Money-Saving Repairs & Maintenance Shortcuts

Shop Built Overhead Bridge Crane

Frank Surber built a new shop in 2023 and soon found that two jib cranes, two chain hoists and an unwieldy forklift so large that he couldn't turn it around inside were causing more problems than they were doing good. Surber built a heavy-duty bridge crane suspended from two ceiling trusses to solve his hoisting needs.

Surber says his crane design is similar to an old roller coaster where the wheels are profiled to fit the outside of pipe that serves as a track. "I built my trusses strong enough, so I didn't need extra rails or beams for the crane to hang from or ride on," Surber says. "My truss calculations show they can support a 10,000 lb. load at the center of my 68-ft. span. My 14-ft. bridge will hold 6,000 lbs. at the center of the span, but I'm only planning on installing a 1-ton hoist.

He used 2 7/8-in. oilfield pipe to produce rails that the crane rides on. To attach the pipe to the roof trusses, Surber welded 1/2-in. by 3-in. flat bars spaced every 2 ft. across the building's span.

Surber made the rollers out of 3 1/2-in. round bar, first boring a 2-in. hole through the center, then welding flanges on each end. He machined the locations for 6306 bearings with a 30 bore by 72 OD and 19 mm wide. He used two old cross rails from a Globe 8,000-lb. four-post lift for end trucks and bracing the bridge.

Surber says he built the crane without any



Surber built an overhead bridge crane for his shop that rides on rails made of oilfield nine.



special plans, and it was just what he needed. Contact: FARM SHOW Followup, Frank Surber, Peacock, Texas.

Offset Socket Extension Gets In Tight Places

The Anex offset socket extension lets you use your power ratchet/driver in places it wouldn't otherwise fit. It's just over 9 in. long, less than 2 in. wide and only 3/8 in. thick, so it gets into tight spaces. The gear drive power transfer is also handy for use with pass-through sockets on threaded rod or long bolts.

The offset socket extension is made in Japan and can be found on Amazon. Prices vary from \$95 to \$150, depending on included items. It's also available on eBay with a slightly different combination of adapters and sockets. Prices vary. The carbon steel tool is powder-coated black with silver adapters for sockets.

While the extension tool weighs less than 3/4 lb., one reviewer pointed out that it requires two hands to operate, one on the wrench and one on the driver. See their video for details on a workaround. They used an older driver with a bracket to attach the tool to the driver, allowing them to use it with one hand

An Amazon reviewer noted that the tool was a great alternative to using a hand ratchet



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wrench in a space that allows only one or

Contact: FARM SHOW Followup, Anex Offset Socket Extension (www.amazon.com or www.eBay.com).

Air Filter Cleaner Saves Money And Time

As a farmer, Shawn Peterson was frustrated with how long it took him to clean farm equipment air filters every day before heading to the field to harvest corn and soybeans. So, 14 years ago, he built his own cleaner and started manufacturing and selling Air Filter Cleaner Tool Kits from his South Dakota farm business, Pete Industries LLC.

"This is one of the first that rotates and regulates air pressure. Others are attachments for air compressor wands which risk filter damage," says McKenzy Peterson, marketing executive for the family business. "Our tool is precision machined to prevent high-pressure damage. It won't harm the filter."

The rotating nozzle has three ports with a quick-connect mechanism to hold interchangeable arms. The arms are cut to size, keeping them 1 to 1 1/2 in. away from the inside of the radial sealed air filter. Six solid tapered disks make up the lid to seal the top of various filter sizes ranging from 4 to 11-in. ID. When the tool is attached to an air compressor and the ball valve is open, raise and lower the 25-in. galvanized shaft inside the filter while the nozzle spins, blowing air from the arms and removing dust and debris from the inside out.

It only takes about a minute per filter compared to the 10 to 20 min. her dad used to take cleaning filters, Peterson says. The cleaner is built with durable materials that won't break. The rotating nozzle is composed of stainless steel and Delrin®, some of the toughest materials known to mankind.

"It's an investment that solves a problem and pays for itself, as its price of \$289 is comparable to filter costs," she says. With the Air Filter Cleaner, filters can be safely reused longer.

Plus, clean filters reduce fuel consumption by as much as 5 gal./hour, according to published research studies. That adds up significantly when considering all the equipment used during harvest and the price of diesel.

The standard-sized Air Filter Cleaner tool is perfect for heavy equipment filters

The rotating nozzle has three ports and a quick-connect mechanism to hold interchangeable arms. The arms are cut to size and kept 1 to 1 1/2 in. away from the inside of the radial sealed air filter.

in many industries, including agriculture, construction, mining, forestry and more. The Petersons also make and sell a larger version for \$325, which is mainly used for manufacturing filters up to 14-in. ID in large dust collection systems and for powder coaters. The XL Air Filter Cleaner tool offers an optional 40-in. shaft in addition to the 25-in. shaft. Custom shafts of any size can be manufactured upon request.

"We offer a lifetime warranty on the rotating end," Peterson says. "The Air Filter Cleaner is a strong tool to last farmers their whole lives."

It can be ordered on the business website, which includes videos of the cleaner in action.

Contact: FARM SHOW Followup, Air Filter Cleaner, Pete Industries LLC, 115 Twin Lakes Rd., Woonsocket, S.D. 57385 (ph 605-796-4288; AirFilterCleanerSD@gmail.com; www.airfiltercleanersd.com).



Paint Sprayer Powered By Cordless Drill

Graco has released the TrueCoat 360 Cordless Connect Drill Sprayer, a paint sprayer that pairs with a cordless drill for easy, mess-free painting.

The entire product line of paint sprayers lets you achieve professional quality results at home without the inconvenience of rollers and brushes. Graco claims it's possible to finish painting projects up to 15 times faster with its airless sprayer without the risk of drips or added cleanup hassle. It's well-suited for tackling doors, trim, furniture, interior walls, ceilings, decks and fences and lets you achieve a professional-level finish with a single coat—no paint thinning necessary.

The TrueCoat 360 is compatible with most major brands of drills, drivers and impact drivers. It's built with a stainless-steel piston pump for a full range of pressure for unthinned paint or stain. Thanks to VacuValve Technology, it's possible to spray in any direction without losing primer, even upside down. The sprayer comes with a reversible spray tip for maximum efficiency in case of a

clog. The included FlexLiner Paint bag offers fast cleanup and can be recycled or reused.

Customer reviews indicate many users love the TrueCoat 360. It's praised for its consistent spraying capabilities and convenience of use without a cord. Some shared that cleanup is straightforward but tedious. In a few cases, customers had clogging problems that rendered the sprayer useless after a few uses.

Every purchase comes with one paint tip and stain tip, an inlet filter, two 32-oz FlexLiner bags, an easy-fill funnel and strainer, seal lube and a quick start guide. It retails for \$189 and can be found at Lowes and Home Depot. Five corded models range from \$189 for a DIY single-speed sprayer to \$539 for a corded PRO line model. There's also a \$919 PRO cordless variation that runs off a DeWalt battery.

Contact: FARM SHOW Followup, Graco (ph 800-690-2894; www.graco.com/us/en.html)

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