

OZV0172019

**AIRMATIC**®  
**WE'LL HANDLE IT.**



**DZTEC**

# CONCRETE VIBRATORS & GRINDERS

**AIRMATIC**

284 Three Tun Rd. Malvern, PA 19355

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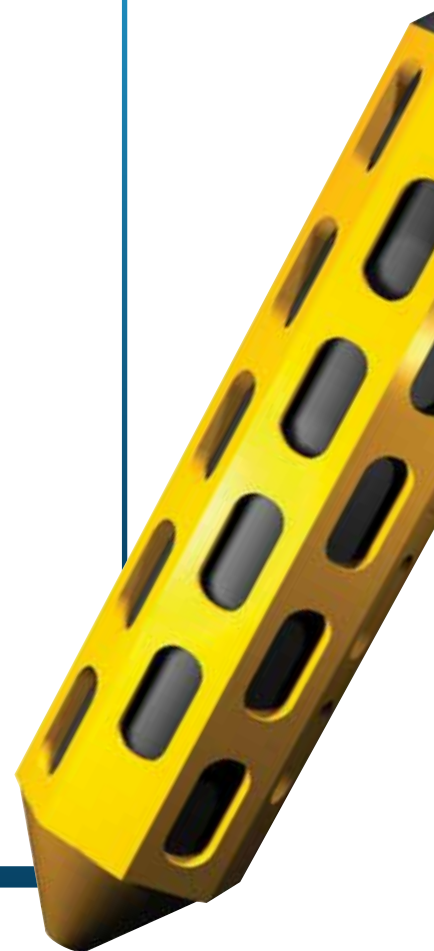
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### OZTEC VIBRATOR HEADS

produce the highest amplitude and centrifugal force, generating the largest radius of influence of any heads available. Energy is efficiently transferred from the motor, via the shaft, to the head, which is all eccentric (vibrating the entire head). Whether combined with one of OZTEC's electric or gasoline powered motors and choice of flexible shafts — the results are exceptional! Superior consolidation, increased productivity and a process more forgiving of less than perfect vibrating techniques. The benefits?

**Lower Cost...Higher Earnings...  
Superior Quality Concrete!**

### STEEL HEADS

Standard of the Industry for use in most applications.



Regular Heads dia. x length		Short Heads dia. x length
¾"x12" (pencilhead)	1¾"x14"	¾"x6" (pencilhead)
1"x13"	2"x14"	1¼"x6"
1¼"x13"	2½"x13"	1¾"x6"
1½"x14"		2½"x6"

### SPECIAL PENCIL HEAD

"For Fill Cell Block Applications"



Mild Vibration Pencil Head - High frequency, low amplitude (to prevent blowouts). Call AIRMATIC at 1-800-322-9770 for technical information. ¾" x 12" (pencil head-mild vibration)



### RUBBER TIPS

Available for all Steel Heads. To order, add RT to the part number.

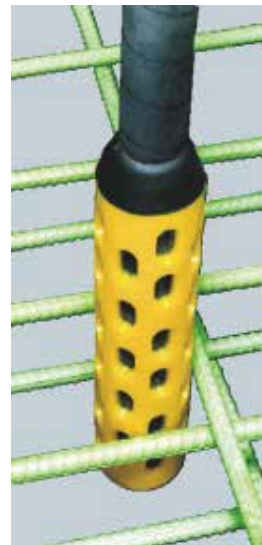
### RUBBER HEAD

Epoxy coated rebar presents a particularly troublesome problem. Steel heads act like an electric hammer, striking any rebar or the forms they contact over 10,000 times per minute, with a force from hundreds to over 2,000 pounds per blow. Contact with a steel vibrator head of as little as one second can chip enough coating to subject the steel to deep rust. OZTEC's patented High Efficiency "RubberHead" vibrator head not only meets DOT non-metal head specifications for protecting coated rebar and expensive forms, but also exhibits some very special and unique properties. The High Efficiency "RubberHead" urethane dimpled construction sends strong shock waves off the entire length of the head, generating a larger radius of action, and producing denser concrete with less voids to patch.

