy suspension of probes from fixed supports
- Our tilt probes are intrinsically safe and cULus listed when used in conjunction with the new CT Control Units: Models CT-105, CT-106 and CT-107
- Heavy duty steel probes for abrasion resistance
- Fail-Safe logic design defaults to safe condition when there is a loss of power
- Adjustable time delay to prevent false signals
- Low 12V DC probe for safety
- Easy installation and low maintenance
- Compact probes for use where space is limited
- Probes can be purchased separately. When not connected to our control unit they are not cULus listed.







LEVEL CONTROLS

CR MODEL Rotating Paddle Level Control

- Provides an indication of material level within a hopper or bin without ever opening the vessel
- Unit can be equipped with either 1, 2, or 3 heavy-duty micro switches to control a variety of functions



CR ADVANTAGES

- Simple, rugged construction with fewer parts
- Switches and motor completely independent for longer life
- Up to three (3) 20-amp switches in one CR
- Field adjustable sensitivity and time delay



CR mechanism and circuitry are easily accessible when protective cover is removed.

TOTAL RELIABILITY 2X DURABLE CONSTRUCTION 2X ECONOMICAL PROTECTION

DLC MODEL Dual Microswitch Diaphragm Level Control

- A flush-mount, pressure-activated, diaphragm-style level control and plugged chute detector
- The DLC has Two (2) dry (unpowered) microswitches that activate when material within the bin or chute presses upon the diaphragm face
- The DLC should be mounted on the vertical side wall or the sloped portion of the chute (as long as material flows freely)
- The DLC is also used as a high level limit in a screw conveyor, transfer point or auger box
- The DLC can be used as a high-level switch, a low-level switch, or a plugged chute detector
- Does not intrude on the material flow stream









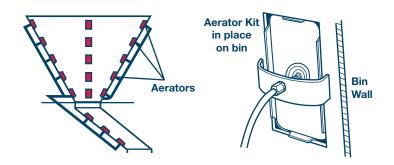
AD MODEL Bin Aeration Pad

AD Bin Aerators are non-clogging and provide equal distribution and consumption of air.



BIN AERATOR PADS

- Helps restore positive material flow without damaging effects of vibration or more expensive and complicated flow systems
- Introduces low pressure air into dry bulk material that has been compacted due to settling



END FLOW PROBLEMS FOREVER!

SAFETY GATES

RCG MODEL Safety Gate The Ready Gate™ is an adjustable self-closing safety fall protection gate.



CONTRACT



AIRMATIC founded in 1944, is a woman-owned Industrial Distributor, with installation and maintenance capabilities, offering equipment, machinery, and shop supplies to the Industrial, Construction, Utility, Government, and Commercial Markets. Our products and services are sold through three business units:

The **MATERIALS MANAGEMENT GROUP** provides products and services to industries that convey, store, transport, and process powders and bulk solids from aggregates, cement, and chemicals to foods, grains, metals, power generation, and waste water treatment applications;

E'LL HANDLE IT.

The **SERVICE GROUP** provides fabrication, installation, and maintenance services to improve bulk materials handling efficiency; mechanical clean-out services for silos and hoppers to eliminate material flow problems; and shop repair/rebuilding and modifications services of products sold by the Company.

The **TOOL GROUP** provides power tools, personal protective equipment, materials-handling equipment, shop equipment and MRO supplies used for production, fabrication, assembly, metal removal, maintenance, and storage in manufacturing, construction, utility, and commercial applications. Our Customers tell us that by choosing **AIRMATIC** to solve their problems, they gain increased productivity, decreased costs, and a safer, cleaner work environment.



CONVEYOR COMPONENTS COMPANY, established in 1965, is a manufacturer of conveyor controls, motion controls, level controls, bin aerators, and conveyor belt cleaners. Conveyor Controls include safety stop switches, pull cords, belt alignment controls, damaged belt-rip detectors and material flow controls. Motion Controls include contact and non-contact zero speed controls and speed monitors. Level Controls include paddle wheel switches, tilt level probes, and bin aeration pads. Conveyor Belt Cleaners include rotary brush cleaners, single and multi-blade cleaners, plow style belt cleaners.

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