SSS01262026

AIRMATIC®

WE'LL HANDLE IT.

SILO SOLUTIONS STORE
SINCE 1944

PRODUCTS & SERVICES
TO IMPROVE SILO SAFETY & PERFORMANCE

AIRMATIC
284 Three Tun Rd. Malvern, PA 19355
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Silo Solutions Store

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Martin Air Cannons supply a quiet but powerful release of compressed air that dislodges buildups and enhances the flow of bulk materials, to improve efficiency and maintain profitability.

AIR CANNONS

Use the power of compressed air to keep the interior walls of silos free of obstructions.

When bulk material builds up inside silos, and stops flowing due to obstructions and ratholes, the best way to keep it moving is with an air cannon. Air cannons are highly effective with materials like coal, cement and aggregate, especially if they retain even small amounts of moisture and become sticky.

We offer a line of air cannons that ensures you'll find one that fits your needs, whether your application zrequires powerful bursts of air every few seconds to products that deliver shorter more frequent bursts. We also offer multi-valve products that discharge at up to five delivery points through pipes or hoses to accommodate tight spaces.

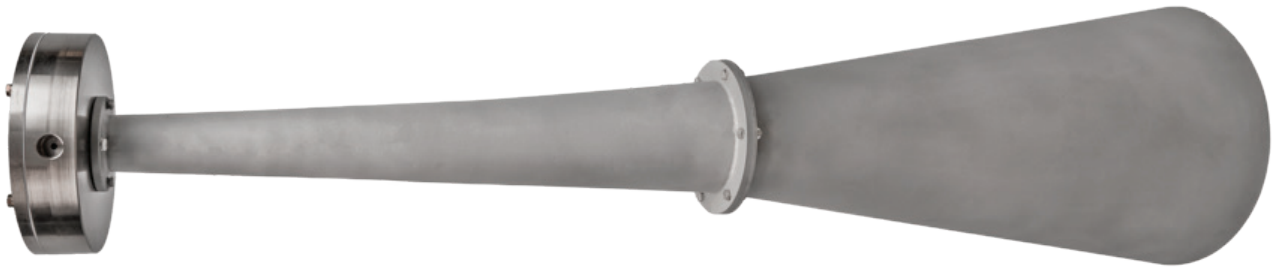
MARTIN HURRICANE

Most direct air path, maximum force output, minimal air consumption, smallest footprint, simplest installation, and one-step maintenance.

MARTIN TYPHOON

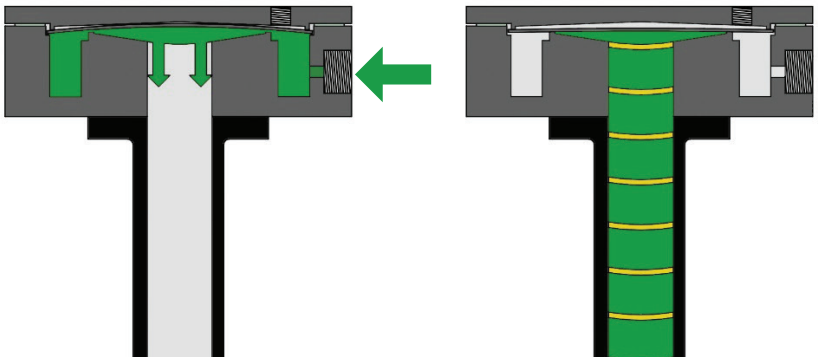
Hybrid design combines minimal plumbing with the most direct air path and maximum force output of centrally-located Hurricane valve technology.

ACOUSTIC CLEANER TECHNOLOGY



Sonic Horns produce and amplify timer controlled bursts of omnidirectional, low-frequency, high-intensity sound wave vibrations to remove the dust and particulate build-up as well as dislodge the bridging and side-wall build-up that occurs in silos.

ACS Sonic Horn Acoustic Cleaners use simple modular construction. There are two basic components: A Bell for maximum output efficiency and a Sound Generator for sound production. ACS Acoustic Cleaners are pneumatically operated. Compressed air is forced over a precision-machined, titanium diaphragm, causing it to flex. This produces low frequency, high energy sound waves which are amplified by the Bell. These sound waves cause particulate deposits to dislodge, which can then be removed by gravity and / or gas flow. The series of pictures below illustrates how the sound generator works:



Contact **AIRMATIC** and let our experienced team of technical specialists and engineers get you the solution to your particulate buildup problem.

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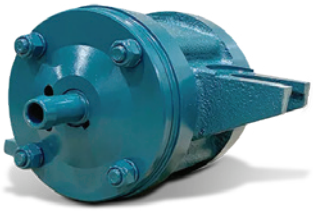
VIBRATORS

ITALVIBRAS® VIBRATORY MOTORS

Italvibras are electric motor driven, eccentric weight, rotary vibrators are used to promote the flow of bulk solids from bins and hoppers and silos. This line of Vibrators can be provided with a maximum force output of 16,500 lb-ft. Frequencies of 900, 1200, 1800, and 3600 RPM.

MARTIN® DV SERIES BRUTE VIBRATORS

DV Brute Vibrators are equipped with motor-driven rotary eccentric weights that can be powered by a pneumatic and hydraulic motor and deliver rotary vibration through a complete range of frequencies. The DV Series are for permanent installation on large vessels, these vibrators come with four- or six-bolt-hole mount bases.



VIBRATEK® VRH DUAL ROLLER VIBRATORS

The VRH Air Operated, Dual Roller Series Portable Vibrators are ideal for silos which respond well to high frequency, adjustable force rotary vibration. These Vibrators are regularly used to prompt and maintain material flow through silos, hoppers, bins, railcars, chutes, and screens. Three sizes of 7020 lb-ft, 10395 lb-ft and 14580 lb-ft provide the speed and force needed to eliminate any material hang-up.

