

# COMPACTORS:

Replace  
Every  
Four  
Years



**Ammann's AC 40 P4B has a 54-inch-wide pad-foot drum, delivering 19,110 pounds of compactive force. Powered by a 41.5-hp four-cylinder, water-cooled Kubota diesel, the unit features rear dual-drive motors with a flow divider to deliver maximum traction without an axle. The hydrostatic braking, drive and vibratory systems are powered by individual pumps, and a large center joint adds durability.**

**By Pam Gruebnau**  
Publisher/Editorial Director

The population of ride-on rollers and compactors in contractor's fleets has increased 20 percent since 1995, according to *Construction Equipment* magazine's 2003 *Universe Study*.

"More than 28,000 firms report they have one or more pieces of roller and/or compactor equipment," says the study, "[which is] 33 percent of the total universe of equipment-operating firms."

The study also estimates there were 72,000 ride-on rollers and compactors in use in the United States in 2003. In

addition, the study found only 55 percent of the compactors in use today were acquired new. (The *Universe Study* is available to AED dealer members at a special reduced rate and can be ordered from the AED website at [www.aednet.org](http://www.aednet.org).)

"Sales of new compactors constitute 30 percent to 40 percent of our sales," says Tom Ernst, sales manager of Road Machinery & Supplies in Savage, Minn. "Rental conversions equal 60 percent to 70 percent of sales."

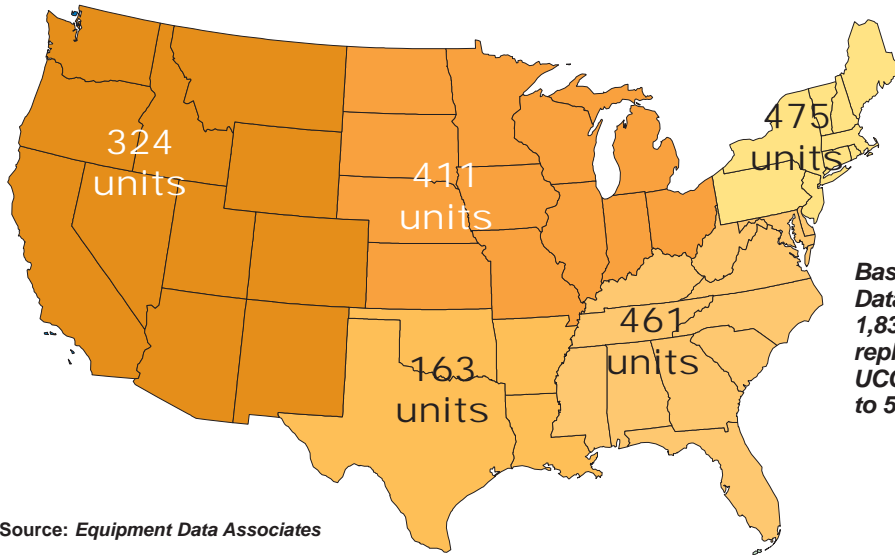
Jeff Steere, vice president of sales for Ellen Equipment Corp. in Aurora, Colo., says Ellen Equipment sells about 10 percent of its compactors new, while 90 per-

cent have either been through the dealership or the rental fleet before the sale.

In *Equipment World* magazine's 2004 *Contractor Forecast*, 10 percent of respondents said they planned to buy one or more compactors in 2004. Larger firms will be buying most; 20 percent of firms doing more than \$5 million annually said they'd purchase a compactor or roller, compared to 7.8 percent of firms doing less than \$5 million.

Analyzed by business category, 16.8 percent of contractors in "Highway &

## 2004 Forecast for Replacement Vibratory Compactor Sales



Source: Equipment Data Associates

**Based on UCC data, Equipment Data Associates (EDA) predicts 1,834 vibratory compactors will be replaced in 2004. EDA estimates UCC filings account for 45 percent to 55 percent of total sales.**

Heavy” work and 12.7 percent of firms engaged in “Both Highway & Heavy and General Building Construction” say they will purchase compactors this year.

Regionally, the survey found purchase plans for roller/compactors are highest in the Northeast (13.9 percent), South Atlantic (13.5 percent) and Pacific (12.5 percent) regions.

