

# Concrete Vibrators and Grinders

**JOB PROVEN  
RUGGED**



**OZTEC**

MADE WITH PRIDE  
IN THE

**USA**

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





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*It must say “OZTEC” to be the industry's best concrete vibrator*

***Industry Leader in Concrete Vibrating Technology and Products***



Founded in 1965 by Fred Oswald, Oztec Industries, a family owned company, began building its reputation as a designer and manufacturer of quality construction equipment with the introduction of their first Terrazzo Grinder. Responding to a contractor's dilemma of finishing and leveling a large terrazzo floor to extreme tolerances and specs in an atomic power facility, Oztec developed and patented a Diamond Terrazzo Grinder. The powerful and rugged grinder sped through the grinding process four to five times faster than the existing carborundum machines, making this seemingly impossible project possible and profitable. Oztec's gas and electric adjustable ceiling grinders continue to produce top quality results on thousands of jobs to this day.

As a natural extension of their success in finishing terrazzo and concrete surfaces, Oztec Industries began designing and manufacturing task-rugged vibrating equipment to meet the demanding needs of the concrete construction industry. Immediately, the power, quality and reliability of Oztec vibrating equipment gained it a reputation as the best on the market. Continually improving existing designs and developing new ideas, the Oztec line of fully interchangeable steel and rubber heads, electric and gasoline motors, back packs and flexible shafts are the most powerful, versatile and reliable in the industry.

With the development of the patented "RubberHead<sup>®</sup>", Oztec has designed and produced a vibrator head that not only surpasses all the standards for protecting epoxy coated rebar, but is unequaled in consolidating concrete. The unique "RubberHead<sup>®</sup>" design provides a more powerful and effective radius of action along the entire length of the head. Oztec continues to revolutionize the concrete industry with its line of standard and heavy duty patented rebar shakers. The "Rebar Shaker<sup>®</sup>" turns the rebar into a vibrator and consolidates concrete in both walls and columns better than any other method while cutting time and cleanup.

The newest model BP-50a Backpack Concrete Vibrator is equipped with a rotary throttle. This new throttle design is totally enclosed and will prevent wet concrete from entering the throttle mechanism. The patent pending rotary throttle ensures the operator vibrates at the proper vibrations per minute for consolidating concrete.

Today, the Oswald family and a highly dedicated and talented team of employees are proud to continue producing a quality American Made product from their facility on Long Island, New York.

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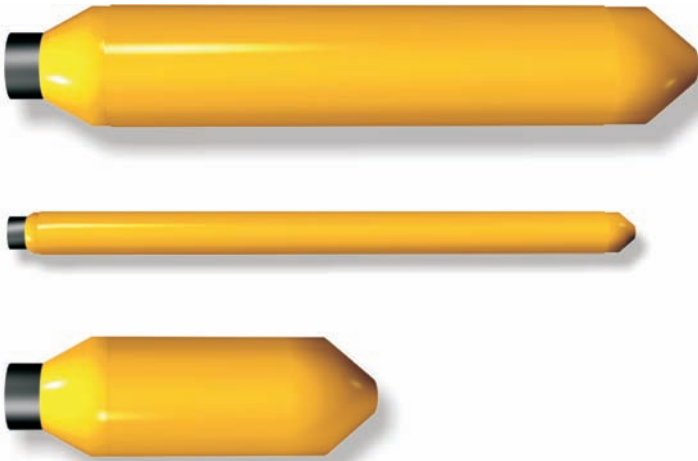


# Steel Vibrator Heads

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)

3/4" x 12" (pencil head)  
 1" x 13"  
 1 1/4" x 13"  
 1 1/2" x 14"  
 1 3/4" x 14"  
 2" x 14"  
 2 1/2" x 13"

### Short Heads (dia. x length)

3/4" x 6" (pencil head)  
 1 1/4" x 6"  
 1 3/4" x 6"



## Rubber Tips

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

# RubberHead®

## Proven for optimal concrete consolidation

### RubberHead®

Epoxy coated rebar presents a particularly troublesome problem. Steel heads act like an electric hammer, striking any rebar or 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 exhibit some very special and unique properties. The High Efficiency "RubberHead®" urethane *dimpled* construction sends strong shock waves off the entire length of the head, with a larger radius of action, producing denser concrete with less voids to patch.