CLEVELAND VIBRATOR® SINGLE IMPULSE AIR KNOCKER

The single impact pneumatic vibrator or "air knocker" delivers one impact at a maximum frequency of once every three seconds through a five-port spool valve. Single Impactors act most like an automatic sledge hammer and are most effective for sticky wet or materials because they are less likely than rotary or continuous impacting vibration to cause packing in bins, hoppers and Silos.

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BIN-BUTLER®

FORMULA FOR SUCCESS

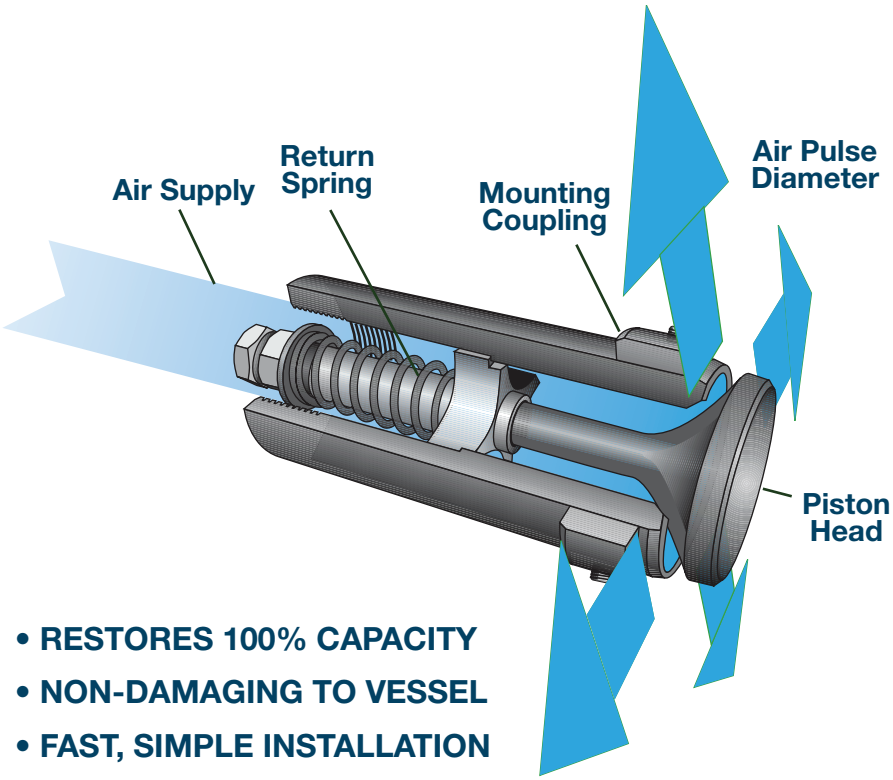
The BIN-BUTLER Aeration System is a cost effective solution for prompting and maintaining the flow of a variety of powders and bulk solids. The System's Injector Heads fire a radial pattern of powerful air pulses between the material and the container wall to undercut, excite, and put the material in fast motion. The dislodged, stimulated material then flows downward to the outlet. Our solid-state, Programmable Time-Sequence Controller is used to precisely fire the System's strategically located Injector Heads so that they act in concert to maintain a consistent, regulated outflow during the storage vessel's discharge cycle.

DOLLAR SMART

The average system uses less than 10-CFM of plant air — significantly less than other types of aerators (ie, air pads, activators, disk/jet type fluidizers), air cannons, lances, or pneumatic vibrators.

BUILT-TO-LAST

To obtain maximum strength and wear resistance, all BIN-BUTLER injector parts are precision-machined from a high-grade, carbon steel (also available in Stainless). Because all components are subject to a rigid quality control system, you'll get years of continuous, trouble-free operation even under the most severe conditions. In fact, the only moving parts, the piston and spring, exhibit very little wear — even after 1-million cycles. Furthermore, the operating design of the BIN-BUTLER® Injector Head enables it to close rapidly, and completely reseal after each firing — no need for a check valve.



- **RESTORES 100% CAPACITY**
- **NON-DAMAGING TO VESSEL**
- **FAST, SIMPLE INSTALLATION**
- **WON'T JAM OR CLOG**
- **MOUNTS TO ANY STRUCTURE OR SURFACE**
- **INJECTOR HEAD WARRANTY — 1 MILLION CYCLES!**

PERFORMANCE DATA

MODEL#	MATERIAL	MOUNT	DISCHARGE (in)
BB-075	Carbon or Stainless	Coupling	3/4
BB-200	Carbon or Stainless	Coupling or Flange	2

AIR PRESSURE (PSI)		AREA OF INFLUENCE (Dia in Ft)		AIR CONSUMPTION (CFM)*	
40 80	60 100	2 4	3 5	0.3 0.7	0.5 0.9
40 80	60 100	2 6	4 8	0.6 1.8	1.2 2.4

***CFM Measured at one PPM (Pulse per Minute)**

SILOTOP® zero

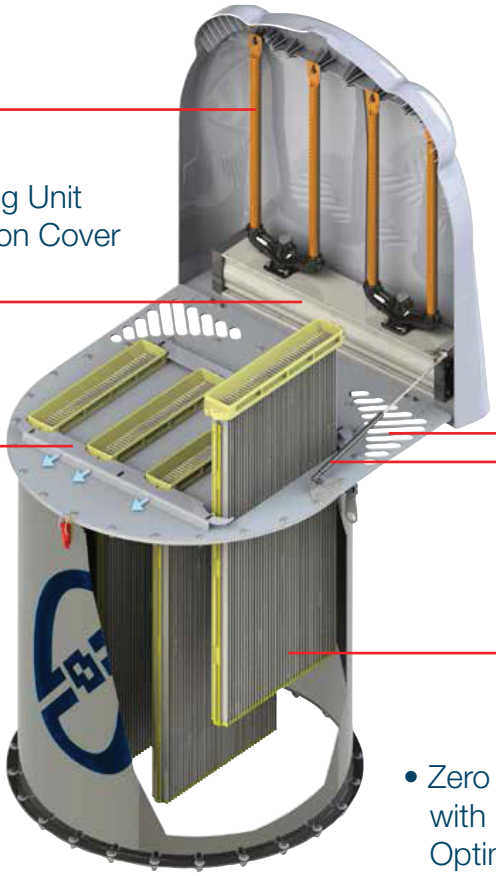
A cylindrically shaped dust collector for venting pneumatically filled silos. Stainless steel body houses vertically mounted POLYPLEAT filter elements. An air jet cleaning system is integrated into the hinged weather cover.

