

Got Cast Iron To Weld?

Welding cast iron is finally easy with Magna 770 rod. Starting at \$140/lb., the electrodes aren't cheap, but they do what other electrodes can't. They provide perfectly machinable welds on nearly all types of cast iron without preheating.

"Magna 770 welds have a much higher elongation, or stretch capability, than cast iron, so they won't crack," says Jimmy Morris of Brecko Corporation, the U.S. distributor for Magna welding alloys. "And their 58,500 psi tensile strength is stronger than most cast iron."

They cost more than other rods, but Morris says "they're money-back guaranteed to do the job right, every time."

The rods are popular for repairing any type of cast iron that is not easily or cheaply replaceable, and when broken machinery needs to be put back in service immediately. Morris says "If you're welding on a fence or something cheap, we have another less expensive rod for that. The Magna 770 needs to be reserved for special situations."

The 770 comes in three sizes, 3/32", 1/8", and 5/32". It can be used with either AC or DC machines, and needs only 40 to 140 amps.

Morris says "We know the rods are expensive, so we sell by the piece if that's all the customer needs." He says the Magna 770 in 1/8" rods are \$10 each, so an order for 5 rods would be \$50 for the rods and \$15 shipping, or a total of \$65.

There is a stronger rod, the Magna 777, which delivers 66,800 psi tensile strength, and is said to be slightly easier to machine. But Morris says "The Magna 777 rod is about 25% more expensive than the Magna 770, so I usually suggest the 770 unless that increase in tensile strength or machinability is really important".

Magna 720 for burned and dirty cast iron, is much less expensive than the other two electrodes at \$50 per pound. Morris says "It works well on exhaust manifolds, furnace grates or old wood stoves, or when machinability is not needed. The tensile strength is only 50,000 psi and it is a bit more difficult to work with. And it only comes in 1/8" size" according to Morris, "I guarantee it's not machinable. It's even hard on a grinder".

All Magna products are made by a subsidiary of Illinois Tool Works. Other Magna rods are also designed for specialized applications. "Magna 303 steel rods will weld any steel to any steel and are stronger than any other rods we can find, with tensile strength as great as 128,000 psi - they even work harden to 180,000 psi", says Morris. "It's a weld you simply can't break".

Magna 307 can be used to weld pipes with fluid in them. Morris says using the 307 is easy, even for inexperienced welders because you can use direct contact and it will not "stick".



Magna 777 rod provides machinable welds that won't crack on most types of cast iron. Photo shows a steel valve welded to a cast iron pump.

Brecko sells all Magna electrodes out of open stock, by the piece or by the pound. A standard \$15 shipping charge is added to orders whether for a single rod or 10 lbs.

"Call to discuss your project" says Morris. "We can help you pick the rod that is best for your needs. And we have direct access to the Magna corporate engineers if a customer needs it."

Contact: FARMSHOW Followup, Brecko Corp., 209 N Mockingbird, Abilene, Texas 79603 (ph or 800 720-2887; breckocorp@yahoo.com; www.breckocorp.com); in Canada: Eldon Welding Systems, 41 Scotia St., Winnipeg, Manitoba Canada R2W 3W6 (ph 204 586-8336; eldonwld@mymts.net).

Reader Inquiry No. 48

New Way To Drill Your Own Well

If you've checked the price of drilling a new well lately, you know you're looking at an expense of thousands of dollars. That's what prompted a pair of Texas inventors to come up with a new do-it-yourself method.

The heart of the system is an air-powered sander/polisher that can be picked up for about \$35. The Bursons removed the handle to fit the power tool inside a piece of pvc pipe. Then they drilled a hole in the back of the sander's housing so air could exit.

With the right selection of "bits" and a compressor that'll put out 16 cfm at 90 psi, they soon had a well drilling rig. Best of all, Burson says, it practically digs the well by itself. Here's how it works:

A small hole is dug and water is added. Then the pipe with the sander and bit inside is inserted into the hole. As air passes up the pipe, it creates a vacuum that pulls in the water and soil to the surface through a hose. After filtering out the solids, the water is returned to the hole.

"The most revolutionary idea in the system was using the exhaust air coming out the hole in the sander's housing to remove water and dirt from the hole," says Burson. He reports using the system to dig wells as deep as 210 feet.

Kits ship with a bit to drill a hole for 4-in. casing, but bits for 6-in casing are available.

The time needed to drill a well depends on the type of soil and the depth needed to find water. In sandy areas of Florida, drilling a well can take as little as a day, while clay and rock can stretch drilling out to a week or more.

Well-Tek sells kits for \$579.95. Plans to build your own kit and an instructional DVD are available on their website for \$29.95 plus \$4.95 S&H. The website also features free videos of the system at work.

Contact: FARM SHOW Followup, Well-Tek, 10758 Highway 155 S., Big Sandy, Texas 75755 (ph 903 576-6800; www.howtodrillawell.com).

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