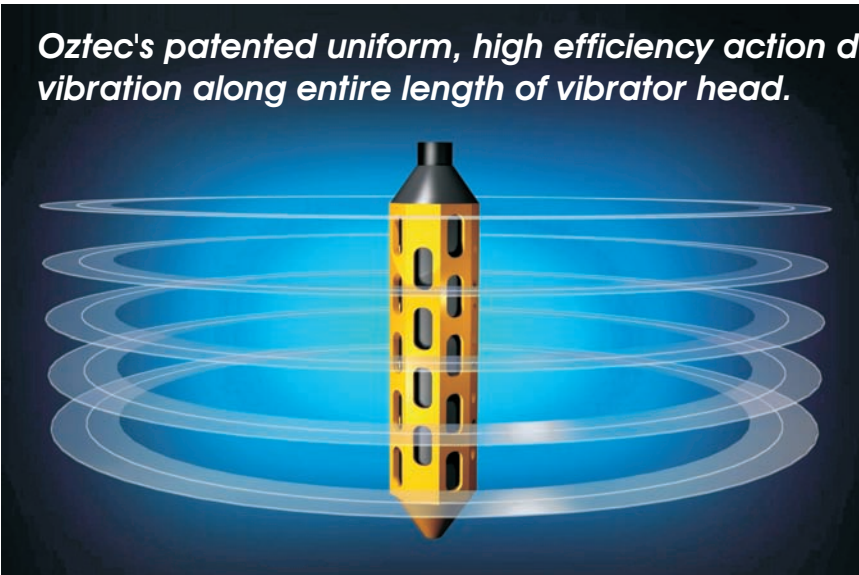
Oztec's patented "High Efficiency RubberHead®":

- Will outperform any other type of vibrator...round, square, hi-cycle, etc...Any Type!
- Will protect epoxy coated rebar and expensive forms.
- Is outstanding in low slump (to "0" slump) concrete.
- Essential in large pours of very stiff concrete.
- Makes concrete denser with less voids to patch.
- Vibrates @ 12,000 vpm, never drops below 10,500 vpm when lowered deep into low slump concrete.
- Provides Superior Action.
- Is an absolute must for Architectural concrete where cosmetic surfaces are essential.

*All Oztec vibrators meet or exceed ACI specification # 309*



Oztec's patented uniform, high efficiency action de  
vibration along entire length of vibrator head.

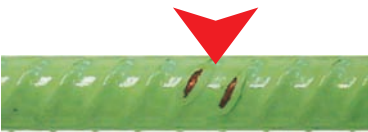
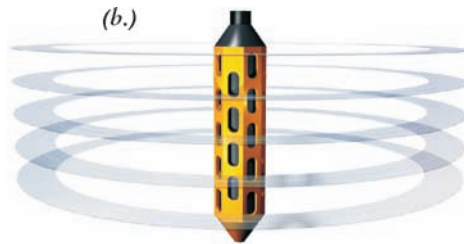
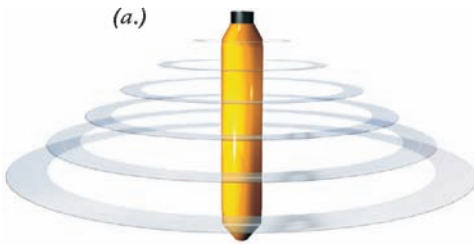


