

# U.S.-Built Gasoline-Powered Torch

By Mick Lane, Contributing Editor

Our report in the last issue on a gasoline-powered torch from China prompted a number of readers to contact us about Petrogen, a U.S. company that has been making gasoline-powered cutting torches since 1962.

If you've never heard of Petrogen, you're not alone. Although the company has been around for more than 40 years, the torch has been sold mostly in the salvage and heavy steel cutting industries, such as shipbuilding. Milt Heft, general manager of Petrogen, Inc., San Leandro, Calif., says several Petrogen torches were used to remove wreckage following the terrorist attack on the World Trade Center. Heft says that while earlier oxygen-gasoline torches were discontinued for safety reasons, the Petrogen torch has been successful because it's actually safer than acetylene and other types of torches.

Some of the shortcomings of the Chinese-built oPetrol torch that were mentioned in FARM SHOW have already been addressed by Petrogen. For example, the torch has a spring-loaded thumb lever to control oxygen, just like most other oxy-fuel cutting torches used in North America. It's also made of heavier materials, so you're less likely to bend the head while tightening the tip or misusing it by prying with it.

The Petrogen fuel tank comes with its own pump, so you won't need compressed air, nitrogen, or a bicycle pump to repressurize the tank on the job site. And it's large, at 2 1/2-gal. capacity.

The Petrogen cutting system has been

tested and approved by Underwriters Laboratories in both the U.S. and Canada. It's also approved by OSHA and meets safety standards for cutting torches set by the U.S. Department of Energy and the U.S. Navy, among others. "In Department of Energy tests, the Petrogen oxy-gasoline cutting torch reduced costs and was faster and more effective in dismantling decommissioned buildings," Heft notes.

The standard Petrogen system is sold with a 20-in. torch and 90-degree head and two cutting tips, along with tip cleaning tools, the 2 1/2-gal. fuel tank, a 20-ft. gasoline hose, a 25-ft. oxygen hose, oxygen backflash arrester, tools and parts for assembly, a striker with extra flint, manuals, and a training video. It does not include an oxygen tank or regulator.

New from Petrogen is a backpack-carried unit that allows the user to easily carry enough gasoline and oxygen for 40 minutes of cutting. "These were designed specifically for rescue crews, but they could also be handy for anyone who needs a lightweight unit to do some cutting in the field," says Heft.

The standard Petrogen package sells for just under \$1,000 (shipping is extra). The backpack unit retails for \$1,640.

Contact: FARM SHOW Followup, Milt Heft, Petrogen, Inc., Box 1778, San Leandro, Calif. 94577 (ph 510 569-7877 or toll-free 877 888-86724; fax 510 569-8070; email: petrogen@petrogen.com; website: www.petrogen.com).



Petrogen gasoline-powered torch has been used mostly in the salvage and heavy steel cutting industries.



Backpack-carried unit allows user to carry enough gasoline and oxygen for 40 minutes of cutting.



Torch has a spring-loaded thumb lever to control oxygen. Unit comes with its own pump.



Homemade snowmaker mounts on a stand. Water comes up through bottom pipe and air is injected from one side, forcing water mist out through hole in pipe cap.



Commercial snow-makers like this one from Backyard Blizzard are also available.



Pipe caps have one or more holes, depending on conditions.



Carousel tether system allows Dick Reinitz to graze his family's milk cow in any location he chooses, without worrying about her getting tangled in the rope.

## Rotating Tether Keeps "Lawn Mowing" Cow On Leash

If you've ever thought about keeping a cow around for milk, here's a way to keep it fed at the same time.

Dick Reinitz of Wembley, Alberta, invented a carousel tether system that allows him to graze his family's milk cow in any location he chooses, without having to worry about her getting tangled in the rope.

He used a heavy gravel-crushing cone for the base (you could use anything heavy) and welded a 6-ft., 6-in. long, 2-in. pipe to the center. He then attached an automotive hub with wheel to the top of the pipe. A 20-ft. long pipe welds crossways to the top of the wheel.

A steel ring that slides back and forth on the pipe is tied to a halter rope. Reinitz

welded a stopper to the end of the horizontal pipe to prevent the ring from sliding off the end.

When tying up his cow, he ensures that the rope is long enough for her head to reach the ground, but not so long that she could get her foot over it.

As she grazes, his cow moves in a 20-ft. wide path, grazing a circle that is 40 ft. in diameter. Reinitz installed a piece of cable in a loop onto the top of the wheel so he can easily pick the unit up with a front-end loader and move it to the next grass area that needs "mowing."

Contact: FARM SHOW Followup, Dick Reinitz, Box 87, Wembley, Alberta, Canada T0H 3S0 (ph 780 766-2777).

\$3,105.

Contact: FARM SHOW Followup, Backyard Blizzard, SnowStation, LLC, 15 Mercer Rd., Natick, Mass. 01760 (ph 877 989-7669; fax 508 655-3737 email: info@Backyard Blizzard.com).

## Make Your Own Backyard Snow

As a volunteer coach of a cross-country ski team, Bob Brown was desperate for snow. He couldn't produce enough snow to ski on, but he thought he might be able to make enough to cover his back yard, "I kind of did it as an experiment, just to see if I could," says Brown.

The concept of making snow is simple but it takes a lot of things working together to produce a significant amount. The parts can be purchased at any hardware store, but you have to have the perfect mixture of temperature and water to actually get snow. To get it right is pretty tough, according to many amateur snowmakers.

The most expensive piece of equipment is a lubricated air compressor that will run continuously. The only other required hardware

is a hose and nozzle, plus a stand used to elevate the hose. "Some people hook up a pressure washer to increase snow production," says Brown. "But the pressure from an outside tap is enough to cover a backyard." The nozzle is just a standard pipe cap that is punctured more or less depending on the amount of snow.

Commercial units like this one from Backyard Blizzard are also available. The basic assembly is made of copper pipe and resembles a "T." The air and water meet in the middle of the "T" as the mixture is shot out into the air. The nozzle is pointed up, usually elevated and attached to a stand for stability. No chemicals need to be added in order to get a nice ground covering.

For those who don't want to spend a lot of

time tinkering, there are a couple of commercial products available to produce snow right out of the box. Backyard Blizzard offers stand-alone snowmakers or add-on attachments if you already have a compressor or powerwasher. Prices range from \$495 to