OZTEC's patented "High Efficiency RubberHead":

- Outperforms any other type of vibrator...round, square, hi-cycle, etc. An Type!
- Protects epoxy coated rebar and expensive forms
- Is outstanding in low slump (to "O" slump) concrete
- Essential in large pours of very stiff concrete
- Makes concrete denser with less voids to patch
- Vibrates @ 12,000vpm, never drops below 10,500vpm when lowered deep into low slump concrete
- Provides Superior Action
- Is an absolute must for Architectural concrete where cosmetic surfaces are essential
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- Is an absolute must for Architectural concrete where cosmetic surfaces are essential

### DEFINING THE FUTURE OF CONCRETE



Inner steel construction

Urethane protective coating

OZTEC's patented high efficiency vibration vector design

OZTEC's high efficiency "RubberHead" provides maximum protection for epoxy coated rebar

Protective rubber tip



OZTEC'S PATENTED UNIFORM,  
HIGH EFFICIENCY ACTION.



### INTRODUCING A NEW WAY TO VIBRATE CONCRETE IN A BLOCKWALL CELL TURN YOUR REBAR INTO A VIBRATOR

Eliminate the time and mess of lowering a concrete vibrator into a cell containing a rebar and filled with concrete. The splash effect caused by the withdrawal of the vibrator is slippery, dangerous, and time consuming to cleanup.

The Rebar Shaker simply slipped over the top of the rebar, vibrates and consolidates concrete in 5 to 7 seconds.

Tremendous savings in man-hours, from filling and refilling cells, clean-up and lost time due to injury from slips and falls, are realized through the use of the Rebar Shaker.

#### Why the OZTEC "RubberHead" outperforms any other type of Vibrator.

- A.** - When a smooth vibrator head (round, square or other shape) is lowered into a relatively still concrete batch, the front or nose of the vibrator drills a hole. It pushes away concrete faster than it can return. Result, shock waves produced mostly only from the vibrator's front end.
- B.** - OZTEC's patented "RubberHead" has a large number of openings which allow wet concrete to cool the inner shell. These openings act like "suction cups", which keeps concrete in contact with the entire length of the vibrator head, sending strong shock waves into the mass.



Damage caused by a standard steel vibrator head.

Available Sizes dia. x length
1 1/2" x 14"
1 7/8" x 14"
2 1/2" x 14"
2 3/4" x 14"
2 3/4" x 6" (short, for slabs)







## FLEXIBLE SHAFTS

When transmitting power from the power source to the vibrating head, select one of OZTEC's flexible shafts. OZTEC Flexible Shaft inner cores are made from extra-high carbon steel wires with casings made from tough abrasion resistant neoprene rubber, reinforced with multiple layers of high tensile wire braiding with a hardened flat steel liner.

This construction makes OZTEC Flexible Shafts rigid enough for driving into the stiffest concrete without kinking, yet limber and non-slip for easy and effective handling.

OZTEC Flexible Shafts are interchangeable on all OZTEC power units, are reversible (doubling their service life), and come supplied with "quick change" adapters.

Standard lengths (in feet): 2, 5, 7, 10, 14, 16, 18, and 21.

OZTEC Flexible Shafts can be coupled to 42 feet using shaft coupling #**6725A1**.

OZTEC Shafts have been successfully coupled to 65 feet. Custom lengths are available. For either situation, call AIRMATIC for details at 1-800-332-9770.

Pencil Shafts for Pencil Head vibrators are available in 3, 6, 9, 15, and 20 foot lengths. (Pencil Shafts cannot be coupled together, but can be lengthened, by coupling to a standard shaft with coupling P/N: **6725A1**.)



## FLEXI-LUBE

Specially formulated shaft lubricant designed to increase the performance and life of any flexible shaft.

## QUICK DISCONNECT FEATURE

OZTEC's "Quick Disconnect" feature allows shaft removal from the power unit with the twist of a lever. The lightweight and bearing-less coupling allows the job to be done in seconds without tools. This fitting will not rust or seize.

## FLEXIBLE SHAFT ADAPTERS

Taking advantage of OZTEC's quality doesn't mean a major reinvestment to replace all your existing equipment. OZTEC supplies motors, shafts, and heads (steel only) that are interchangeable with most other makes. OZTEC makes various style core and casing adapters which allow other manufacturers flexible shafts and heads to be used with OZTEC motors or other motors with OZTEC flexible shafts and heads. Flexible shaft adapters for use with other manufacturers' equipment.

Call 1-800-332-9770 for specifications



## OZTEC POWER UNITS

All OZTEC Power Units (gas and electric) run power heads at 11,000 to 12,000 vpm. They never drop below 10,000 vpm even in the lowest slump concrete (near 0) when maximum head size specifications.