## RubberHead®

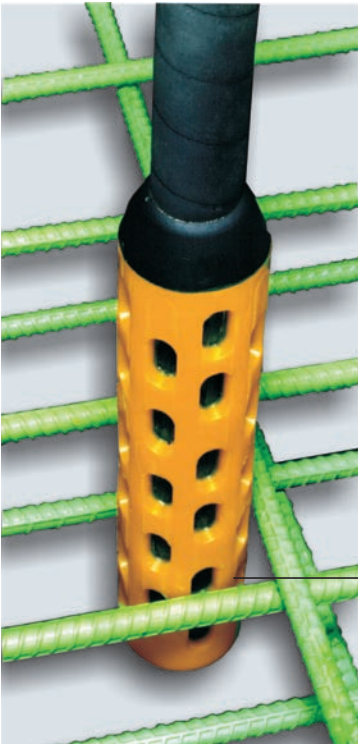
Why the Oztec's patented "RubberHead®" outperforms any other type of Vibrator.

(a.) When a smooth vibrator head (round, square or any other shape) is lowered into a relatively stiff 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 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.



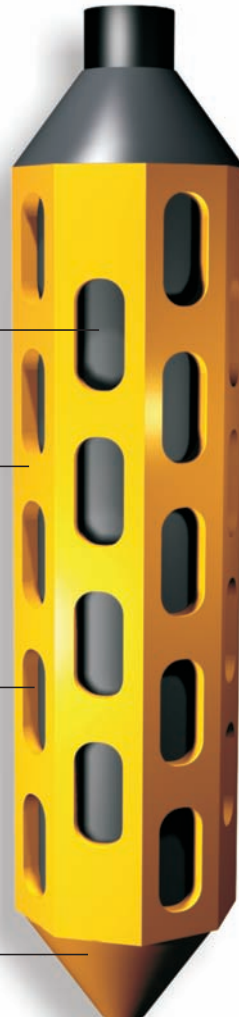
Inner steel construction

Urethane protective coating

Oztec's patented high efficiency vibration vector design

Oztec's High efficiency "RubberHead" providing maximum protection for epoxy coated rebar

Protective rubber tip



### Available Sizes: (dia. x length)

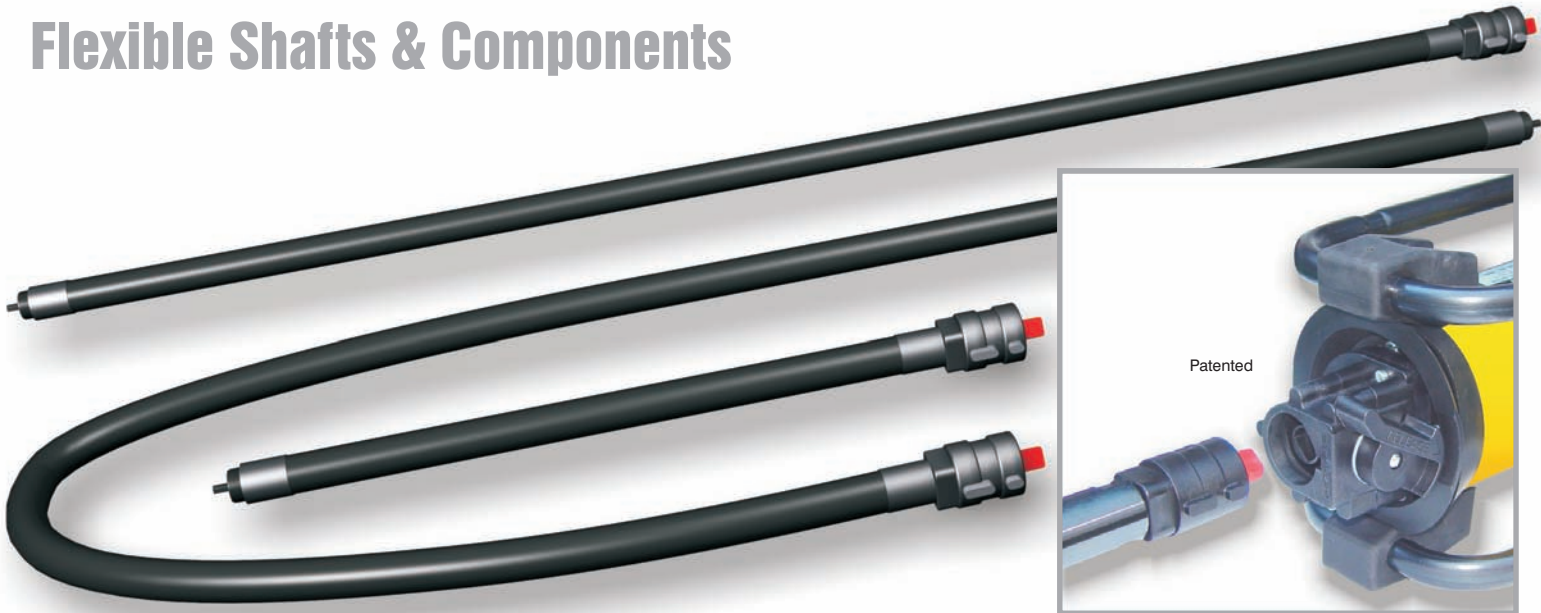
- 1 7/8"x14"
- 2 1/2"x14"
- 2 3/4"x14"
- 2 3/4"x6" (short, for slabs)