Dust separated from the air flow by special filter elements drops back into the silo after an integrated automatic pulse-jet air cleaning system has removed it from the filter media.

Air filtration capacity has been increased through new high performance filter media, which requires less filter surface area. This results in a lower pressure drop and dust emissions of less than 1mg/NM³.

- High Efficiency Blowing Pipes with Elliptical Nozzles
- Maintenance-free Air Jet Cleaning Unit Integrated Into Weather Protection Cover
- Quick Release Filter Element Replacement
- Easy and Safe Dust Emissions Sampling

Sampling Pipe Extension Not Supplied



SILOTOP® zero 150 ft²

SILOTOP® zero 24.5 m²

- Sealed Frame Between Body and Plate Holds Filters in Place
- Easy to Open and Locking Lids Make Changing Filters a Breeze
- Zero POLYPLEAT Filter Elements with Integrated Venturi Shafts Ensure Optimum Filter Surface - Body Volume Ratio

OVERALL DIMENSIONS

Model	Body 0 in (mm)	Filter Surface sq-ft (M²)	Max. Height Closed in (mm)	Max. Height Open in (mm)	Weight lb (kg)
SILAB 14	31.5 (800)	150 (14)	43.3 (1100)	72.8 (1850)	150 (68)
SILAB 24	800 (31.5)	264 (24.5)	43.3 (1100)	72.8 (1850)	174 (79)

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WAMFLO® Front Dust Collectors

DESCRIPTION

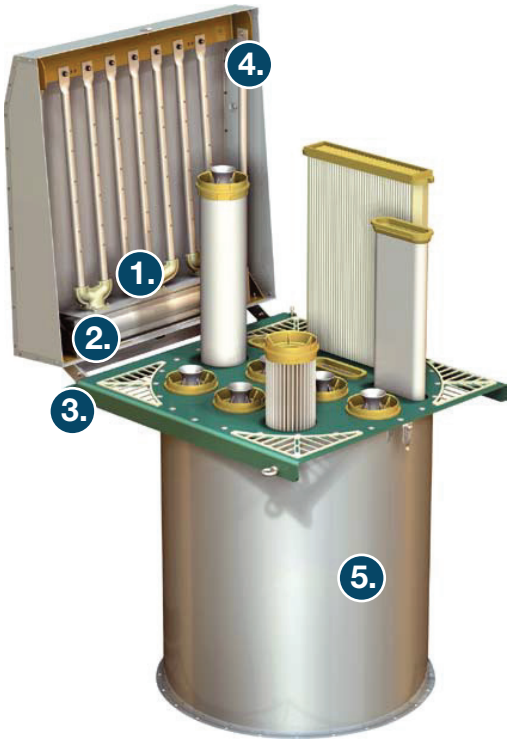
WAMFLO Front Dust Collectors are equipped with a cylindrical shape stainless steel body with flanged connection that contains vertically mounted filter elements. The air jet cleaning system is integrated in the top cover. A top-mounted suction fan creates the negative pressure necessary for de-dusting.

FUNCTION

The modular system combines the maximum safety of a flanged body connection with the variety of options in terms of type of filter media and filtering elements with the unique integrated pneumatic cleaning system design. Membrane-type, water-repellent filter elements ensure efficient dust collection and separation of moist particles.

APPLICATION

The collector can be installed on top of a silo or on any other equipment that requires dedusting (belt conveyor, bucket elevator, chain conveyor, etc.), or as a "stand-alone" unit fixed on a standard DK-type WAM dust collecting hopper.



1. **Full Immersion solenoid valves incorporated in air tank to minimize flow resistance**
2. **Corrosion Resistant Aluminum air tank**
3. **Weather protection cover with lockable snap hook**
4. **Maintenance-free air jet cleaning unit inside weather protection cover**
5. **304 stainless steel body w/ bottom flange**

VCP PRESSURE RELIEF VALVES

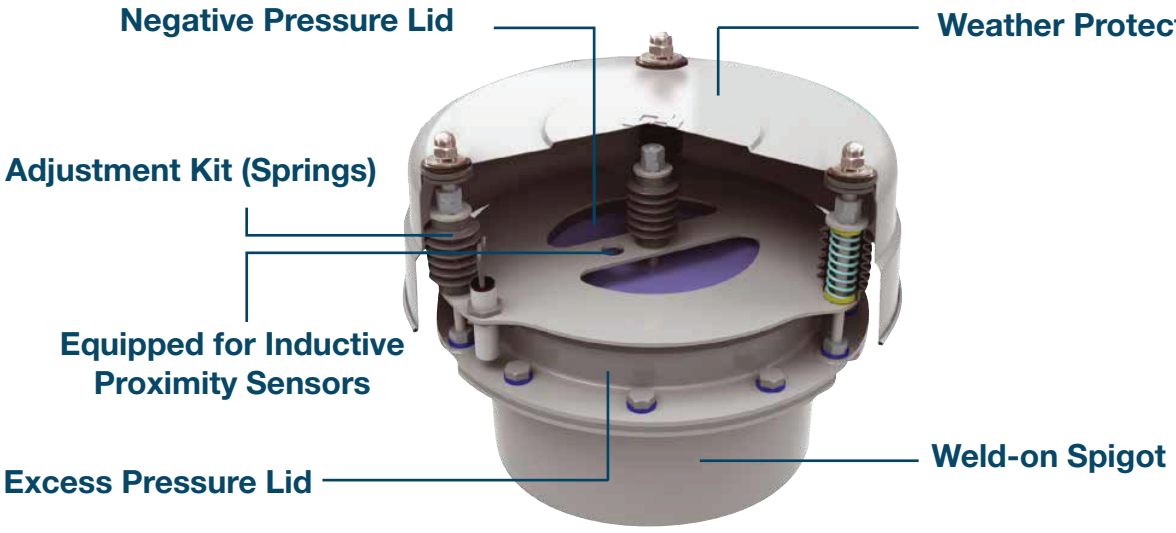
VCP PRESSURE RELIEF VALVES are the last resort when abnormal pressure conditions endanger the silo structure. This is why sudden excess or suction pressure inside the silo must be dealt with instantaneously. Even though ideally a Pressure Relief Valve should never have to go into action, it must be efficient and reliable if needed. With hundreds of thousands installed worldwide, VCP Pressure Relief Valves have given evidence of being totally reliable under most different conditions.