### Compactor replacement cycles

Equipment Data Associates (EDA) analyzed their historical UCC database of vibratory compactor sale and lease transactions and found the replacement life cycle is 4 years. By analyzing the

equipment acquisition histories of hundreds of contractors, EDA is able to predict (and later verify) when a company is likely to purchase a replacement compactor.

Based on that four-year life cycle, EDA predicts 1,834 vibratory compactors will be purchased in 2004 as replacements. Assuming UCC filings represent 45 percent of compactors sold and leased, total vibratory compactor replacement sales and leases in 2004 should be 4,075 units.

While this quantity only represents replacements and does not include fleet expansions or contractors buying for the

first time, it is based on historical data and likely establishes the minimum vibratory compactor sales level for the year.

EDA expects replacement vibratory compactor sales to be strongest in the Northeast and Southeast regions in 2004.

### Where buyers buy compactors

In 2003, AED surveyed buyers of new ride-on compactors to determine where they had purchased them and found 73.5 percent had purchased them from independent authorized dealers. In contrast, 87.8 percent of skid-steer loader buyers and 97.5 percent of backhoe-loader buyers had purchased those



**Bomag's new BW161AD-4 tandem vibratory roller provides improved visibility and performance compared with the model it replaces. Slanted drum support legs provide a clear view of the drum edges, eliminating the need for operators to lean out of the cockpit during operation, while the design of the front and rear frames allows an unrestricted view of the drums and sprinkler system. All drum surfaces and sprinkler nozzles are visible across the entire 66-inch rolling width, enabling operators to quickly spot potential asphalt pick-up. Powered by a 131-horsepower, four-cylinder Deutz water-cooled diesel, the compactor delivers 36,000 pounds of centrifugal force in low (2,700 vpm) and 27,225 pounds in high (3,600 vpm) – an increase of 23 percent and 60 percent, respectively.**



According to Bobcat, its BCA asphalt compactors are often overlooked because Bobcat is not known for compaction. But, says the company, these products are very productive and compete effectively. The compactors give operators a clear view of the drum edges, as well as the front and rear of the machine. BCA compactors feature the largest water tank capacity – 79 gallons – in the industry. Power is supplied by a Kubota diesel engine to deliver 4,000 vpm, and the compactors feature a hydrostatic drive and a dual-drum drive.

**36.2 percent of double-drum vibratory compactors sold at auction in 2003 were in the 1.8 to 2.9 metric ton class**

products from authorized dealers.

Ride-on compactors are more likely to be purchased new from authorized dealers than walk-behind rollers. Only 65.2 percent of contractors who purchased walk-behind rollers in 2003 pur-

**Stone Construction Equipment's WolfPac 3100 asphalt roller now features a 20-hp water-cooled diesel engine. The 35-inch-wide roller is ideal for finish layers on driveways, parking lots and other paved surfaces. Other features include double-drum drive, internal vibration and centerpoint articulation. WolfPac rollers are backed by same-day parts response.**



chased them from authorized dealers; 21.7 percent bought walk-behind rollers at rental companies.

According to *EquipmentWatch* auction data on the sale of double-drum compactors, the most popular vibratory machine in 2003 was in the 1.8 to 2.9 metric ton class – 36.2 percent of double-drum vibratory compactors sold at auction were in this size class. Ingersoll-Rand was the most popular with 38 percent of sales in that size class.

The second most popular compactor at auction was the 8.0 to 11.2 metric ton machine at 28.3 percent of total sales. Vibratory compactors at 8.0 to 11.2 metric tons produced an average selling price in 2003 of \$130,901, up



**The model 255 and 265 tandem rollers from Vibromax are ideal for small and medium sized paving jobs. With drum widths of 39 inches and 47 inches, respectively, the rollers feature a three-cylinder, water-cooled, Kubota diesel, sealed articulation joint and splash lubricated bearings that eliminate the need for greasing. Each drum is equipped with dual, spring-applied, retractable scrapers for reduced wear. The operator's platform provides excellent visibility to the drum edges and work area. A single control lever allows fingertip operation of forward/reverse and vibration on/off.**