### Prove it to yourself!

Before you purchase a high cycle system with expensive generators or controllers, call 800-533-9055 or visit our web site to arrange a demonstration on your job site.



# Flexible Shafts & Components



## 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, 12, 14, 16, 18 and 21.

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

Custom lengths are available. For special situations, call Oztec for details at 1-800-533-9055.

Pencil Shafts for Pencil Head vibrators are available in 3, 6, 9, 11, 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® ULTRA TASK<sup>SM</sup> Vibrator Shaft Lubricant

Specially formulated shaft lubricant designed to increase the performance and life of any flexible shaft. Available in 1 lb. jar and 5 lb. jars.

## Quick Disconnect Feature

(Patent number: 5,641,238) Oztec's patented "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 any 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 1-800-533-9055 for specifications.

# Electric Power Units

## OZTEC Power Units

All Oztec Power Units (gas and electric) run power heads 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 (see page 10) are followed.

## 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 allows 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
1.2 OZ	9	1¼	1½"	None
1.8 OZ	15	1¾	1¾"	None
2.4 OZ	17	2¼	2"	2¾" short
3.2 OZ	19	3¼	2½"	2¾"

All Oztec vibrators meet or exceed ACI specification # 309



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

Oztec units meet all United States OSHA and Canadian safety standards.



## Job Site Proven

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.



Model 1.2 OZ



Model 1.8 OZ



Model 2.4 OZ



Model 3.2 OZ



# Gas Power Units

## 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).

### BP-50a

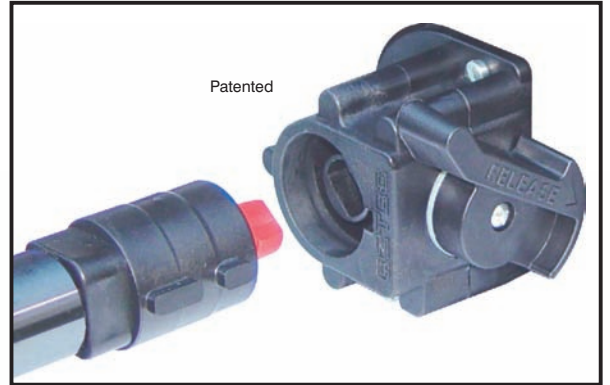
Runs heads up to 2 1/2" diameter. Honda 2 1/2 HP, 4 stroke, Weight 24lbs.



Enclosed, clog-proof kill switch



Two powerful Backpack Models. The BP-35 and the BP-50a are mounted on very comfortable welded frames allowing the operator incredible maneuverability around the job. Run time with a full tank is approximately 1 hour plus.



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

## New Rotary Throttle



The BP-50a is equipped with a totally enclosed rotary throttle allowing the operator to comfortably control the engine while preventing wet concrete from entering and clogging the throttle mechanism. A kill switch is also conveniently located on the same handle.

