

### Where To Buy Wood Bearings

"Wood bearings have been used since wheels were invented and they're still used today in equipment ranging from combines to water turbines and even nuclear submarines," says Starkey Steuernagle, general manager of Woodex Bearing Company in Maine. "Even though there are all kinds of metal, composite and plastic bearings, we still supply standard-size roller, hanger, spherical and custom wood bearings." Steuernagle says Woodex bearings provide the least abrasive surface for metal shafts and they don't usually need oiling. They're made from rock maple, which woodworkers know as hard maple and maple syrup lovers know as sugar maple. Rock maple has the perfect composition for bearings because its cell structure is like tiny "straws" that store oil for lubrication.

Before Woodex bearings are cut, the raw wood is infused with lubricant using a heating and cooling process. Its bearings are made using antique lathes more than 125 years old, modern CNC equipment, and several hand tools. Hand-drawn plans and 3D software configure the company's standard and custom

designs.

Steuernagle says, "After wood bearings are installed and put to work, they warm up from friction, which allows capillary action to move the lubricant to the shaft. When the machine is turned off and the bearing isn't in use, the oil cools and flows back into the wood, ready to lubricate the next time."

Woodex began producing bearings for farm equipment many years ago because of an unusual request. One morning employees arrived at work to find a rusted old disc harrow parked in front of their shop. A note attached asked the company to fit the machine with new bearings, which they did. Later the company began making replacement bearings for a Ferguson tractor club. Today they make bearings for antique disc harrows, cultivators and cultipackers. Steuernagle says modern farm equipment, including the straw walkers on combines, still use wood bearings, although many of those are mass produced in China.

"Woodex has a rich history and a long-standing tradition of customer satisfaction,"



**Woodex Bearing Co. in Maine still produces standard-size roller, hanger, spherical and custom wood bearings. Some modern farm equipment still uses wood bearings.**

says Steuernagle. The company began in 1905 as a trademark of the Neveroil Bearing Company, which produced bearings for New England's textile industry. As those businesses moved south, or overseas, Woodex moved north to Maine, where today the employee-owned company thrives. "Our

30 Woodex employees create affordable and precise wooden bearings," Steuernagle says. Contact: FARM SHOW Followup, Woodex Bearing Company, 216 Bay Point Road, Georgetown, Maine 04548 (ph 207 371-2210; [www.woodexbearing.com](http://www.woodexbearing.com)).

### They Build Products For Safer Truck Repair

"I built the Gate-Lok safety bar after a customer told me one of his employees was killed when the endgate on a gravel truck slammed shut on him," says Mike Krall of Work Safe USA, Inc. "It's a simple idea that I'm amazed wasn't out there before."

Krall's patent-pending device secures a truck endgate in the open position for unloading or during maintenance. The standard size is a 40-in. metal bar made for full-size dump trucks and trailers. The "shorty" is 38 in. long and works for one-ton and ton-and-a-half contractor dumps. Both are priced at \$160.

Krall started his business in 2007 with a safety lock to hold up truck boxes. At the time he was a city maintenance supervisor who observed an employee using a 4 by 6-in. wood beam rather than a metal prop rod to hold up a truck box. The beam slipped on the oily truck frame and instantly Krall knew there had to be a better way to support the box.

He searched the internet and found a

dump bed lock invented by a truck driver in Wisconsin. "I wanted to buy a set, but he said he couldn't get them built so I made a deal to produce them, even though I didn't know anything about doing that. Several months later I found a manufacturer and the rest is history. In 10 years we're up to 300 dealers who've sold 10,000 Dump-Loks in the U.S., South America, New Zealand and Europe."

Krall's success story doesn't stop there. While touring a fire department he noticed a mechanic working on a truck engine with a flimsy rod holding up the cab. "I chewed the guy out for not being more safety conscious, and he told me that's the way it's always done," says Krall. The next day we started working on our Cab-Lok, and that's been a great product too."

