

## New Concepts in High Horsepower Tractors



Each wheel of the revolutionary all-hydrostatic Hydratiller has its own drive motor.

### NO CLUTCH, TRANSMISSION OR TRANSFER CASE

## All-Hydraulic Tractor Is First of Its Kind

Backed by extensive field testing of prototypes, a Colorado firm has introduced its new Hydratiller — said to be the first and only fully hydrostatic 4-wheel drive tractor on the market.

"It's fully hydrostatic, with no clutch, gear-drive transmission, transfer case or drive lines," explains Robert Klepper, president of Hydra-Pow'r, Inc., Arvada, Colo. He's the inventor and prime developer of this just-introduced new concept in high horsepower (350 to 600 hp) tractor power.

Each wheel has its own individual hydrostatic drive motor. "Overall efficiency is comparable to gear-drive tractors and exceeds the efficiency of powershift transmissions," says Klepper. "This greater efficiency is achieved thru exclusive 'traction sensing' control circuits that allow the tractor to feel its way through varied field conditions without wheel spin. With conventional transmis-

sions, if a wheel spins, it spins faster than wheels still driving. On the Hydratiller, if one wheel spins, it rotates no faster than wheels still driving and additional horsepower is immediately transferred to the remaining drive wheels."

Because of its all-hydraulic drive, the Hydratiller produces comparable horsepower at less total weight than conventional tractors, thus reducing soil compaction. Klepper points out. "For example, our 450 hp model weighs 34,000 lbs., versus about 50,000 lbs. for a conventional tractor of the same horsepower."

The Hydratiller shifts on-the-go, features infinitely variable speed, and carries a two-year warranty on the self-lubricating drive system. The entire tractor has only 4 zerks to grease, all of them on the steering mechanism. "I don't believe there's a tractor made with a drive system as rough and rugged as this one, or that's as easy to service and main-

tain," according to Klepper.

Price tag for custom built Hydratillers, fully equipped, is \$68,000 for a 350 hp model, and \$128,000 for the largest-available 600 hp model. They're powered by Cummins diesel engines and equipped with 24.5 by 32 duals on all four wheels (30.5 by 32 duals optional).

The all-hydrostatic drive is quiet and virtually free of vibration. These features, plus the fact the tractor has no clutch or gear shift, allows the cab to be isolated from the tractor and drive train to minimize noise. "We haven't gotten a decibel reading on it but it'll be among the lowest on the market," says Klepper.

The new Hydratiller is available with an optional hydraulic-drive pto which runs at a constant speed re-

gardless of engine speed. A six-spool system delivers hydraulic power to equipment towed behind the tractor.

Much of the initial testing of prototypes was done on Montana wheat farms, and in central Illinois. "We think it has excellent application here in the Corn Belt," says Larry Voga, of Voga Farms, Plano, Ill. He also heads Voga Construction, Engineering and Manufacturing and has worked closely with Klepper and his Hydra-Pow'r Company in testing, designing and marketing the new Hydratiller tractor.

For more details, contact Larry Voga at the above address (ph. 312 553-0228) or call or write: Robert Klepper, President, Hydra-Pow'R, Inc., 7957 Fenton St., Arvada, Colo. 80003 (ph. 303 429-0581)

### FEATURES TRIPLE DUALS, FLOODLIGHTS AND A REFRIGERATOR

## Twin Engines Power New Lely Tractor

Lely Southwest, Temple, Texas, has introduced an entirely new concept of farm tractor—the Lely Multipower 420.

It's equipped with two 210 hp engines, with the front engine driving the front axle, and the second engine the rear axle. Driving the two axles direct and separately has the advantage that the axles cannot be overloaded since no more than 210 hp ever goes through either axle.

For work with large equipment, the rear engine can be used for pto drive while the front engine is used to drive the tractor. For lighter jobs, or over-the-road transport, one engine may

be used only, thus using it the same as a 210 hp tractor.

To more efficiently transmit the 420 engine hp into drawbar horsepower, the new Lely tractor is equipped with triple 18.5 by 38 tires on both the front and rear axles. It can also be operated with duals.

"Design of the tractor provides room for triple tires both front and rear without causing it to be much wider than conventional tractors with duals," explains the manufacturer. Total width with standard triple duals all around is 13 ft., 10 in. The turning radius (outside) is 21 ft. Since each axle is driven direct by



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one engine, there is no drive line through the articulating point.

To match its high horsepower, Lely has introduced a 30 ft. wide Roterra tiller. The new RH 900-60 is made up of three 10 ft. sections mounted in a frame and carried by lift-assist wheels. The two outside sections fold to a transport width of 11 ft. It's available with an optional engine

mounted on the frame, making it suitable for nearly any size tractor, as well as for tractors without a 3-pt. hitch or pto shaft.

For more details on both the tractor and the new 30 ft. Roterra, contact: FARM SHOW Followup, Lely Southwest, Box 1026, Temple, Texas 76501 (ph. 817 938-2564).