**Where Buyers Buy Compactors**

	Ride-on roller	Walk-behind roller	Rammer/tamper
Independent Dealers	73.5%	65.2%	68.6%
Rental	8.2%	21.7%	20.0%
Auction	14.3%	2.3%	5.7%
Broker	8.2%		
Another Contractor	2.0%	2.3%	2.9%
Website			
Direct from Manufacturer			2.9%

Source: AED's Construction Equipment Marketplace Study

**AED surveyed contractors who had purchased compaction equipment and asked where they had bought it; 73.5 percent had purchased ride-on compactors from independent authorized dealers.**

*The TV1200, Terex's most popular model, features single drum vibration on the rear drum, to allow the operator to see the exact location of the roller in relation to the material being compacted. The entire front hood assembly tilts up to provide good access to the engine and hydraulic pumps. These components are visible while standing on the ground without climbing up on the machine.*



**This year's introductions included the first rubber-tired vibratory roller**

just 1.93 percent from 2002 and up 3.28 percent since 2000.

Compactors in the 11.3-metric-ton-plus category saw a sharp price increase in 2003. The average price for a machine in this size class last year was \$167,941, up 11.9 percent since 2002 and up 13.5 percent since 2000.

**Appealing to buyers**

While most compactor redesigns seem

to focus on improving visibility and making servicing easier, this year's introductions also included the first rubber-tired vibratory roller and a smaller asphalt roller available with a diesel engine.

According to Sakai, their new GW750 is the only vibratory rubber-tired roller in the world.

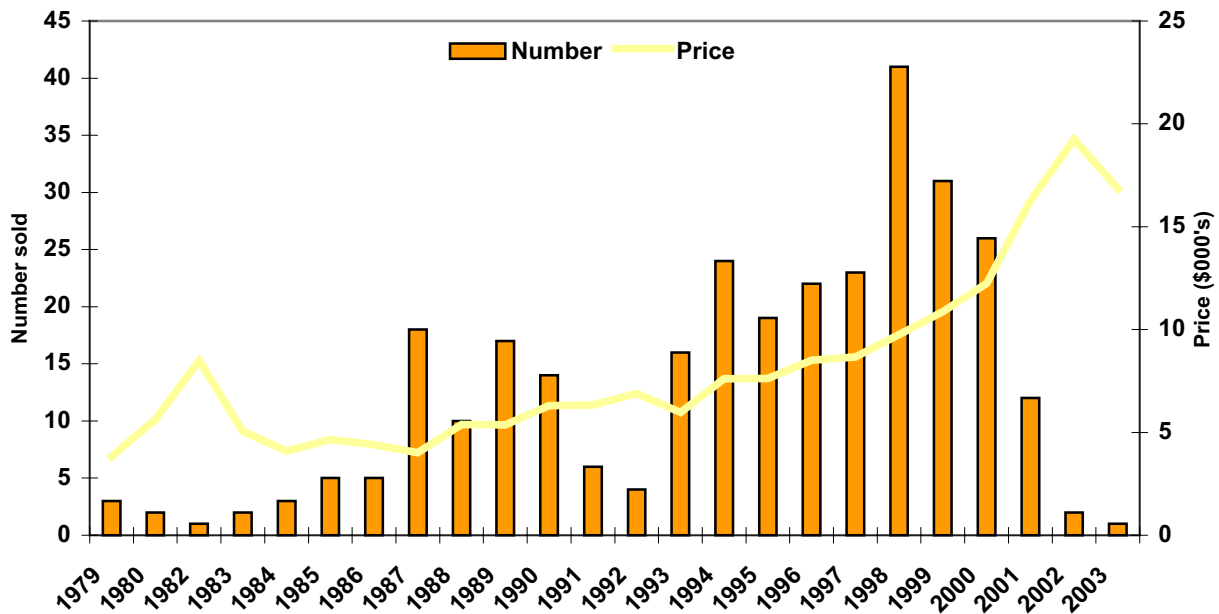
The GW750 combines the features of a vibratory roller with those of a static roller and pneumatic-tired roller. The machine was designed to aid the compaction effort on perpetual pavement jobs like Superpave. It also overcomes the

bridging problems associated with jobs where HMA is laid over a profiled surface, providing optimum interlock of the mix, according to the company.

