



Hydraulic shear blade cuts the log and then also pushes it onto splitter head, simultaneously pulling the log up for the next cut.

## ALL-HYDRAULIC WITH NO SAW OR SAWDUST

# “Chomper” Automatic Firewood Processor

“I needed a one-man, large volume firewood chopper. To build it, we eliminated all conveyors and saws and developed our hydraulic shearer and automatic feed system,” says Warren Aikins, president of Rainier Hydraulics, Inc., manufacturer of the new Chomper Automatic Firewood Processor.

The one-man processor is unique in that it has just two moving parts — a hydraulic shear blade and the shear blade carriage. The machine operates at ground level so logs don't have to be lifted onto a platform. Because there is no saw blade, there's no sawdust removal problem or waste. The hydraulic blade shears through wood up to 16 in. in dia. and a splitter splits it into four chunks that can be automatically loaded into a truck or wagon with the use of an optional conveyor.

Here's how the Chomper works: A simple cable winch pulls the log into the machine. It's pulled up flat against the closed shear blade which rises to an open position and moves back to cut to the desired length, ranging from 12 to 20 in. The shear blade, which is made from a special alloy heat-treated steel that never needs sharpening, penetrates the log nearly through but doesn't completely sever it. The shear blade car-

riage then pulls the log forward onto the splitter head, splitting the wood into four chunks and finishing the cut. It then repeats the cycle automatically.

“Eliminating the saw blade saves 2.3% of the wood figuring a 3/8-in. kerf and 16-in. long firewood,” says Aikins, who began working on the Chomper in 1978 and finally built a first workable prototype in 1980 and introduced his first commercial model in the Northwest last year.

The portable splitter pulls down the road behind a pickup. An optional lights and brakes package is available.

The splitter is powered by a 68-hp. diesel engine which runs a hydraulic pump. The shear blade is fitted with a 6-in. bore, 18-in. stroke hydraulic cylinder.

The Chomper sells for \$25,500. A smaller model with all the same features, except that it's designed to cut and split wood up to 13 in. in dia. sells for \$17,000. An 11-in. dia. model, designed to mount on a tractor 3-pt. and is powered by a pto-powered hydraulic pump, sells for \$6,500.

For more information, contact: FARM SHOW Followup, Rainier Hydraulics, Inc., P.O. Box 748, Rainier, Ore. 97048 (ph 503 556-9136).

## KING-SIZE HEAT SOURCE

# Portable “Bio Burner”

“It's the biggest and most practical crop-burning furnace ever built,” say manufacturers of the new “Bio-Burner” a king-size, go-anywhere combination crop dryer and furnace that puts out as much as 1,000,000 btu's per hour.

Mounted on a heavy-duty trailer and equipped with lights for over-the-road travel, the Bio-Burner features a unique auger-feed design that allows it to burn corn cobs, wood

chips, and other pelleted biomass materials. It consists of a large hopper which gravity feeds into a 10-in. auger which feeds into the bottom of the large stainless steel burning chamber. Temperatures inside the burning chamber are extremely high, reaching up to 2,500°, so that less than 2% of residue is left to be cleaned out. Rate of burn is controlled by a small force feed fan and heated air is collected from the heat

## PROVIDES FASTER GROUND PENETRATION

# Conversion Kit For Post Hole Augers

Upgrading your tractor-mounted or hand-held post hole auger with a conversion kit from Pengo will give it “faster and more efficient penetration, even in the most stubborn ground conditions.”

Developed originally for industrial-type augers used for drilling holes under extremely difficult and abrasive ground conditions, the add-on kit is now available for farm-type single or twin helix post hole augers.

“We've tested the conversion kit on dozens of farms here in Australia under a wide variety of ground conditions. We know it works,” says Greg Dunn, Pengo's sales representative in Australia who helped develop and perfect the kit. “Many farmers who've used it on older augers now equip brand new augers with the kit because of the faster, more efficient penetration it provides.”

Standard kits for 6 to 12 in. dia. augers include 2 tooth-holding plates which you permanently weld to the “business end” of the auger, a pilot bit which welds to the tip of the auger, a spiral-shaped drive bit which bolts onto the end of the bit, and a set of 4 interchangeable nickel alloy teeth and a Rub'r Lok to hold them securely in place. The nickel alloy teeth can be interchanged with optional teeth of other configurations and degrees of hardness, depending on severity of the digging conditions



Tungsten carbide teeth can be installed to dig through frozen ground, if required.

being encountered. For extremely abrasive soil, or frozen ground, tungsten carbide teeth can be placed into the tooth-holding devices, using the “easy in - easy out” Rub'r-Lok system. Extra tooth-holding plates and teeth are available for augers larger than 12 in. in dia.

Kits are available for 6, 8, 9, 10 or 12 in. augers.

Prices range from \$63.85 for 6-in. augers to \$90.35 for 12-in. augers. Each standard kit includes two teeth-holder plates, a pilot screw bit and the drive lug it mounts on, four nickel alloy teeth, and Rub'R-Loks for holding the teeth in place.

For more information, contact: FARM SHOW Followup, Pengo Corp., 710 Zwissig Way, Union City, Calif. 94587 (ph 415 487-8400).



Temperatures inside stainless steel burning chamber reach up to 2,500° so that less than 2% of residue is left to be cleaned out.

exchange chamber around the firebox by a 7½ hp. fan that blows air through a flexible heat conduit that connects up to dryers, barns or houses. Can be quickly and easily disconnected and moved to other locations.

The company says the Bio-Burner is particularly well-suited to burning corn cobs and notes that a field of corn yielding 150 bu. per acre of corn will produce an amount of cobs

equivalent to 150 gal. of LP gas.

The bio-burner is fully automated, constantly monitoring heated air temperature. It has a stainless steel burning chamber, a spark arrestor on the flue, and an hour meter that helps determine savings.

Sells for \$15,000. For more information, contact: FARM SHOW Followup Bio-Energy Company, 11700 Haber Rd., Union, Ohio 45322 (ph 513 836-7769).