The patent pending rotary throttle has been specifically designed and engineered to eliminate the operators variable setting of the engine speed. This feature will ensure that the unit will consistently produce the proper vibrations per minute resulting in optimum concrete consolidation.



# Gas Power Units

## BP-35

Runs heads up to 1 1/2" diameter.  
Honda 1 3/4 HP, 4 stroke, Weight 19lbs.



## GV-5

Carry handle



All Oztec vibrators meet or exceed  
ACI specification # 309

## GV-5W Wheelbarrow



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

Our Carry Handle and Wheelbarrow models, with flexible shaft storage, are ideal for any jobsite. Utilizing Briggs & Stratton and Honda engines, these power units run all steel and rubber heads up to 2 3/4" diameter.

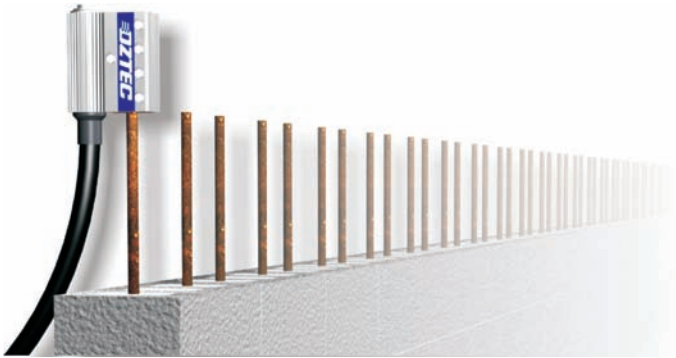
# Standard Rebar Shaker®

***The Most Efficient & Cost Effective Way To Vibrate All Types of Concrete In Blockwall Cells or Walls..***

Eliminate the time and mess of lowering a concrete vibrator into a concrete filled cell, which requires 4 people. Splashes caused by the withdrawal of a typical vibrator are slippery, dangerous, and time consuming to clean up.

The Rebar Shaker® requires only 2 people, one to pour the grout and the other to center the rebar with the Rebar Shaker® and vibrate while the cell is filling with grout.

When the cell is filled, the grout is completely consolidated and there is no need to top off... *It's Done!*



Can be used in either position

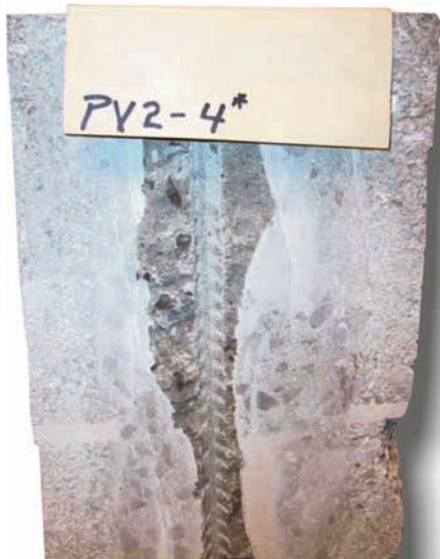


## **INDUSTRY PROVEN TECHNOLOGY**

See test report on our web site: [www.oztec.com](http://www.oztec.com)

"We recommend that the reinforcing bar shaker be fully recognized as an acceptable alternative to the conventional pencil vibrator."