For contractors who prefer to operate diesel equipment, Stone Construction Equipment has introduced the WolfPac 3100 with a diesel engine. According to Stone, the new WolfPac is the only vibratory asphalt roller available with a diesel engine in its size class.

To improve visibility of the drum,

**Double-Drum Vibratory Compactors Sold at Auction in 2003  
1.8-2.9 Metric Ton Size Class**



Source: Equipment Watch, a PRIMEDIA Business Directories & Books Group

*The most popular size vibratory compactor at auction was the 1.8 - 2.9 metric ton machine. Note the constant rate of value decrease over a very long period as opposed to the sharp drop at 5 to 7 years, which is present with most other types of construction equipment.*

*The Reynolds Compactor delivers higher amplitude, higher static linear load, larger weight concentration in front module area and lower frequencies than the average competitor models in the market, according to the company. An optional padfoot shell is available.*



**In an AED survey, 27.7 percent of buyers of ride-on compactors planned to purchase fewer in 2003; 23.8 percent said they'd buy more**

the TV1200 compactor from Terex Compact Equipment features single-drum vibration on the rear drum.

"Since the operator sits over the rear drum," says Lowell Stout of Terex, "he can easily see the exact location of the roller in relationship to the material

being compacted."

Serviceability was also a focus of the TV1200 design, according to Stout. The entire front hood assembly tilts up to provide good access to the engine and hydraulic pumps.

Bomag's BW161AD-4 has an ergonomically designed operator's platform that allows the operator to work instinctively with the roller. The seat can be moved and turned anywhere within the cockpit, making both steering wheels accessible in any position.

To improve operator comfort on the

Intensus compactor, an anti-vibration seat, air conditioning, tinted glass windows, radio and CD player are all standard features.

### **Selling compactors**

In AED's *Construction Equipment Marketplace Report*, 27.7 percent of ride-on compactor buyers predicted they'd purchase fewer machines in 2003, while only 23.8 percent said they'd buy more. But, say dealers, things are picking up for 2004.

"Sales of compactors are not up this



*Sakai America has a new vibratory rubber-tired roller. The GW750 is perfect for tender mix Superpave applications, stiff HMA mixes and SMA. It develops a new gyratory action that combines the field-proven kneading action of a pneumatic-tired roller with the high forces generated by a vibratory. It develops an equivalent of up to 55,000 pounds of compaction effort in a fast-moving 20,500-pound package and is especially useful for achieving thorough compaction from top to bottom of a typical HMA lift. It takes the top-down compaction of a static roller, the bottom-up compaction of a vibratory and the kneading action of a rubber-tired roller for a totally integrated compaction effort and consistent density from top to bottom of the lift.*

*Dynapac's new CC622 HF is a 12.5-ton machine with a drum width of 84 inches and dual frequencies and dual amplitude measurements of 3060/3780 vpm and 0.024/0.008 inches. According to the company, the high frequency combination works well to compact thin layers, when adjusted to low frequency and high amplitude, it can be used for base and binder courses, as well as thin wearing courses. Drum diameter is 55 inches and operating weight is 27,783 pounds. The operator's station can be moved sideways and rotated 180-degrees. The angled front frame permits an excellent view of the edges of the roller when working adjacent to curbs and gutters.*





*The 23,369-pound CV100D vibratory compactor from Intensus is powered by a 152-hp Cummins 6BT5.9C and features Sauer pumps and motors, Dana axles, and Parker hoses and adapters. According to the company, the compactor provides an excellent environment for the operator with excellent visibility, an anti-vibration seat, air conditioning, tinted glass windows, radio and CD player.*

***“If you’re not renting compaction equipment, you’re missing sales opportunities.”***

year compared to last,” says Steere, “but the activity level has increased. We’re putting more quotes out there this year than last year at this time. More people are getting quotes for jobs that are starting this spring.”

According to Steere, smaller asphalt rollers and mid-sized dirt rollers are Ellen Equipment’s two biggest sellers. He has about 30 compactors sitting in

the rental fleet.

