## Biodiesel refinery — in a box

DAVID SHAFFER, Star Tribune

One of the more unusual farm implements at the Minnesota State Fair is a big metal box with no tires, steering wheel or windshield. It's actually a former shipping container, the kind that carries goods from China.

Now it holds monitors, pipes, tubes, a condenser, a catalytic chamber and other technology that its inventor says can turn natural oils into biofuel to power diesel engines.

SarTec Corp., an Anoka-based company in the agricultural nutrients and biodiesel business, has developed the unit. It is a smaller, portable version of the Mcgyan technology used in the Ever Cat Fuels biodiesel plant in Isanti, Minn.

"It will allow the farmer to produce all their diesel on the farm to run all their operations," said Clayton McNeff, a SarTec vice president and co-inventor of the biodiesel technology used in the unit and the Isanti plant.

The unit, which has been tested for about 40 days, is being shown publicly for the first time at the fair. It was developed with a \$400,000 state grant, matched by SarTec.

"A lot of people have stopped by," said David Wendorf, marketing director for Ever Cat Fuels and SarTec, who manned the unit on the fair's first day. "We've had farmers. We've had individuals who were aware of the Mcgyan technology, school kids .... We have seen an increased awareness in renewable fuels."

The project is tied to SarTec's broader research effort into energy crops. The company is studying whether farmers can profit from growing energy crops such as Camelina, whose oil-bearing seeds can be crushed to extract an oil that can be refined into biodiesel.

SarTec has not yet priced the unit, but McNeff said he expects it to be in the range of a large combine, which can cost about \$400,000. He said the unit is designed to be mostly automated and run by farmers with technical support from the company.