## ELECTRIC MOTORS

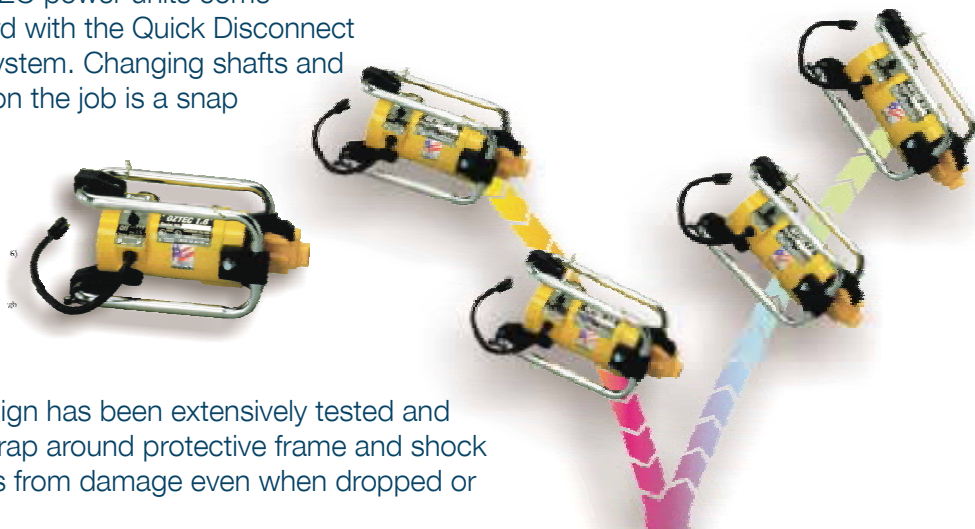
OZTEC Electric motors are manufactured to exacting specifications to withstand the rough day to day abuses associated with construction sites. Lightweight, compact and fitted with our comfortable adjustable shoulder strap, this one man power unit will speed through the stiffest concrete. Using the Vibrator Selection Chart enables you to combine power units with any of OZTEC's steel or rubber vibrator heads for maximum productivity.

4 Powerful Models			Maximum Head Size	
Model	Amps	HP	Steel	Rubber
<b>1.2 OZ</b>	<b>9</b>	<b>1¼</b>	<b>1½"</b>	<b>None</b>
<b>1.8 OZ</b>	<b>15</b>	<b>1¾</b>	<b>1¾"</b>	<b>None</b>
<b>2.4 OZ</b>	<b>17</b>	<b>2¼</b>	<b>2"</b>	<b>2¾" short</b>
<b>3.2 OZ</b>	<b>19</b>	<b>3¼</b>	<b>2½"</b>	<b>2¾"</b>

**OZTEC UNITS MEET ALL UNITED STATES OSHA AND CANADIAN SAFETY STANDARDS!**



All OZTEC power units come standard with the Quick Disconnect "QD" system. Changing shafts and heads on the job is a snap



## JOB SITE PROVEN

Tough, Rugged, and Durable! OZTEC's design has been extensively tested and used on-the-job for over thirty years. The wrap around protective frame and shock absorbers effectively protect OZTEC motors from damage even when dropped or thrown from heights of over six feet.



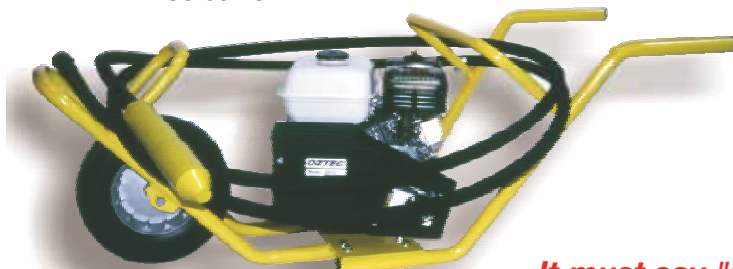
## GAS POWER UNITS

Powerful, portable and reliable...OZTEC gas power units, provide ultimate and immediate adaptability on the job. Utilizing rugged and dependable Honda gasoline engines, coupled to our "speed-up" transmission, vibrator heads develop 12,000 vpm and never drop below 10,000 vpm — even in the heaviest low slump concrete loads (tested in near 0 slump concrete). This 10,000 - 12,000 vpm range is essential for high-quality concrete.

**(Direct drive units "scream", have short lives, and usually drop below 10,000 vpm when the head is immersed in concrete).**



**GV-5W** Wheelbarrow



Two powerful Backpack Models: Mounted on very comfortable frames, OZTEC backpacks **BP-31** and **BP-50** allow operators incredible maneuverability around the job. Run time with full tank approximately 1 hour plus.