DESCRIPTION

VCP Pressure Relief Valves consist of a cylindrical casing with a bottom flange to be connected with a spigot welded on the silo roof, a disc shape inner steel lid for negative pressure operation held in position by a central spring rod, an outside steel ring for excess pressure kept in position by three spring rods, gaskets, and a weather protection cover.

FUNCTION

Helical springs keep the valve lids closed when the pressure value remains within the preset limits. The three outside spring rods keep the external ring-shaped lid firmly closed as long as the force generated by the pressure inside the silo does not overcome the spring force. Once the pressure exceeds the pre-set value the lid is pushed up and pressure can escape. The smaller lid covers the central circular opening of the external lid from below. It is held in the middle by a single spring rod and is pressed onto the external lid by the normal air pressure inside the silo. In the event of suction pressure the spring is compressed and allows the lid to drop. The air entering the silo from outside ensures rapid pressure balance and pushes the central lid back up into "closed" position.



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RV–RVR ROTARY VALVES

HIGH FILLING EFFICIENCY AND PRECISE METERING!

RV AND RVR DROP THROUGH ROTARY VALVES are designed according to a criteria of maximum applicative universality, suitable for controlled feeding or discharging of products in powder or granular form, from silos, hoppers, pneumatic conveying system, filters or cyclones.

FEATURES

- Round Inlet Diameter: 6"– 8"– 10" - 12"
- Square Inlet Dimension: 6"x6" – 8"x8" – 10"x10" – 12"x12"
- Capacity: 0.07 – 0.17 – 0.35 – 0.7 cu ft/rev
- Working Temperature: from -40°F up to 302°F
- Working Pressure: from -7.2 PSI up to + 4.3 PSI
- Material of construction: Cast Iron, 304 Stainless Steel and 316 Stainless Steel for RV Models only

RV – RVR... X

ATEX 20/22 Certified

CE 0948 Ex II 1D/3D c T135°C

ATEX RATED ROTARY VALVE designed and tested for use in potentially explosive zones classified as ZONE 22 or non classified zones and with process atmospheres (inside the valve) classified as ZONE 20 in accordance with Directive 94/9/EC and 1999/92/EC.

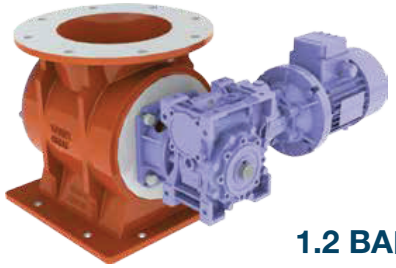
Ambient temperature: from 14°F to 104°F
Process Temperature (material): from 4°F to 140°F
Atmospheric Pressure: from 11.6 PSI to 15.9 PSI
Maximum rotor speed : 30 rpm
Minimum Ignition Energy : mie > 3 mJ

RV-RVR...E

Cert. No.IBExU11ATEX2014X
EN 15089 - Explosion Isolation System

CE 0948 Ex II 1D/3D c T135°C

CE 0637 Ex D



1.2 BAR

FLAME PROOF AND EXPLOSION PROTECTION DEVICE are ATEX certified for zone 20/22 and are used as a protective and dust explosion-flame proof system up to 17.4 PSI

Suitable to be used under dust filters, cyclones, product separators, pneumatic conveying and dosing systems within the following conditions:

Ambient temperature: from 14°F to 104°F
Process temperature .(material): from 4°F to 140°F
Atmospheric Pressure: from 11.6 PSI to 15.9 PSI
Maximum rotor speed : 30 rpm
Minimum Ignition Energy : mie > 10mJ
Maximum Explosion Pressure: 17.4 PSI

GWR-2000 GUIDED WAVE RADAR

GUIDED WAVE RADAR FOR POWDERS & SOLIDS

BinMaster's GWR-2000 guided microwave level transmitter utilizes time domain reflectometry (TDR) to continuously measure the distance, level, and volume of powders and solids in bins, tanks and silos. The transmitter is mounted on the top of the vessel in an unobstructed area through a 1-1/2" NPT opening or 3" ANSI flange. A single, flexible 8 mm stainless steel cable with a counter weight is suspended from the transmitter to the bottom of the vessel.

Reliable level measurement for high dust and low dielectric materials. The transmitter emits a high frequency microwave pulse guided along the cable. When the pulse reaches the material surface, the pulse energy is reflected back up to the sensor head. Level is calculated based on the time difference between the pulse being sent and the reflected pulse received. This sensor features hazardous location approvals, a very small upper dead zone, and assures highly accurate level measurement in low dielectric materials down to 1.3.

IDEAL FOR GRANULES, POWDERS, AND BULK SOLIDS

The GWR uses innovative technology to automatically monitor the dielectric constant of the material as low as 1.3, making it a superior guided wave radar for powders and solids. Advanced, high resolution signal processing significantly reduces or eliminates the upper deadband, ensuring accurate level measurement at the top of the vessel. The TDR technology is proven to work in difficult applications with excessive steam, condensation, or buildup. The GWR-2000 excels in challenging conditions such as vessels with high dust and air movement, or excessive noise.

