Heavy-Duty DC Impact Wrench

"It's the most exciting new development in professional-quality shoptools in years," says Lyndol Hollingsworth, inventor of a new heavy-duty DC-powered impact wrench that he says provides the power and reliability of an air impact wrench.

Hollingsworth was a Snap-On Tools dealer for 15 years and says the most common complaint he heard from farmers, ranchers, tire service people, and others was the hassle of hauling air compressors - along with generators or gas motors - to the field to power air-driven tools. "Some other DC-powered tools have come on the market but they've been built too light to hold up to heavy use," he says.

When Hollingsworth first started working on the idea in 1987, he used a Honda starter motor to drive his wrench. His current production model impact wrench is fitted with a 6/10 hp. wing motor that gives it torque comparable to an air impact wrench and draws 75 to 85 amps, requiring heavy-gauge wiring. The wrench weighs 10 to 12 lbs. and simply clamps onto a 12-volt battery, with a heavy-duty relay switch mounted between the wrench and the battery. Or, the switch could be hard-wired into the vehicle and you would just plug in the wrench as needed.

Hollingsworth has designed 3/8, 1/2



and 1-in. drive wrenches. He hopes to develop an entire line of all-metal, heavyduty DC tools. "They provide the same high torque as air wrenches without the noise and hassle that an air compressor brings to a work site. They're also safer to use than high wattage AC-powered tools," he says, noting that he has also invented a DC powered jack that uses a similar principle. It can't fall or leak down since it powers up and down on tandem drive screws.

Hollingsworth is looking for a manufacturer for both new products.

Contact: FARM SHOW Followup, Lyndol W. Hollingsworth, Best Concept Product Development & Marketing, 1309 August Dr., Austin, Tex. 78753 (ph 512 834-7886).

Continued from previous page

(A,B,D,G); umbrella brackets (A,B,G,H,R, and 50 to 830 models); grille screens (available for more than 20 models); front emblems (many models); steering wheels (many models); refibered belt pulley (L,LA,LI,M,MC, and MT); and many other miscellaneous parts. Contact: Ross Reproduction Parts, P.O. Box 307, West Union, Ohio 45693 (ph 513 544-3023).



Wayne Hagen, Lake Alma, Sask.: "I recently built this metal punch and bar shear to go along with my home-built 4-ft. combination brake and shear that was featured in FARM SHOW some time back (Vol. 16, No. 3, 1992). This new machine will cut 1/2-in. bar up to 6 in. wide and will punch a 1/2-in. hole into 1/2-in. thick bar or a 3/4-in. hole in 1/4-in. plate. It also has a heavy brake on top with about 15 tons of pressure.

"I could not justify the \$10,000 to \$20,000 I would have had to spend for new or used iron working machinery for my shop. I was able to build both my machines for only about \$3,000. These compact machines take up little space in my shop and move around easily on heavy castor wheels. I power them both with the same electrohydraulic unit.

"Both machines are cut and weld projects that I built with a bandsaw, drill press, and welder. We can custom-build machines or make plans available." (Hagen Manufacturing, Ltd., Box 215, Lake Alma, Sask. SOC 1M0 Canada ph 306 447-4721).

Gary Speckman, Juda, Wis.: Gary has advice for anyone pouring concrete in a basement, garage, quonset, barn, or whatever. "Always put plastic down underneath the concrete as a vapor barrier. Concrete guys will tell you the concrete won't dry properly that way but they're wrong. It'll dry just fine. I lay down sheets of 4 mil black plastic over the sand and then pour the concrete directly onto it. The plastic will never rot and the floor stays completely dry. Keeps the slab from absorbing moisture from below. I store grain in a quonset. With plastic under the slab, the concrete floor stays perfectly dry and I have no spoilage at all."

John Van Esch, Chilliwack, British Columbia: "We've come up with several solutions to problems we had with our Profit Centresilo with a Supreme bottom unloader (the type with a center unloader pole fitted with swinging chains). The first problem was that bearings would corrode away from juice constantly dripping on them. We made a shield to mount over the bearings and around the shaft which provides protection during filling or unloading.

"Another problem was that after filling silo, it was packed so tight it would take about 2 weeks to break the unloader loose. To solve it, I mounted a transmission and clutch assembly from a Chevy Blazer on the unloader input shaft, and I belt-drive the clutch end of the transmission with the unloader motor. I put a gear box on the output end of the transmission to drive the unloader pole and made a lever to operate the clutch. Now we can engage the unloader in low gear so it turns very slow to break loose, then we gear up gradually to full speed.