### BP-31

Runs heads up to 1½" diameter. Honda 1½ HP, 4 stroke, Weight 19-lbs.



**POWERFUL...**  
**PORTABLE...**  
**RELIABLE...**

### BP-50

Runs heads up to 2½" diameter. Honda 2½ HP, 4 stroke, Weight 24 lbs.



**GV-5**  
Carry handle





All OZTEC power units come standard with the Quick Disconnect "QD" system

Our Carry Handle and Wheelbarrow models, with flexible shaft storage, are ideal for any job site. Utilizing Briggs & Stratton or Honda engines, these power plants run all steel and rubber heads up to 2 ¾" diameter.


***It must say "OZTEC" to be the industry's best concrete vibrator.***

### ALL HEADS, SHAFTS AND POWER UNITS ARE INTERCHANGEABLE \*

1. Select Head Size

HEADS			
Steel		High Efficiency "Rubber Head"	
			
	Part No.		Part No.
*3/4"	HP 075 OZ	1 1/2"	HR 150 OZ
1"	H 100 OZ	1 7/8"	HR 188 OZ
1 1/4"	H 125 OZ	2 1/2"	HR 250 OZ
1 1/2"	H 150 OZ	2 3/4"	HR 275 OZ
1 3/4"	H 175 OZ	2 3/4" x 6"	HSR 275 OZ
2"	H 200 OZ	 Available for all steel heads. Add "RT" to Steel Head Part No. Rubber noses	
2 1/2"	H 250 OZ		
Short Heads			
	PART NO.		
*3/4 x 6"	HSP 075 OZ	<b>REBAR SHAKER</b>  For vibrating concrete in block wall cells. For use with a 1.2 electric motor.	
1 1/4 x 6"	HS 125 OZ		
1 3/4 x 6"	HS 175 OZ		
2 1/2 x 6"	HS 250 OZ		
Special Pencil Head *			
			
	PART NO.		
*3/4"	HPMV 075 OZ (mild vibration)		Part No. RS 120 OZ

2. Select Shaft Length

SHAFTS

Part No.
2' FS 02 OZ
5' FS 05 OZ
7' FS 07 OZ
10' FS 10 OZ
14' FS 14 OZ
16' FS 16 OZ
18' FS 18 OZ
21' FS 21 OZ
Pencil Shafts
3' FSP 03 OZ
6' FSP 06 OZ
9' FSP 09 OZ
15' FSP 15 OZ
20' FSP 20 OZ

3. Select Power Unit (Do Not Exceed Maximum Head Size)

POWERUNITS					
Electric Motors				Maximum Head Size	
	Model	Amps	HP	Steel	Rubber
	1.2 OZ	9	1 1/4	1 1/2"	None
	1.8 OZ	15	1 3/4	1 3/4"	None
	2.4 OZ	17	2 1/4	2"	1 1/2" 2 3/4" short
Gas Engines	3.2 OZ	19	3 1/4	2 1/2"	2 3/4"
Back Packs					
	BP-31	-	1 1/2	1 1/2"	None
	BP-50	-	2 1/2	2 1/2"	2 1/2" 2 3/4" short
Carry Handle Models (Briggs & Stratton/Honda)					
	GV-5	-	5/5.5	2 1/2"	2 3/4"
	Wheelbarrow (Briggs & Stratton/Honda)				
	GV-5W	-	5/5.5	2 1/2"	2 3/4"

All Oztec vibrators meet or exceed ACI specification #309

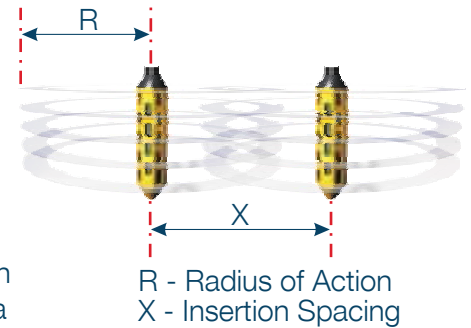
\*Pencil Head requires Pencil Shafts

Head Diameter	Radius of Action (R-inches)	X=1 1/2 Times Radius of Action	Amplitude Centerline to Side (inches)	Centrifugal Force (pounds)	Compaction Rate (cu.yds./hour)
Steel Heads					
3/4"	3	5	0.03	155	1-3
1"	4	6	0.04	220	2-4
1 1/4"	5	8	0.04	510	2-5
1 1/2"	6	9	0.05	920	5-8
1 3/4"	9	14	0.08	1200	8-16
2"	11	17	0.075	1500	12-20
2 1/2"	13	20	0.08	1850	23-30
Rubber Heads					
1 1/2"	9	13.5	0.075	1050	9-13
1 7/8"	11	16	0.09	1400	10-18
2 1/2"	14	20	0.12	1900	14-22
2 3/4"	18	27	0.12	2100	25-35
2 3/4" short	15	22	0.12	1100	9-15