RELIABLE AND MAINTENANCE FREE

The GWR-2000 housing is available in plastic, stainless steel, or aluminum and has IP66/IP67/IP68 ratings (dependent on enclosure selected) for protection again dust ingress and water. Housings are configured as a single chamber when requiring a two-wire output or a dual chamber for the four-wire / Modbus RTU output. This robust sensor comes with a 8 mm cable with a gravity weight at the end to stabilize the cable location. Each sensor is made-to-order with a ready-to-install cable made to your custom length at the factory.

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NCR-80 LEVEL SENSOR

NON-CONTACT RADAR WITH SUPERIOR PERFORMANCE IN SOLIDS

The BinMaster **NCR-80** is a non-contact radar level sensor designed specifically for superior performance in powders and bulk solids. Its advanced technology uses an 80 GHz frequency focused in a narrow 4° beam angle.

This ensures reliable performance at measuring ranges up to 393 feet and accuracy within 0.2 inches. The **NCR-80** is ideal for continuous level measurement in tall and narrow vessels where there is excessive noise or dust.

Stainless Steel Flange Option

RELIABLE LEVEL MEASUREMENT. 80 GHZ OF POWER.

There are two configurations of the **NCR-80** and three different housing options including plastic, stainless steel, or aluminum. One configuration features a 10° swiveling, stainless steel flange for precise targeting at the material in the silo. It is suitable for high temperature applications up to 392°F. The other configuration mounts using an 8° swiveling flange or a mounting strap that allows for adjustable targeting and has a lightweight plastic antenna. The plastic antenna is for use in process temperatures up to 176°F.

NCR-80 plastic horn model

MORE MOUNTING FLEXIBILITY

Not all roofs are flat. So, in addition to the affordable 0° mounting plate BinMaster offers a 30° mounting plate with a 4" ANSI flange. This roof angle is especially prominent in the grain industry, where dust-penetrating 80 GHz non-contact radar is becoming an increasingly popular sensor.

Or, there's the 10° swiveling holder for the metal jacketed version of the **NCR-80** that comes in 4", 6", or 8" 316L flange sizes that allows for precise aiming to the output of the vessel. For the **NCR-80** plastic horn antenna version, 8° directional aiming is available with 3", 4", or 8" adapter flanges.

FAST AND SIMPLE SETUP WITH BINDISC

An optional BinDisc interface enables push-button sensor setup and configuration. The BinDisc is integrated into the sensor housing and is installed and visible under the housing cover for easy viewing. BinDisc simplifies setup and provides continuous, at-a-glance, operational status of the sensor. This handy interface aids in on-site system diagnosis. Data can also be sent to a PLC in a control system.

ROTARY POINT LEVEL MEASUREMENT FOR INVENTORY CONTROL

Detect high and low levels while protecting valuable inventory with tried-and-true rotary level indicators from BinMaster. Made in Lincoln, Nebraska, USA, following ISO-9001:2015 quality processes, BinMaster offers the widest variety of custom extensions, paddles, and mounting options available. Select from the fail-safe MAXIMA+, reliable BMRX, or compact mini rotary – shipped fast and built to last.

MAXIMA+

Fail-safe operation, self-diagnostics, and immediate and corrective response to failures distinguish the MAXIMA+ as the best rotary for process control. Its red LED light visually alerts to fault, covered, or rotating status conditions.

BMRX

From its explosion-proof housing, to de-energized motor operation, a bi-directional slip clutch, and a four-bearing drive shaft – the BMRX is a rugged workhorse built for efficiency and longevity.

MINI

Compact design for top or side mounting on small bins or hoppers and in tight spaces. Four-vane or bayonet style paddle options, adjustable sensitivity, and simple ¾" installation for affordable level alerts

	MAXIMA+	BMRX	MINI
De-Energized Motor	x	x	
Fail-Safe	x	x	
Status Light	x		
Time Delays	x		
Auto Sensing	x	x	x
Built-In Slip Clutch	x	x	x
Screw-Off Cap	x	x	
Tight Spaces			x

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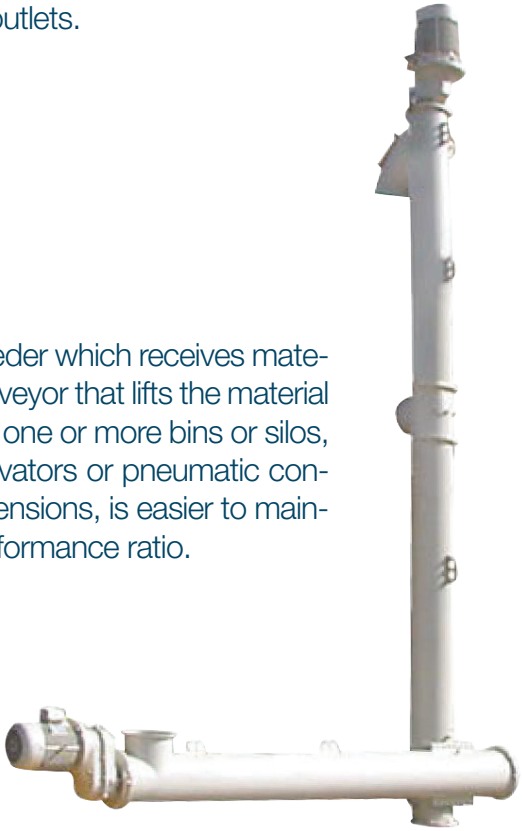
SCREW CONVEYORS

WAM® ES CEMENT SCREW FEEDERS

ES Cement Screw Feeders are used for feeding from the weigh hopper outlet into the mixer in dry batch plants. Manufactured in carbon steel with a suitable surface finishing and powder coating, they are extremely durable and provide for quick, versatile installation due to innovative ball-jointed universal inlets and outlets.