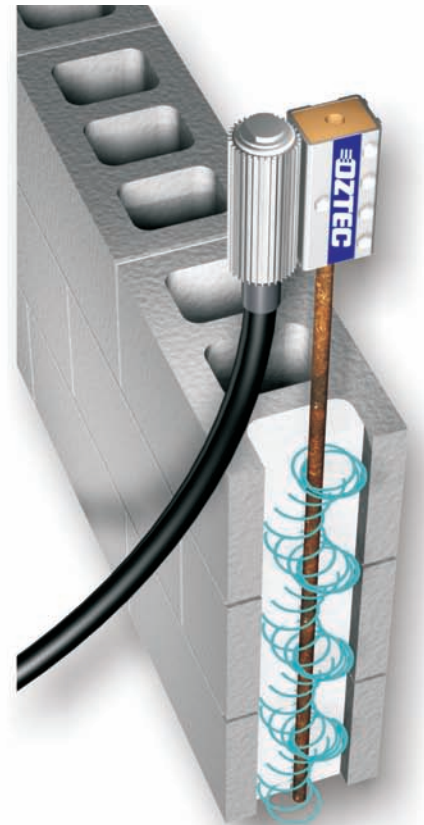
(University of Tennessee, Department of Civil and Environmental Engineering) For the full report, please see our web site: [www.oztec.com](http://www.oztec.com) or contact Oztec.



Cross section of blockwall cell illustrating improper vibration technique

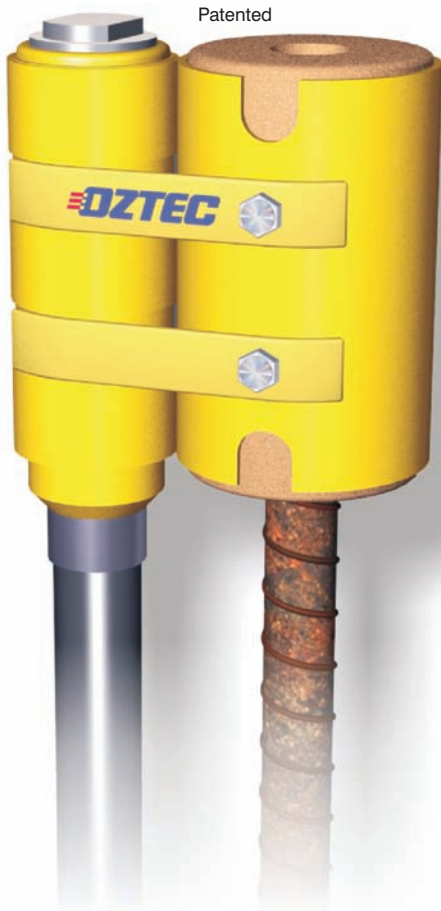


Cross section of blockwall cell using Oztec Rebar Shaker®





# Heavy Duty Rebar Shaker®



Patented

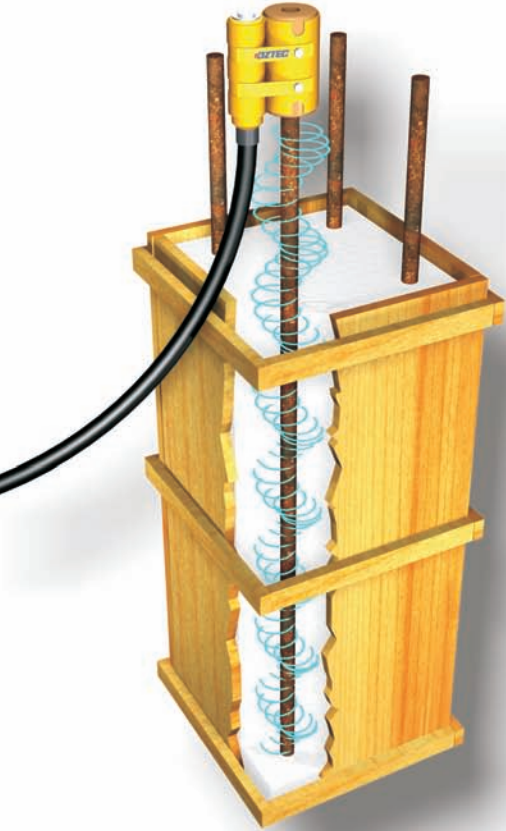
**Oztec Heavy Duty Rebar Shaker®**  
*...The Most Efficient & Cost Effective Way To Vibrate All Types of Concrete In Walls or Columns...*

The Heavy Duty Rebar Shaker® turns the rebar into a long vibrator. For rebar sizes #6 (3/4") to #14 (1 3/4")

- Consolidates concrete in congested rebar areas.
  - Consolidates very low slump concrete in congested areas.
  - Binds concrete to rebars and consolidates between rebar and forms.
  - Creates void free surfaces.
- Use together with standard vibrators for sections with wider spaced rebars.