### RADIUS OF ACTION

The most important bit of information needed for complete consolidation. Radius of Action is the distance from the center of the vibrator to the outer edge, where complete consolidation takes place (see diagram). For quality concrete OZTEC lists conservative values for "Radius of Action". Complete consolidation is necessary for low slump concrete with close meshed reinforcement bars, high strength concrete and architectural concrete. Radius of Action can be twice the listed values when slump is high or super plasticizers are used. It is important these values are used only as a general guide. Specifications are subject to change.



**"The benefits of even the finest concrete vibrator are lost if the proper operating technique is not followed."**

### PROPER VIBRATING TECHNIQUES WILL:

- Produce concrete with the maximum strength and qualities designed in the mix.
- Bond rebar to maximize strength.
- Slow penetration of rust-causing liquids by increasing density.
- Eliminate rock pockets and lift lines.
- Minimize patchwork, improving surface appearance by removing trapped air.

### PROPER CONSOLIDATION TECHNIQUES WILL NOT:

- Cause segregation in well-designed concrete.
- Eliminate a significant amount of entrained air.
- Normally damage the lower layers, as long as the concrete in these lower layers becomes plastic under the vibrating action.

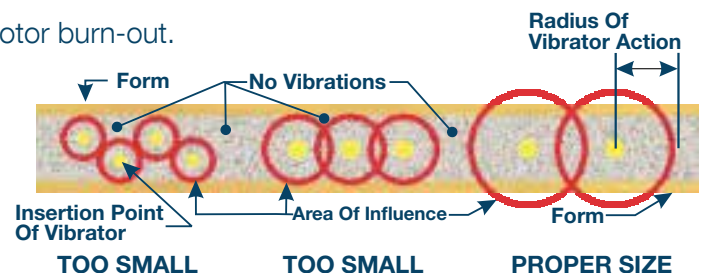
### FOR QUALITY CONCRETE, OZTEC SUGGESTS:

1. Select the largest Vibrator suitable for the job.
2. Insert the Vibrator vertically, allowing it to sink to the desired depth by its own weight. Forcing it may lock it between rebars.
3. Hold the Vibrator 5 to 15 seconds then slowly lift vibrator up, staying behind the trapped air's upward movement. Allow about 15 seconds for each 2 foot distance to avoid re-trapping air.
4. A slight up and down movement will close the hole formed by the Vibrator.
5. Withdraw the Vibrator quickly when near the top to prevent churning air into the top layer.
6. Move Vibrator and re-insert at a distance 1 ½ times the Radius of Action (as shown in the diagrams).
7. Allow Vibrator to pass 3 to 6 inches into the preceding layer to ensure knitting the two layers together. This insures a good bond and prevents "lift lines" when forms are removed.
8. Try to limit pours to 2 to 3 feet high, so air has less resistance to escape.
9. DO NOT use Vibrator to move concrete laterally, it causes segregation (use a shovel). Place Vibrator in the center of mounds to knock them down.

### Extension Cord Wire Size Per UL Specifications

Too light an extension cord can cause poor performance and motor burn-out.

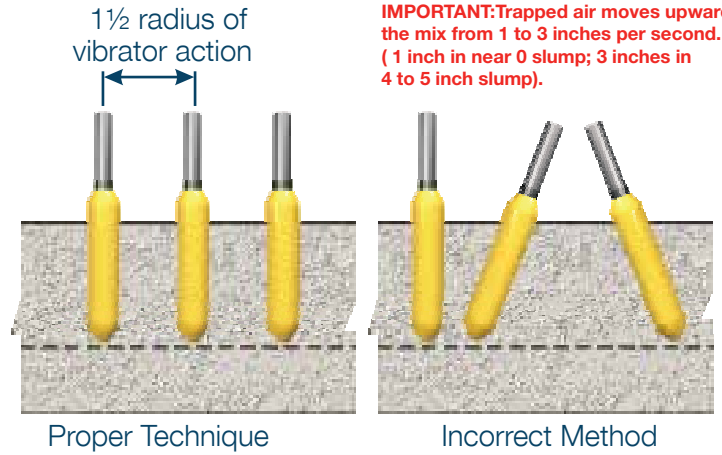
Motor Model #	Amps@120v	50ft	100ft	150ft	200ft	300ft
1.2	9	14	14	12	10	8
1.8	15	14	12	10	8	8
2.4	17	14	12	8	8	8
3.2	19	12	12	8	8	6