Asked what dealers can do to sell more compactors, manufacturers suggest a better understanding of the applications for specific products.

The key to selling compactors is knowing the product and the application, says Sakai. This will enable the dealer to communicate with contractors, inspectors and local jurisdictions and apply the equipment properly on a range of applications.

Thomas Meyer, manager of marketing and sales support for Vibromax, recommends dealers get their compactors

rented.

“Most compaction equipment is sold after it’s rented,” says Meyer. “If you’re not renting compaction equipment, you’re missing sales opportunities.”

Tom Ernst, sales manager of Road Machinery & Supplies in Savage, Minn., says the company sells two-thirds of its compactors after renting.

“New compactors constitute 30 percent to 40 percent of all sales,” says Ernst. “Rental conversions account for the other 60 to 70 percent of sales. At any given time, RMS carries 60 to 80 units in the rental fleet.” □

# 3 Great Reasons to Sell Felco

## More Pipe in the Ground

Felco’s patented compactor buckets and innovative bedding conveyor helps keep contractor’s projects on schedule.

## Keeps Traffic Moving

Our bedding conveyor on an excavator allows the operator to bed and place pipe when confined to one lane of traffic.

## Safety and Productivity

Compaction buckets and bedding conveyors increase safety by keeping an extra man out of the trench and a loader away from the edge.

**Safety and productivity—that’s Felco.**  
**Felco 1-800-221-5427 www.felco-ind.com**

Bedding conveyor

Vibratory plate compaction bucket

Wheeled compaction bucket

## For Other Compaction Chores...

Sometimes the job calls for smaller machines or attachments. Are contractors buying them from you?

In a recent AED survey, 68.6 percent of contractors who had purchased rammers in the previous year bought them from an independent authorized dealer. Twenty percent of those buyers purchased rammers from rental companies.

Buyers of compactor attachments were slightly more likely to purchase them from authorized dealers (70 percent), but 20.8 percent bought compactor attachments from rental companies.



*Multiquip's V30-4 single-drum vibratory roller is designed for asphalt patching jobs that are too small to require tandem rollers. The V30-4 delivers 3,730 pounds of centrifugal force, 4,400 vpm and travel speeds to 2.5 mph. The fully enclosed hydrostatic drive system provides infinitely variable speed control, and smooth acceleration and braking. The roller features a 30-inch-wide steel drum, two scraper blades to prevent the buildup of material between the drum and the frame, stabilizing rollers, and a multi-position handle for operator comfort. The edge roll allows the operator to work flush to the curb, and optional customized transport hooks makes it easy to load the unit on the tailgate of a dump truck.*



*Felco Vibratory and Roller Compactor Buckets allow the excavator operator to backfill, smooth, control the depth of lifts and compact, eliminating the need for an additional man and machine for backfilling. By following closely behind a trench box, the compacting excavator can keep the trench closed without requiring personnel compacting in the trench. Felco offers a range of sizes to fit everything from backhoe-loaders to large excavators.*



*Allied's recently introduced Model 500 Ho-Pac hydraulic vibratory compactor/driver delivers 30 percent more impact energy, a longer base plate, a four-function valve, three motor options and oil splash bearing lubrication. The four-function valve controls flow, pressure, regeneration and oil flow direction and the longer base plate provides a greater compaction area.*

*The unique design of Breaker Technology's TC Series hydraulic compactors delivers high impulse energy for superior compaction. Minimal oil flow leaves a sufficient amount of oil flow for boom movement throughout the compacting process. A variety of bracket options and an adjustable boss mounting system allows adjustment of the pin spacing to accommodate quick coupler installations on most backhoe-loaders.*



*Wacker's new BS-50-2i, BS 60-2i and BS 70-2i rammers feature Wacker's EPA-certified WM 80 two-cycle engines. A patent-pending vented carburetor reduces the number of pulls needed to start the engine. Uptime and durability have been increased with a unique three-stage air filtration system that offers 33 percent better filtration. And a new air box design includes a filter minder that tells the operator when it is time to change the air filter. Only Wacker's oil-injected rammers offer a low oil shutdown switch.*