Orbiting action rotates concrete (about 30 rpm) and packs concrete between the rebar and the form.



**Turn Your Rebar Into a Vibrator & Ensure Void Free Consolidation in Congested Rebar...**



*With high-cycle vibration in congested rebar*



*With Oztec Rebar Shaker® in congested rebar*


# Selection Chart

All Heads, Shafts and Power Units Are Interchangeable\*

1. Select Head Size 2. Select Shaft Length 3. Select Power Unit (Do Not Exceed Maximum Head Size)

### HEADS

**Steel**



Part No.

\*3/4" HP 075 OZ  
1" H 100 OZ  
1 1/4" H 125 OZ  
1 1/2" H 150 OZ  
1 3/4" H 175 OZ  
2" H 200 OZ  
2 1/2" H 250 OZ


**Short Heads**

Part No.

\*3/4 x 6" HSP 075 OZ  
1 1/4 x 6" HS 125 OZ  
1 3/4 x 6" HS 175 OZ


\* Pencil Head requires Pencil Shafts

**High Efficiency RubberHead®**




Part No.

1 7/8" HR 188 OZ  
2 1/2" HR 250 OZ  
2 3/4" HR 275 OZ  
2 3/4x6" HSR 275 OZ

 **Rubber noses**  
Available for all steel heads. Add "RT" to Steel Head Part No.

### SHAFTS



Part No.


2' FS 02 OZ  
5' FS 05 OZ  
7' FS 07 OZ  
10' FS 10 OZ  
12' FS 12 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  
11' FSP 11 OZ  
15' FSP 15 OZ  
20' FSP 20 OZ


### POWER UNITS

**Electric Motors**




Model	Amps	HP	Maximum Head Size	
			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 7/8" short 2 3/4" short
3.2 OZ	19	3 1/4	2 1/2"	2 3/4"

**Gas Engines**




**Back Packs**

BP - 35	-	1 3/4	1 1/2"	None
BP - 50a	-	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"
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**Wheelbarrow (Briggs & Stratton/Honda)**

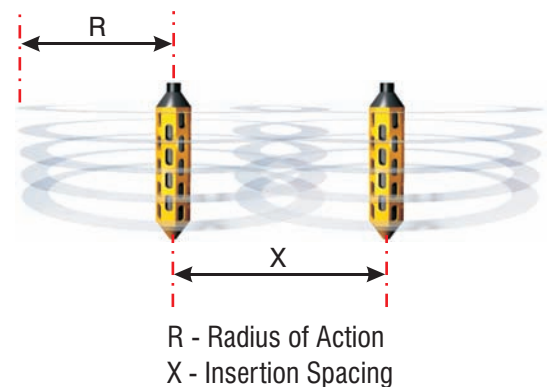
GV-5W	-	5/5.5	2 1/2"	2 3/4"
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All Oztec vibrators meet or exceed ACI specification #309

## 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.

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)
<b>Steel Heads</b>					
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
<b>Rubber Heads</b>					
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





## "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**:

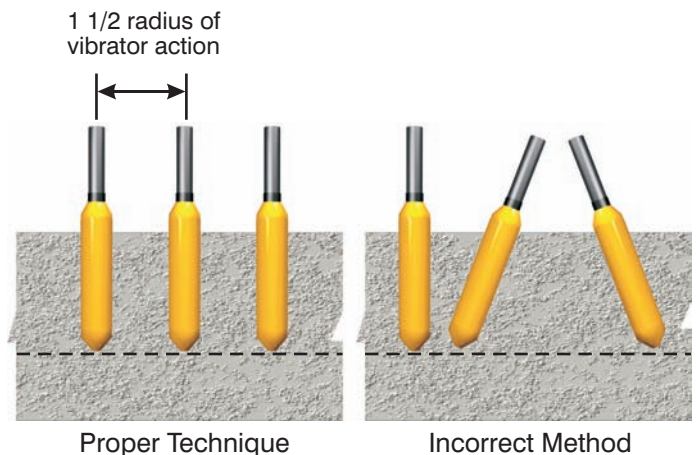
- Cause segregation in well designed concrete.
- Eliminate a significant amount of entrained air.
- Normally damage the lower layers, as long as the concrete in these lower layers becomes plastic under the vibrating action.