"Another problem was that the belt feeder under the silo would only last for about two years until the bearings had to be replaced. I rebuilt it by cutting a 16-in. pvc pipe in half

"Power Bucket" Replaces Tool Batteries

"Cordless power tools work great but if you've got a big job to do, you might need 6 or 8 batteries to get though one day's work," says Brian Smithers, co-inventor of the new "Power Bucket", a new batteryin-a-bucket that'll run cordless hand tools 20 times longer than standard batteries.

A 12-volt wetcell garden tractor battery mounts in the bottom of the plastic 5-gal. pail. A 14-ft. cord runs from the battery to an adaptor that mounts in place of the battery in the power tool. When working, you carry the tool and battery bucket with you.

"It gives cordless tool users the power and dependability that they've wanted," says Smithers, noting that the battery is expected to last more than 1,000 recharges. "It has a power rating of 40 to 44 amp hours. That compares to a rating of 1.2 amp hours in a standard cordless battery."

You can carry tools and accessories on top of the battery inside the bucket. Adaptors are available to fit Makita, Black & Decker, DeWalt, Milwaukee, Skil, and Rigid cordless tools. Other makes can be custom-fit. Sells for \$84.95, not including



battery, which Smithers says you can buy for about \$20 at a discount store.

Contact: FARM SHOW Followup, Power Bucket, 33723 Five Mile Rd. #252, Livonia, Mich. 48154 (ph 313 930-6367).

and bolting 2 by 4's to the sides. Then I laid the belt in the bottom of the trough so the sides of the belt ride under the 2 by 4 edges. I mounted a pair of rollers under the trough for the return. It works terrific and has been in use for 5 years now with no sign of wear."

David H. Meyer, Winona, Minn.: "I have problems with the steel tube hydraulic lines on my combine and self-propelled chopper. They crack or break from vibration and my dealer can't always get the lines from the regional warehouse when I need them. So he started making replacements out of high-pressure hydraulic hose. Works great because hose stands up to the vibration better and is a lot cheaper than steel tubing.

"Here's another idea. When I built my new farm shop, I put a dividing wall in it. That way I can do the dirtiest work on one side and cleaner work on the other side. We do our daily 'hurry up' service work on the dirty side and then when we get time later, we clean things up. We have two doors on the dirty side of the shop so you can just drive through. Really speeds things up."

James Johnson, Glade Spring, Virg.:
"One of my small engines has a drain plug that's difficult to get to and when you do open it up to drain it, it makes a mess. I solved the problem by attaching a short length of hydraulic hose to the outlet and putting a plug in the end of the hose. No more mess when changing oil."

Dale Appleman, Brooksville, Kent.: "When we got an electrical short in our 1982 Mack Midliner MS200 grain truck, we came up with a way to find the problem that might work on other equipment. We unhooked the batteries and then ran a direct line from the battery post to each individual circuit. That let us find the circuit that was out of order and we were then able to easily find the short.

"One modification we made in our farm shop comes in handy. We put anchors in the concrete floor that we can hook up to. They're useful for holding pieces in place to straighten them out or for pulling things apart."

Work Light Clips to Hat, Pocket

If you've ever worked on a piece of equipment with a flashlight between your teeth, you'll like this new clip-on work light that snaps onto the brim of a cap or clips onto a shirt pocket.

Powered by two AA batteries, the tiny Versalite has a strong 6,000 candlepower "laser spot" bulb. The bulb itself pivots 180° so you can mount it in virtually any position. There's a clip on front and you can attach a velcro magnet on back. There's also a clip on either side of the light housing that allows you to run an elastic strap around the light so you can strap it to your head (or a hard hat).

The light is 3 in. long, 1 3/4 in. wide and 1 7/8 in. high. "For years I looked for a light that would allow both my hands to work free. This light worked out even better than I hoped so I decided to become a distributor for it," says Miles Manchester, distributor.

Sells for \$17.95 plus \$2.00 shipping. An optional fiber optic light bender sells for \$2.50. It fits over end of bulb and lets



you get light into small openings - like gearboxes, carburetors, chain saw cylinders, etc. - without obstructing your view.

Contact: FARM SHOW Followup, Miles Manchester, Joy Brook Farm, Rt. 1, Box 63, Brushton, N.Y. 12916 (ph 518 529-6112).