

New Bolt-Together Poly-Strut Buildings

Latest new wrinkle in farm buildings is the Poly-Strut concept, created by Ronald Trafton, Drayton Plains, Mich. It makes use of a unique bolt-on metal column which may save up to 30% on material and labor costs, compared to conventional steel buildings.

"We can put up a 4,000 sq. ft. building in 2 days. Or, we'll ship a ready-to-construct kit directly to the farmer and he can build it himself," Trafton told FARM SHOW. "The entire building bolts and screws together. Most anyone can construct it."

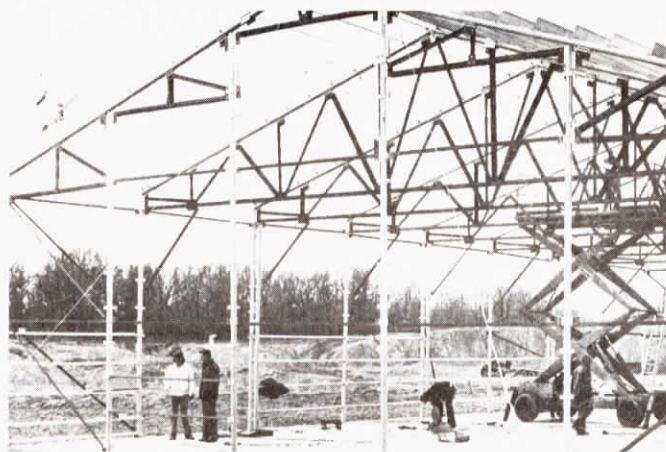
Key to the system are extruded aluminum, 3½ in. columns. Winged brackets, also made from aluminum, attach to fanned struts on the column with set screws and tightening bolts. Brackets slide up and down the columns to the desired position and can be angled off in any direction off any strut. "This lets you build at angles that aren't possible with conventional materials," says Trafton. "The new building concept assembles and

bolts together like a child's erector set and accommodates most any structural design requirements."

The 6-in. wide cross members allow at least that much insulation in the side-walls. The area under the



Adjustable brackets bolt to the aluminum "studs".



"We'll build it, or you can do it yourself," says the manufacturer of Poly-Strut buildings.

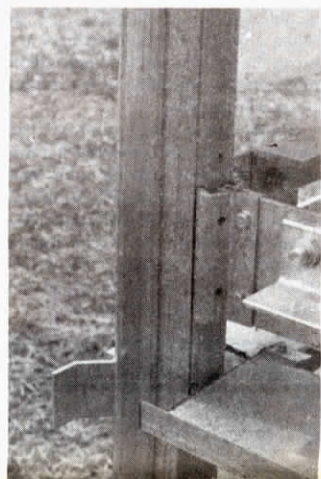
roof trusses, which bolt to rafters in the same way cross members bolt to side posts, also holds a thick layer of insulation.

Columns bolt to a standard cement foundation and are braced on the ceiling with steel cable and turnbuckles.

No special machines or tools are needed. Traftco supplies all interior and exterior finishing materials (steel or aluminum siding, roofing, brick, stone, insulation, etc.) with pre-engineered building packages. Clear spans of up to 50 ft. are possible for any required length.

Cost is right at \$4.50 per square foot for the do-it-yourself kit and about \$15 for a "turnkey" installation.

For more information, contact: FARM SHOW Followup, Traftco Products, Inc., 4779 Dixie Highway, Drayton Plains, Mich. 48020 (ph 313 674-2231).



Metal column saves up to 30% on material and labor costs.

GOOD MECHANIC COULD MAKE THE CHANGE

This Car Runs on "Moonshine"

Archer Daniels Midland Co., Cedar Rapids, Iowa, one of the country's largest alcohol producers, has modified a conventional assembly line car to run on pure 190 proof alcohol.

The ADM modifications were carried out on a standard Ford Fiesta equipped with a 1600 cc engine. Because of the high octane rating of alcohol, the compression ratio was increased from 8.6:1 to 12.5:1, upping the car's horsepower and efficiency. Engine bore size was decreased by slipping in a substitute cylinder sleeve. Piston stroke remained the same.

Bob McKee, of McKee Engineering at Palatine, Ill., did the work for ADM. He says any good mechanic

could make the changes.

Testing is not complete on the car, but McKee expects the miles per gallon to be slightly less than gasoline. "That doesn't worry us because we're using a fuel that can be renewed in a year — not a million years, like oil," he says.

For more information on the do-it-yourself conversions, contact: FARM SHOW Followup, ADM Corn Sweeteners, Archer Daniels Midland Co., P.O. Box 14 5, Cedar Rapids, Ia. 52406 (ph 319 398-0600).

Technical advice on alcohol engine conversions is also available from Bob McKee, McKee Engineering, 411 West Colfax, Palatine, Ill. 60067 (ph 312 358-6773).



ADM's re-manufactured Ford Fiesta. The company has also modified an Oldsmobile diesel to run on 10% alcohol.

Car Runs On Waste Oil

(Continued from page 3)

"We'll do the work, or we'll send you the diesel engine with instructions for a do-it-yourself installation. The diesel engines have a life expectancy of 300,000 miles and usually get twice the mileage, or more, than conventional gas engines," says Schuler.

His waste-oil burning Aspen has a

71 hp. four cylinder diesel (boosted to 92 hp. with a turbo charger) and a 5-speed transmission with overdrive. It replaces the original Chrysler slant-six engine.

Since diesel engines aren't compatible with vacuum-actuated transmissions in most Ford and GM vehicles, Schuler installs hydraulic Chrysler transmissions in converting them to diesel. He takes the old

transmissions in trade and sells them through his dealership.

Two local shops also do custom conversions for Schuler. This year, they've done 60 — primarily on pickups — for owners from all corners of the U.S. Schuler also has shipped engines to many do-it-yourselfers.

Conversion costs range from \$3,500 to put a 4-cylinder diesel engine (which costs around \$2,800 it-

self) in a car like the Aspen, to around \$6,000 to put a 6-cylinder 253 cu. in. turbocharged diesel engine in a pickup "with everything on it."

For more information on repowering cars and pickups, and running them on waste oil and other low grade fuels, contact: FARM SHOW Followup, Eddie Schuler, Box 109, Morrison, Ill. 61270 (ph 815 722-2196).