### 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 1/2 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, ensuring a good bond and preventing "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.

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.

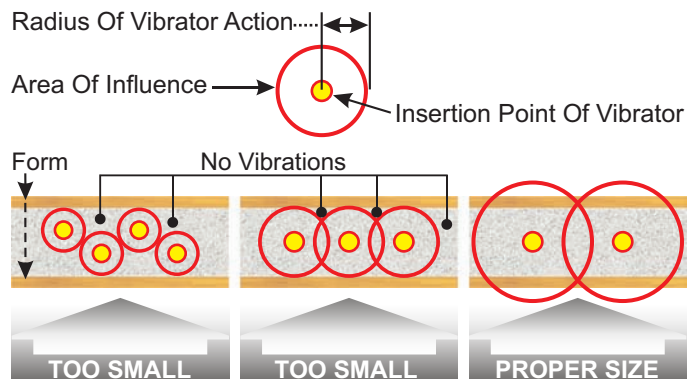


**IMPORTANT: Trapped air moves upward in the mix from 1 to 3 inches per second. (1 inch in near 0 slump; 3 inches in 4 to 5 inch slump).**

### 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



One page is not sufficient to describe the full scope of vibrating concrete. A fine source for more complete information are publications from ACI.

# Ceiling Grinders

## CG-12 Ceiling Grinder



Self aligning, grinding head makes full surface contact easy to operate because it needs no adjustment.



Welded frame is fully adjustable and configurable to any ceiling grinding requirement.



Shown with optional  
Dust Collection System (CG12E Only)



Electric Model CG12E with 2 HP Baldor motor with thermal overload protection.

- Grinds ceilings 7 feet to 12 feet high.
- Swivel adjustment allows grinding up to and along edge of the wall.
- Optional Dust Collection System to comply with new jobsite requirements regarding dust collection.
- Dust Collection System is also available as a Kit to allow existing Oztec Electric Ceiling Grinder owners to comply with new jobsite requirements regarding dust collection.



Gas Model CG12G with 3 HP Honda engine.



### **Limited Lifetime Warranty. Your satisfaction is guaranteed!**

Over 40 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. This excludes failure caused by normal wear and tear of the product. Other exclusions may apply. Exclusion from Warranty considerations includes, but not limited to, the following conditions.

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

All warranty claims must be shipped prepaid to OZTEC's factory with a copy of the OZTEC invoice, packing slip, or a copy of the dealer's invoice, along with the merchandise and the RGA number. An RGA number **MUST** be obtained directly from OZTEC **BEFORE** sending back the merchandise. To receive an RGA number please contact OZTEC toll free at 800-533-9055 or at (516) 883-8857. Please note that equipment will not be accepted without an RGA number.

Ship all claims prepaid to:

OZTEC Industries, Inc.  
Attn: Service Department  
65 Channel Drive  
Port Washington, NY 11050

OZTEC will not acknowledge any unauthorized repairs. OZTEC will not accept charges for parts or labor not performed at OZTEC's factory without previous written consent from OZTEC. Imitated but never equaled, OZTEC guarantees your satisfaction. Oztec...Simply The Best!



Oztec reserves the right to change specifications and discontinue products without notice.



O Z T E C I N D U S T R I E S , I N C .

65 Channel Drive • Port Washington, New York 11050

Tel: 516.883.8857 • 1.800.533.9055 • Fax: 516.883.7857 • Website: [www.oztec.com](http://www.oztec.com)