GENERATES INSTANT STEAM IN THE SPRAY WAND ITSELF

Simple New Way To Steam Clean Equipment

On-the-farm steam cleaning could become a common practice with the help of the new Steam Jet steam cleaner imported from Australia by the Air Products Co. It develops high pressure steam in the spray wand itself, completely eliminating bulky boilers and high maintenance coils, motors and pumps.

"Unlike other steam cleaners, the Steam Jet is completely portable which lets you bring the cleaner to the work and not the other way around," says Dave LaBonne, Air Products representative. "The cleaner weighs just 140 lbs., has no moving parts, and can also be used as a hot water cleaner, or a cold water, high pressure washer."

The key component of the cleaner is the steam "gun". Compressed air is mixed with LP gas in a manifold and the mixture fed into a combustion chamber on the gun. A battery-powered "igniter", which is similar to a sparkplug, is activated by a button on the gun and explodes the gas-air mix, instantly turning water, which flows past the downstream end of the combustion chamber, into steam.

All controls — the ignition button and flow-control valves for the air/gas mixture, water and detergent — are located at the gun so the operator can presoak with cold water, hot water or detergent water and then instantly turn on the steam. The gun is insulated to protect the operator.

Other components of the Steam Jet are an LP gas tank and a detergent tank, both mounted on a two-wheel dolly. To operate, you simply hook up to the compressed air and water hoses. LaBonne notes that the detergent, if used, is injected downstream of the fire so it'll use most any type of soap or solvent. "It also burns clean so there's no toxic fumes and a much lower operating cost since there's no wasted energy going up and out the stack.

New Steam Jet generates steam in the spray wand itself, eliminating boilers pumps and motors.

The Steam Jet requires minimum air pressure of 35 to 60 psi, and consumes anywhere from 30 to 120 gal. of water per hour. Fuel consumption at about 50 cents per hour is about half that of a conventional steam cleaner, according to LaBonne, and the retail cost of $1,650 is also about half that of a regular steam cleaner.

LaBonne says there has been interest from farmers both for cleaning field equipment and for cleaning and disinfecting livestock equipment and barns.

For more information, contact: FARM SHOW Followup, Air Products Co., 9250 Grand Ave. So., Minneapolis, Minn. 55420 (ph 612 888-5537).

1 BU. OF CORN PRODUCES 425,600 BTU'S

Portable Corn Drier Burns Shelled Corn

Latest new way to beat low corn prices and high energy costs is a new portable grain drier that burns shelled corn, ground corn cobs, corn fines, sawdust or cubed materials.

Bruce Schmidt, president of the Holstein Manufacturing, Holstein, Iowa, says the company's new Maxi-Dry corn burner has a 26 bu. capacity hopper, which is more than enough for a 24 hr. period. The hopper is designed for loading with a tractor or skid steer loader.

Shelled corn, or other material being used for fuel, is augered from the fuel hopper into the burning chamber by a 4 in. auger. This auger is thermostatically controlled so it shuts off when the temperature gets too hot in the burner, and starts up when more heat is needed.

The firebox of the burner stays at about 1,100° with the temperature at the flue at about 125°. The burner is refractory lined (a heat resistant ceramic material) for insulation. A fan forces the warm air out of the burner through heat exchanger tubes and into the bin.

Schmidt says the shelled corn burner drier can be adapted to fit most any grain drying system by making slight modifications on the duct work.

You start the fire in the burner manually. If desired, logs up to 24 in. can be placed in the burner as another energy source.

"The only ashes from burning shelled corn will be calcium, phosphorus, and potassium," Schmidt notes. "This residue should be removed whenever you shut the drier down but you could probably go as long as a week without having to remove any residue."

The fans and auger in the drier are powered by electric motors.

Here, according to Schmidt, is how the "dollars and cents" of burning shelled corn to dry grain pencils out:

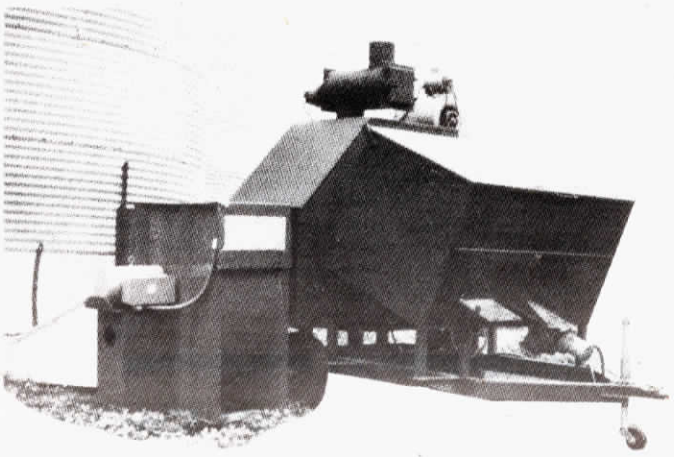
"If you wanted to dry 30,000 bu. of corn down 10 moisture points (from 25% to 15%) it would take about $3,000 worth of propane (figuring 5,000 gal. at 60¢ a gal.).

"Corn produces 425,600 BTU's per bushel or 7,600 BTU's per lb. Propane produces 92,000 BTU's per gallon. So, in a 24 hour period, you'd use 19.28 bu. of corn instead of 88.73 gal. of propane.

"It would take 1,080 bu. of corn to dry the 30,000 bushels. If corn is selling for $2.50 a bu., your cost is $2,700. When corn is at $2.00, the cost drops to $2,180, making the corn, when used for drying, worth $2.76 compared to propane costs.

"If you estimate interest on the $2.00 corn for one year at 17%, that's an additional 34 cents per bushel savings. To this add a saving in storage costs of 36 cents per bushel and transportation costs of 6 cents per bushel.

"Added up, it pencils out to a total value for corn used for drying of $3.52 per bushel — when you start with $2.00 corn.



Corn is worth about $3.50 per bu. when used as fuel for the new corn burner, according to the manufacturer.

"Another economic advantage of the shelled corn drier burner is that it can be fueled with damaged corn," Schmidt points out.

The 342,000 BTU per hour unit sells for $9,950. Units are available that kick out 1 million and 3 million BTU's. In the making is a 150,000 BTU model that burns shelled corn and would be suited for heating hog houses.

For more information, contact: FARM SHOW Followup, Holstein Mfg., Box 135, Holstein, Iowa, 51025 (ph 712 368-4342).