WAM VE VERTICAL SCREW LIFT SYSTEM

The VE Vertical Screw Lift System consists of two units: a Horizontal Screw Feeder which receives material from a silo, hopper, or another feeder or conveyor, and a Vertical Screw Conveyor that lifts the material to the required level. Material can then be discharged into a weigh hopper, into one or more bins or silos, or into another conveyor or conveying system. In comparison with bucket elevators or pneumatic conveying systems, the VE Vertical Screw Lift System has the smallest overall dimensions, is easier to maintain, requires the smallest number of spare parts, and offers the best price-performance ratio.

WAM TU MICROSILICA SCREW FEEDERS

TU Tubular Screw Feeders are highly versatile and offer a variety of standard solutions for handling powdery materials. To feed micro silica from a silo into a separate weigh hopper, the TU Screw Feeder can be installed at a very low angle. These Feeders are very durable under extreme conditions.

EXTRABEND® and EXTRACURVE® Pipe Elbows

DESCRIPTION

Short-radius **EXTRABEND** and wide-radius **EXTRACURVE** Pipe Elbows are inserted as a link in pneumatic silo filling pipes. Both models are manufactured from a one-piece SINTTM engineering polymer cast.

Wear-resistant **EXTRABEND** and **EXTRACURVE** Pipe Elbows deflect incoming cement, filler dust or microsilica minimising material degradation and elbow wear, avoiding at the same time any clogging or plugging.

FUNCTION

The EXTRABEND short-radius Pipe Elbow offers a substantially innovative geometry suitable to reduce wear during operation.

The body cavity next to the point of diversion generates an internal material turbulence which protects the elbow from wear caused by the material travelling through the duct.

The EXTRACURVE represents the latest evolution in the development of wide angle pipe elbows. Due to its flexibility and adaptability installation has become quicker while durability is dramatically increased.

APPLICATION

EXTRABEND and EXTRACURVE Elbows are used as a link in silo filling pipes and in ductworks of pneumatic conveying systems. They excel through their particular resistance to wear with abrasive materials.

BENEFITS

- Long-life elbow with abrasive materials thanks to anti-wear SINTTM engineering polymer material;
- Reduced installation costs thanks to elastic properties (no extra work for connection on site is needed);
- Reduced installation and maintenance time because EB/EW are easy to handle thanks to lightweight design;
- Reduced costs for plant designing thanks to elastic properties (elastic elbows fit for different plant layouts);
- Considerable reduction of flow resistance, consequently energy saving pneumatic conveying.

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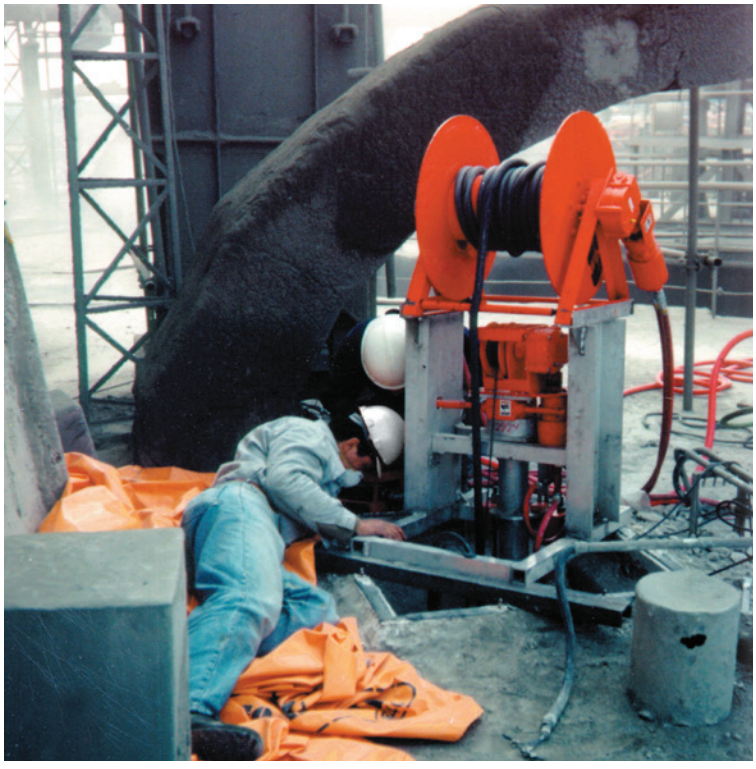
WHY SILO SOLUTIONS FROM AIRMATIC?

Since 1944, AIRMATIC has specialized in helping Customers throughout the New England and Middle Atlantic States eliminate problems with the flow of powders and bulk solids held in storage vessels. Through our Service Group, our crews not only install and maintain Air Cannons and Vibrator Flow-Aid Systems to prompt and maintain product flow, but also provide mechanical and acoustic vessel clean-out services to remotely, and safely, clear build-up and blockage obstruction in silos, bins, bunkers, stacks, industrial chimneys, railcars, pipes, and tanks. Our vessel cleaning services, generally referred to as Silo Cleaning, are used in manufacturing, mining, construction, and agricultural facilities on a wide range of bulk materials to: (1) Remove Product Build-Up; (2) Restore Flow Rates; (3) Recover Design Capacity; (4) Prevent Cross-Contamination; (5) Reclaim "Lost Material"; (6) Eliminate Combustion-Generating "Hot Spots"; and (7) Decommission Storage Vessels at Facility Conversions or Shut-Downs.

- **Removes Product Build-Up**
- **Eliminates "Hot Spots"**
- **Reclaims "Lost" Material**
- **Restores Flow Rates**
- **Recovers Design Capacity**
- **Prevents Cross-Contamination**

Whether the flow obstruction is caused by materials that cling, arch, bridge, or tunnel in silo, bin, and hopper applications, or build-up / block-off in pipe and stack applications, AIRMATIC's Silo Cleaning Services are increasingly chosen because we can select from an arsenal of clean-out technologies, our SILO SOLUTIONS Tool Kit, developed by AIRMATIC, enhancing material flow for 75 years.

