# Spin Screed® The World's Lightest Power Roller Screed

After struggling with heavy, noisy and hard-to-clean vibrating screeds for over 30 years, concrete contractor Joe Churchill developed the Spin Screed.

The 22-ft. roller screed is powered by electricity and can be carried and loaded on a truck by one person.

The Spin Screed consists of aluminum pipe up to 22-ft.long that is caused to spin opposite of the direction it is being advanced by a heavy-duty power unit, causing the concrete to roll up in front of the screed while leveling the high and low spots. Unlike a gas powered screed, the electric screed starts working in less than one second after you press the trigger. The aluminum pipe can be custom cut into lengths up to 22 ft. The operator is spared back pain, standing erect while using the Spin Screed.

Consistency of the concrete mix is not a factor. The Spin Screed can be used on stiff, low slump concrete of only 3 in. or on a wet mix. Unlike a vibrating screed that causes the aggregate to sink far below the surface, the Spin Screed leaves aggregate immediately below the surface, resulting in a high quality, durable finish that is less likely to scale off when exposed to freeze and thaw conditions.

Spin Screed has also developed a unique flat bar support system for pours wider than 20 ft., saving workers time and money while producing flatter concrete.

The Spin Screed has been field tested for over 17 years and is built of the finest quality components.

The Spin Screed continues to grow in popularity among both large and small contractors. See our Photo Gallery on the Spin Screed website to view job photos of the Spin Screed at work.

Spin Screed engineers have developed a "Gutter Builder" screed that can be used to build drive-over curb and gutters and valley pans in a single pass.

Reasonably priced, the Spin Screed produces a durable surface in less time with less effort. For details, visit the Spin Screed website at www.spinscreed.com or call 888-329-6039 (Toll Free).

**Reader Inquiry No. 104**

# "Made It Myself" Pto-Powered Ditcher

Leroy Groening designed and built a rotary ditcher with a 59 1/2-in. dia. flywheel to dig drainage ditches on his Manitoba farm.

Groening made the ditcher from a cultivator frame fitted with a combine drive axle with gear reduction that pto-drives the flywheel. He used one of the cultivator's wing lift cylinders for depth control.

The drive axle is from an old Massey 92 combine. He cut the axle in half and mounted it onto the cultivator frame, then attached a pto driveline from the tractor's 1,000 rpm pto to the axle's input shaft. Using Sketchup 3D modeling software (www.sketchup.com) he drew up the flywheel and paddle parts and then gave the dxf files to a machine fabrication shop, which used a laser cutter to form the parts.

The flywheel is made from 3/4-in. thick steel plate and has 8 paddles bolted onto it. "By having the parts laser-cut I didn't need to drill any holes, and everything fit together precisely," says Groening.

He uses a Deere 7200 tractor rated at 92 pto hp. to pull the machine. "I tried my ditcher out for the first time last year and it worked quite well, although the frame could use some more weight to keep the machine from drifting to the side," says Groening. "Also, using a cultivator equipped with walking axles might have worked better because the ditcher wouldn't bounce up and down as much over rough ground, and the walking axles would help with floatation in wet conditions."

**Leroy Groening built this rotary ditcher to dig drainage ditches on his Manitoba farm. He made the ditcher from a cultivator frame fitted with a combine drive axle that pto-drives the flywheel.**

A pair of steel gathering blades under the frame move dirt toward the center, which results in a wider cut than just the radius of the cutting wheel. The blades are located a bit higher than the bottom of the flywheel.

A metal fender over the flywheel protects the ditcher's laser receiver and also helps keep dirt from flying up onto the tractor. An electric-hydraulic valve is used to control depth. "The valve connects to a unit on the tractor that works with the laser receiver, and automatically adjusts the ditcher's height as I'm driving," says Groening.

**Ditcher's 59 1/2-in. dia. flywheel is made from 3/4-in. thick steel plate and has 8 paddles bolted onto it.**

**Metal fender over flywheel helps keep dirt from flying up onto tractor.**

Contact: FARM SHOW Followup, Leroy Groening, P.O. Box 266, Lowe Farm, Manitoba, Canada R0G 1E0 (ph 204 746-2063; lginnovations@hotmail.com).