

Specialty Shop Can Build Or Restore Any Radiator

Heavy-duty tables and workbenches have drawers that can handle up to 450-lbs. and are U.S. made.



Custom-Built Workbenches Built To Last A Lifetime

Cody Freeze got into the workbench business almost by accident.

"The business started in 2012 when we needed a welding table for our own use," Freeze says. "We built two heavy-duty welding tables and sold one of them. Today we've got 65 different models of heavy-duty workbenches and welding tables."

In addition, his company makes cabinets plus accessories like work stools, bar stools and metal pegboards.

Freeze says their benches have a unique patented pivot hinge system with grease fittings, so drawers open easily, even with gloves or greasy fingers. Each drawer will support up to 450 lbs. and Freeze says they will never wear out. They open with just a slight tug and a simple magnet keeps the doors closed. Welding tables do not have drawers. The legs, drawers and steel pegboards are powder-coated for durability and available in a variety of stock colors.

Since the benches are all metal, even a modest version can weigh more than 1,000 lbs. Freeze says the benches and tables were originally built for farmers, but they now have customers worldwide. "We go to 30 or 40 trade shows a year and are always finding new markets for our products."

Table customers can usually find what

they want with stock items the company builds. But workbench customers often want something just a little bit different. So, the company offers custom builds.

Orders can be configured on the company's website and more complex designs are handled with a phone call to the company. The design team provides an estimate and then uses 3D software to complete the layout. Production takes about 8 to 10 weeks plus shipping.

Freeze and his 12 employees take tremendous pride in building virtually indestructible and functional products. They're especially proud of the benches they've made for the U.S. Navy. Says Freeze, "The Navy wanted workbenches that would last the life of a ship and could take any punishment a crew could hand out. Our benches passed their strict tests, so U.S. Navy ships are now sailing the world with our workbenches." It's quite a success story for a guy who just wanted to make a welding table.

Prices range from around \$4,500 for a smaller workbench up to \$20,000 or more for a big corner unit.

Contact: FARM SHOW Followup, Cody Freeze, Badass Workbench, 3210 Antelope Ave, Suite A, Kearney, Neb. (ph 866-547-1123; www.badass-workbench.com).

Need a radiator fixed, restored or custom-built? Empire Radiator can do it all. They do so many radiator jobs of all sizes that they just moved into a 30,000-sq. ft. facility, triple the size of their previous shop.

"We get stuff in from across the country," says co-owner Jim Schelkun, Empire Radiator. "Our specialty is figuring out how to build products that don't exist, building entire radiators from scratch."

Schelkun has multiple engineering and design teams at his disposal. This is vital when people bring in designs on napkins and ask him to turn them into products. "We just ask for something physical to work with. It could be a sample, a blueprint or a dimensional drawing, even if scratched in pencil. If the measurements are accurate, we'll take it from there."

When restoring or repairing a radiator, he and his crew look for ways to make it more efficient and provide better cooling.

"We may change or reconfigure the core itself, its tubes and fins," says Schelkun. "We can change the fin count for more heat transfer or the tube count for greater flow. If we take it from 3-row to 5-row, we can add 20 percent volume. Change the fins and add another 10 to 20 percent heat transfer."

It's simple in concept, he adds, as long as the laws of physics are followed. "You have to know what can and can't work," he says.

Restoration starts with a careful visual inspection. That is followed by a thorough cleaning. Once it is disassembled, repairs are made, the core is measured, and a replacement is ordered. Reassembly is done with lead-free solder for copper/brass units. Once it has been tested for leaks, it is painted



Empire Radiator specializes in repair and restoration of all types of radiators.



and returned to the customer.

The number one problem that Schelkun sees with radiators is being plugged up inside, outside or both. It may be from lack of maintenance, tough working conditions, or use of Stop Leak.

"It is amazing what comes in," he says. "Sometimes there are big holes blown through a radiator tank because someone took a torch to it, thinking they could fix it. Age often produces rust or sludge, and things just wear out."

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Heavy Metal Beefed Up His Deere Loader Bucket

Dave Ferrante rebuilt his loader bucket saving money over buying new and ended up with a heavy-duty bucket that will last.



"I made some big improvements to a beaten up and broken-down Deere 158 loader bucket that'd been used and abused by previous owners," says fix-up specialist Dave Ferrante. "Now I've got a really tough rig for my Deere 4020."

Ferrante says when he bought the loader the bucket was bent, the vertical mounting points were twisted, and the pin holes for mounting the tilt cylinder and loader arms were egg-shaped. "At first I thought about scrapping it altogether, then on closer assessment, I figured reinforcements were a better idea."

Ferrante cut off the top of the bucket and

replaced the bent metal with a new piece of heavier gauge sheet steel. Then he beefed up the 1/2-in. tilt cylinder and lift arm mounting points with 1 1/4-in. thick plate steel.

"Rather than cutting away the old vertical mounts, I machined 4 new pieces, two that fit along each side of the existing plates for added reinforcement," Ferrante says. "I wanted to bolt them on rather than weld them permanently, so I bored the holes and hand-filed them square to accept 3/4-in. carriage bolts. Next, I machined bronze bushings for the pin mounts and put in grease fittings to lubricate them, like most new loaders have these days. If the bushings ever need to be

changed, the reinforcing pieces are easy to remove."

To complete the upgrade Ferrante made new pins from 4140 bar stock, a big improvement over the old pins. He also re-packed the cylinder seals and fitted both of them with new hoses and connectors.

"The project took longer than expected," Ferrante says, "but the mounting brackets and bucket are industrial strength now, so I won't have any problems loading gravel, dirt or manure. It was definitely worth the time and effort, without much out-of-pocket costs."

Contact: FARM SHOW Followup, Dave Ferrante, 870 Road 19, Powell, Wyo. 82435 (ph 307-754-1555).



New pins were made from 4140 bar stock and the cylinder seals were re-packed and fitted with new hoses and connectors.



The Bucket Stool sits on top of a work bucket and leaves space to access the bucket while in use.

"Topper" Turns Bucket Into A Stool

The Bucket Stool topper turns a 3 1/2, 5 or 6-gal. bucket into a convenient-height seat for jobs in the shop, garden or anywhere around the farm or ranch.

The stool sits up 6 in. over a bucket yet still allows access to the bucket beneath. You can place and remove materials from the bucket without standing up. The seat can also double as a side table.

Rated for 300 lbs., the Bucket Stool sells for \$29.99 for one, \$39.99 for two and \$109.99 for six, shipping included.

Contact: FARM SHOW Followup, RWK Solutions, LLC, P.O. Box 476, Concordia, Mo. 64020 (ph 708-462-2737; www.bucketstool.com).