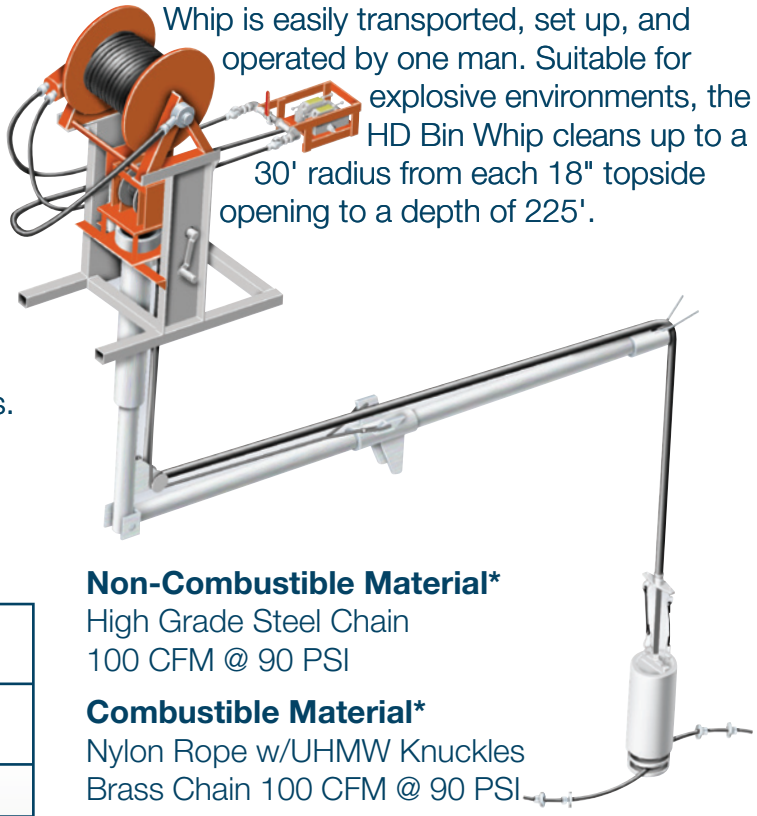


OUR SILO SOLUTIONS TOOL KIT:

- Prevents hazardous confined space entry by en abling our trained Technicians to remotely operate the controls
- Reduce the risk of damage to vessel linings, walls, and bottoms, a problem prevalent with other clean-out methodologies
- Eliminate environmental waste issues because no water or chemicals are used
- Eliminate potential contamination by burst or leaking hoses from hydraulic-driven equipment — our mechanical and acoustic cleaning technologies are compressed-air driven.
- Allow the vessel to stay "on-line" during clean-out (based on plant policy) which can be especially important during production periods.
- Preclude the risk of fire through the use of non-sparking equipment.

HD BIN WHIP TOOL

A compressed-air driven (plant air 85-100 PSI), remotely-controlled, heavy-duty, reversing motor equipped with application specific, specially designed flails and cutting edges (the Whip Head) mounted to a modular, articulating boom which is used to dislodge stubborn materials without damaging the vessel's lining, walls, or bottom. The Whip Head is lowered from the vessel's topside access port / inspection hatch opening, and precisely positioned, based on the type of flow obstruction. With the Whip Head in place, our trained Technicians remotely control, from outside the vessel, the operating speed, 360° boom movement, and draw rate based on material characteristics and equipment load-out capabilities. As the agglomerated material is undercut, it falls from its own weight. The process continues safely and efficiently until the vessel is completely empty or meets Customer expectations / requirements. The HD Bin Whip's easy-to-assemble components are compact and lightweight, so the highly mobile Whip is easily transported, set up, and operated by one man. Suitable for explosive environments, the HD Bin Whip cleans up to a 30' radius from each 18" topside opening to a depth of 225'.



BIN WHIP REQUIREMENTS

Maximum Vessel Diameter (with single center access opening)	60 ft
Maximum Vessel Height (to vessel discharge)	225 ft
Minimum Opening	18 in
Minimum Working Height	56 in
Cleaning Unit Weight (overall)	850 lbs
Reel & Hose (by sections)(121.1kg)	267 lbs
Air Unit	122 lbs
Boom Modules	150 lbs
Compressed Air Requirement	100 cfm @ 90 psi
Electrical Requirement	120 VAC (for lights)
Roof/Top Load Rating	> 50 PSF

Our service may require an outage for equipment set-up or vessel cleaning, depending on your operation and material. Our may require lift equipment to raise silo cleaning apparatus to the top of the vessel.

Non-Combustible Material*
High Grade Steel Chain
100 CFM @ 90 PSI

Combustible Material*
Nylon Rope w/UHMW Knuckles
Brass Chain 100 CFM @ 90 PSI

Pneumatic Controls allows precise positioning of cleaning head to remove material without risk to vessel.

Double Wire Braid Hose supplies strength for control. Air Motor provides powerful whip action to remove even the most stubborn build-up from walls.

Cleaning Flails – urethane-coated Rope Whips with knuckles, or brass or steel chain based on stored material.*

Hose Reel separates from boom assembly for ease of transportation and set-up in tight quarters.

Modular Boom extends to 30ft, allowing cleaning of vessels up to 60ft in diameter from a single, central opening.