The company also produces the No-Jack, a device that mounts on a self-loading wheel lift so wreckers can safely lift a disabled vehicle without a jack.

"All our stuff is common sense safety equipment that protects workers and helps



**Dump bed locks, left, hold truck bed securely in the "up" position. At right, Gate-Lok safety bar secures a truck endgate in the open position.**

employers meet OSHA guidelines," says Krall. "This year we're starting a re-certification program for older model Dump-Loks. We'll check the welds, bolts, chains and holding plates, then repair and re-certify the product at no cost. If our products save one

injury or one life, then I've done my job," says Krall.

Contact: FARM SHOW Followup, Mike Krall, Blue Ribbon Safety, P.O. Box 138, New Berlin, Ill. 62670 (ph 217 891-1674; [www.dump-lok.com](http://www.dump-lok.com)).

### Low-Cost Way To Keep Multiple Batteries Charged

Norm Bennett got tired of constantly having to deal with dead batteries so he designed a system that uses a single trickle charger to maintain up to ten 12-volt batteries at the same time.

The system consists of a Stanley FatMax 8-amp battery trickle charger; two 10-ft. lengths of 12-ga. wire – one red and one black; and 10 positive and 10 negative 3-in. clamps.

He lines the batteries up in a row with all the polarities on the same side. The largest battery is first in line and the smallest battery is last. The batteries are spaced about 1 ft. apart and sit on a 2 by 8 board. He soldered the negative clamps about 1 ft. apart on the negative wire, and the positive clamps 1 ft. apart on the positive wire. One clamp attaches to each battery.

"The trickle charger maintains each battery's charge all the time instead of letting it go dead, which is hard on a battery and reduces its efficiency and its life span because sulphation builds up inside," says Bennett.

"I came up with the idea because I had been storing a lot of batteries from various vehicles

during the winter, and I needed 10 different trickle chargers just to keep them charged. Now all I need is one 8-amp charger."

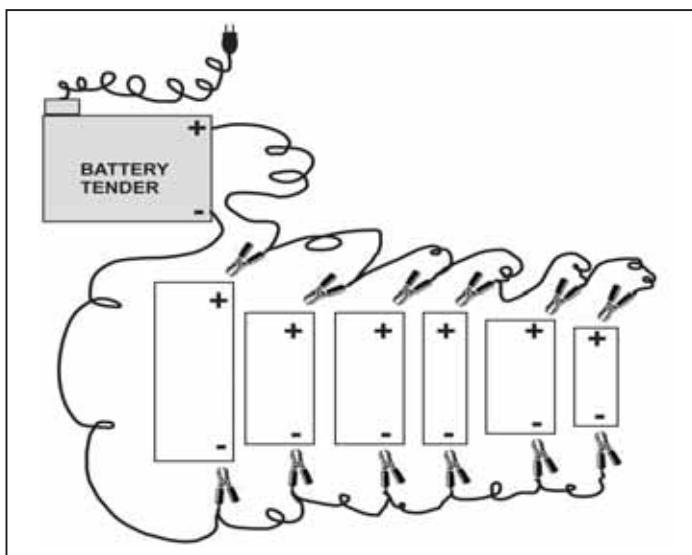
"I've used this idea for the last 3 years on batteries off everything from pickups to boats, 4-wheelers, Jet Skis, riding mowers, tractors, and so forth, and have never failed to keep a battery charged."

Bennett says the trickle charger senses each battery's voltage and reduces the amperage as needed according to the battery's voltage and charging capacity.

He paid \$28 for the trickle charger and about 50 cents apiece for the clamps.

Bennett also uses the system to charge batteries on accessories that are designed to plug into a vehicle's cigarette lighter. "For example, I use a 12-volt portable DC cooler to keep drinks cool when I travel. The day before I go on a trip I put the cooler in line with the other batteries and charge it up. The next day it's ready to go."

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**Norm Bennett came up with this low-cost system that uses a single trickle charger to maintain up to ten 12-volt batteries at a time.**