## CEILING GRINDERS

**Consolidation eliminates** pockets of aggregate and air bubbles maximizing strength, eliminating surface voids bringing sufficient fine material to the surface and against the forms to produce the desired finish. Vibrators consolidate concrete by sending out shock waves which allows aggregate to “float” freely while pushing lighter trapped air up and out of the mix. Vibrators allow pouring stiff mixtures which are stronger, more economical and result in less segregation, less bleeding, and less shrinkage cracks.

You know that you have consolidated concrete properly when a thin line of mortar appears along the form near the vibrator or the coarse aggregate disappears into the concrete.



### CG-12 CEILING GRINDER

- Grinds ceilings 7 feet to 12 feet high.
- Swivel adjustment allows grinding up to and along edge of the wall.
- Self-aligning grinding head makes full surface contact easy to operate because it needs no adjustment.
- Electric Model **CG12E** with 1 ½ HP Baldor motor.
- Gas Model **CG12G** with 2 ½ HP Honda engine (other makes available).



### LIMITED LIFETIME WARRANTY. YOUR SATISFACTION IS GUARANTEED!

Over 35 years of developing and manufacturing concrete vibrators. OZTEC has earned a reputation of delivering the most reliable and productive equipment to consolidate concrete. If there is any defect in workmanship or materials, OZTEC will repair or replace the part at no charge, for the life of the equipment.

Conditions excluded from Warranty consideration include, but are not limited to the following:

- Normal wear and tear.
- Abuse or misuse of equipment.
- Act of God
- Lack of maintenance (rinsing heads, changing brushes, filters, etc).
- Use of after-market replacement parts and/or components.

**Imitated but never equaled, OZTEC guarantees your satisfaction. OZTEC from AIRMATIC – Simply the Best!**



### **AIRMATIC: Concrete Industry Specialists**

For over 70-years, AIRMATIC has been a Stocking Distributor for many of the world's foremost manufacturers of products used in the concrete construction industry. During that time, we've developed considerable expertise and experience in the field of Precast, Pre-stressed, Cast-in-Place and Tilt-Up Concrete Construction. Here's a brief overview of the products and services we provide others in your industry:

**Rebar Connecting & Cutting** to provide faster, safer and more secure rebar joints than hand tying, and Cutters for safe, clean rebar cuts with minimal effort.

**Pneumatic & Electric Vibrators** to excite and maintain movement of bulk solids to improve concrete flow in forms, molds, chutes & pipes, empty bins & hoppers, railcars & trucks, and clean dust filters & precipitators.

**Air Cannons & Bin Aerators** to eliminate arching, bridging and clinging flow problems in bins, hoppers, silos and bunkers through the instantaneous injection and expansion of compressed air.

**Belt Conveyor Components, Accessories & Controls** to prevent leakage and spillage at transfer points, belt misalignment, material carryback, airborne dust, and belt damage problems with products that improve belt loading, carrying and discharging.

**Point and Continuous Bin Level Indicators & Controls** to provide fast, safe and accurate solutions for measuring and monitoring inventory levels of stored bulk solids.

**Portable Air Supply Systems** to provide a transportable source of clean, dry compressed air for remote or difficult-to-access locations where an air-line device is needed.

Every day, hundreds of Customers rely on us to provide application-specific products, which are value-priced, promptly shipped, and supported by dependable service. We're convinced that you too will benefit greatly, if you decide to place your business with us - we live our Corporate Motto: ". . . HELPING PRODUCERS EXCEL!"



Please inquire about additional catalogs relevant to productivity and safety issues in the Concrete Construction Industry!







**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.



Formed in 1965, **OZTEC** Industries began building its reputation as a designer and manufacturer of quality construction equipment with the introduction of their first Terrazzo Grinder. Quickly responding to industry needs for a powerful, rugged machine, the Diamond Terrazzo Grinder was developed and patented by Oztec. It "sped" through the grinding process four to five times faster than existing carborundum machines making seemingly impossible, costly projects, possible and profitable.

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