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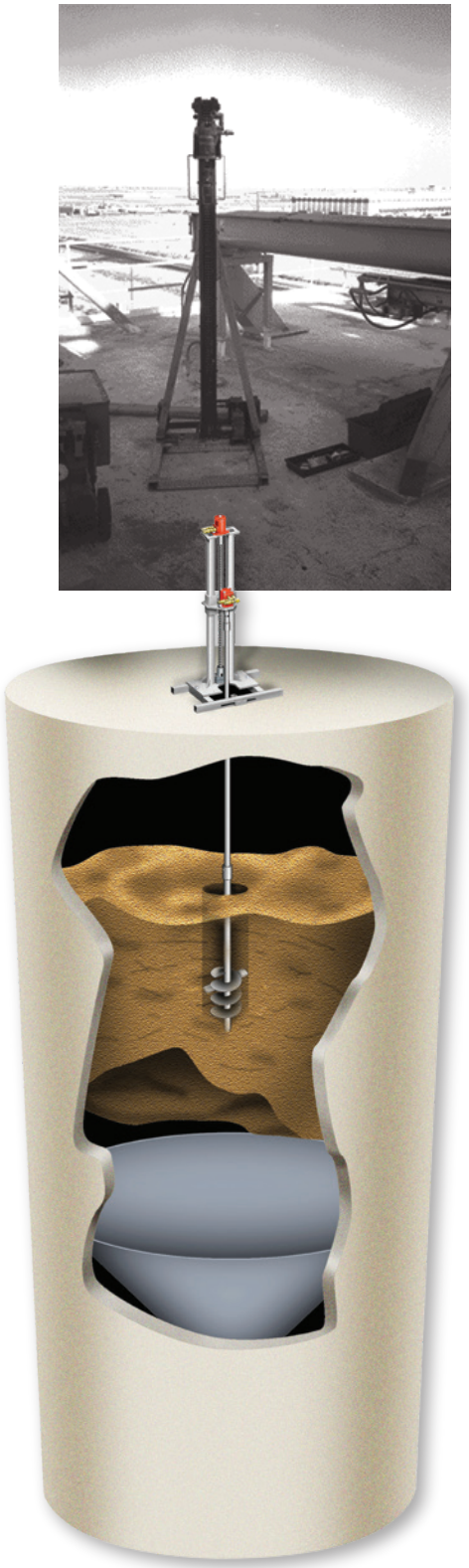
BIN DRILL TOOL

A hydraulic-driven, remotely-controlled drilling rig used to bore a flow channel through a bridged, arched, or completely blocked vessel so that bulk material dislodged by the HD Bin Whip, the Sonic Horn, or the combined use of these Tools during the cleaning process has a pathway to the discharge. The Bin Drill's platform is clamped over the vessel's topside access port / inspection hatch opening, and, using multiple lengths of bolt-connected drill shaft, application-specific, graduated drill bits are rapidly and efficiently fed into the flow obstruction until a sufficient flow channel has been opened. The components of the highly mobile Bin Drill are constructed of compact, lightweight, spark-proof materials, and are easily transported, set up, and operated by one man. The highly efficient power unit includes portable controls that enable our trained Technicians to precisely manage the drilling operation from outside the vessel. Suitable for explosive environments, the Bin Drill has been used on vessels up to 200' deep.



Bin Drill Tool

PROBLEM

Bridged or arched material creates a “no flow” condition.

SOLUTION

The Bin Drill Tool opens a flow channel through tough clogs. The powerful hydraulic action of the Drill bores through blockages, clearing a path to depths up to 150’.

BIN DRILL REQUIREMENTS

Contact us today or simply complete our Application Data Sheet and let us know when to contact you!

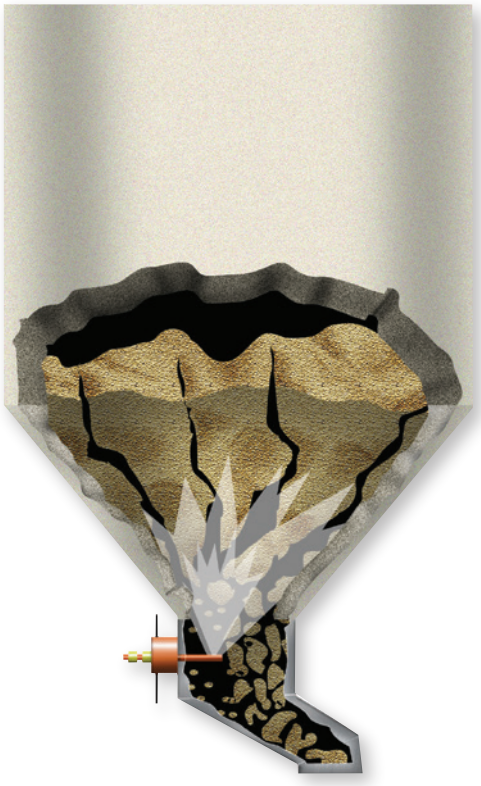
ACOUSTIC CLEANER TOOL

A compressed-air driven (plant air: 85-100 PSI) Sonic Horn that produces deep penetrating, low-frequency, high-energy sound waves. The sound waves are produced by the compressed air flexing a titanium diaphragm in the Horn's sound generator. The sound waves are then magnified as they are emitted through the Horn's bell, and travel at > 1100 ft/sec in a 360° radial pattern. The Sonic Horn is mounted to or suspended in the vessel at strategic locations, and then air pressure and volume are controlled remotely from outside the vessel. Alternating sound waves, repeating 60-420 times per second, produce a range of fundamental frequencies that cause dry particulate deposits to resonate and become fluidized. Once fluidized, gravity causes the material to flow freely to the discharge.

Acoustic Cleaner Tool

CHUNKBUSTER CARTRIDGE TOOL

A specially-designed, high-strength steel tube filled with liquid carbon dioxide (Cc2 as used in fire extinguishers) which, when remotely energized, converts the liquid to expanding gas creating an instantaneous pushing force (the CARDOX System). One or more tubes with discharge nozzles are mounted to the vessel at point-specific build-up locations. The tube, which houses a replaceable chemical heater and rupture disc, is filled with liquid carbon dioxide. When energized by a small electrical charge, the chemical heater converts the liquid carbon dioxide to gas, causing it to expand in volume by 600%. Pressure builds up then pops the disc, releasing a heaving mass of Cc2 gas which generates an instantaneous pushing force of up to 40,000 PSI through the discharge nozzle to rapidly dislodge the most rock-solid blockages. The CARDOX Tubes can be reused by replacing the heater and disc, and recharging the Cc2. The System is certified as a non-explosive device, making it suitable for virtually any type of vessel.



AIRMATIC® WE'LL HANDLE IT.

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;

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.

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