

half expected to see somewhere on the pistons and sleeves what, in my opinion, are the 3 most dreaded words in the English language: 'Made in China'.

"I can't tell you how pleased I was when I found out the kit is made in Wisconsin by a company called **Richland LTD** (ph 608 588-7779; www.richlandengineparts.com). I've worked with quite a few engines over the years, and these parts are top notch. I had a couple of questions I wanted to ask, and received a call back from the CEO himself. He's a great guy. We had a very enjoyable conversation and a few laughs while we were talking, and during the conversation he mentioned that Richland has been around since the 1940's and one of their first contracts was making pistons and sleeves for the International Harvester Company. That's a pretty good testimonial that they know what they're doing.

"So my advice is, if you buy an engine kit, ask them if it has Richland pistons and sleeves. If not, call Richland and they'll let you know where you can find their products."

Gary Grubrich, Novinger, Mo.: "So far my 2014 **Deere** 569 round baler does a good job of baling hay that would have 'slugged' my older Vermeer model."

Fred Steele, Chillicothe, Ohio: Fred's the satisfied owner of a 2006 **Kubota** ZTR-21 zero-turn riding mower equipped with a 21 hp diesel engine and 60-in. deck. "I used my previous mower to cut 3 acres of grass and it took 3 1/2 hrs. and 2 1/2 to 3 gal. of gas. Now I'm mowing 4 acres, yet it takes only about 45 to 50 min. and I'm using only 1/2 gal. of fuel."

Bob Otto, Mapleton, Iowa: A 2013 **Deere** 6170M MFWD tractor equipped with a **Deere** 380SL front-end loader rates as Bob's "best buy". "Deere's M series tractors provide everything needed for a livestock operation. You don't have to pay for technology that's used only in row crop operations. That results in huge cost savings. The weight distribution of this tractor-loader combination is superior, and the Power Quad transmission with reverse makes feeding chores an easy job."

Larry Cook, Winona, Texas: "My 2000 **Kubota** M9000 tractor runs good, but I wish it had a better air conditioner.

"My 2010 **Husqvarna** 2348 riding mower had fewer than 100 hrs. when it threw a rod that made a hole in the Briggs & Stratton engine block. Another problem is the machine has a weak steering spindle. The mower itself cuts good when it's working."

Nathan E. Mast, Arthur, Ill.: "My 1999 **Deere** 310SE backhoe does everything I want it to. No major problems."

Allen Franks, Guthrie, Ky.: "I purchased an **HP** Windows 8 computer on sale, and it crashed even before we had it fully set up."

Slade Hartranft, Richland, Penn.: "I love my 2006 **Case** 440 skid loader. It has a 2-speed transmission and ride control, which is great for making time. It's also compact and has an 81 hp rating, which makes it drive like a bulldozer. I liked it so much that I bought a used 2007 model with about 1,100 hrs. on it, and it still runs like new. Case really had their ducks lined up in a row for this one."

Arnold W. Anderson, Aragon, New Mexico: "My 1988 **Mantis** rototiller equipped with a 2-cycle engine is still going strong. Last year I decided to give the machine a rest and bought a 2013 **Mantis** 7624 model equipped with a 4-cycle engine. It starts easy and digs great. It's heavier than the 2-cycle model yet is still a great bargain. I hope to get 25 years out of it, too."

Matt Stewart, Seabeck, Wash.: "I bought a 1991 **Dodge** Ram 250LE pickup from my parents when my dad fell ill in 2004. This

pickup had faithfully towed their travel trailer to Arizona from Washington state every year. I've used it to haul tractors, firewood, and rocks. Now it has about 170,000 miles on it but still hasn't needed any major repairs. I expect it to last for many more years.

"I bought my 2012 **Bear Cat** WT190T wheeled trimmer to use around the edges. Although this trimmer is solid and has a good running Briggs & Stratton engine, the machine totally fails regarding safety. The ends of the factory-provided trimmer line extend 2 in. beyond the safety shield. As a result when the right wheel enters a depression in the ground, the trimmer line digs into the soil showering the operator with dirt, sticks, and rocks. I was hit in the head with a rock the first time I used it, but thankfully I was wearing safety glasses.

"I notified the company about the problem and asked if their engineering department was working on a modification to the shield, but got no reply."

Richard Burch, Clyde, N.C.: "My 2003 **Ford** F-250 Super Duty pickup equipped with a 6.0-liter Power Stroke engine was the biggest piece of junk I ever owned. It started having problems at about 8,000 miles and was at the dealer a lot. After about 36,000 miles the warranty expired and I had to pay for all repairs from then on. So far, I've spent about \$15,000. I still have this pickup today and am still paying repair bills. It has about 109,000 miles on it and has never been abused.

"I called the company's warranty service people but they just said 'sorry'. I was offered \$7,000 for this pickup 2 years ago on a trade. I guess I should have taken them up on it."

Christ Fisher, Ephrata, Penn.: "I wanted a good bench vise, so last year I searched craigslist.com and found just what I was looking for. It's a No. 206R model made by **Reed Mfg.** in the 1940's that has 6-in. jaws and weighs more than 150 lbs. This vise is still in great shape and was built to last. It comes in handy for all kinds of equipment repairs on our farm."

Ed Stalcup, Chuckey, Tenn.: "Back in 1983 I bought a **Ford** 2610 tractor. I've used it with a **Bush Hog** 2346 front-end loader to load oak logs onto my portable bandsaw mill. I've also used the tractor with a **Hesston** 5530 hay baler. I'm well satisfied with this tractor."

He's had problems with his 1999 **New Holland** Boomer 250 diesel tractor. "The fuel injection pump started leaking, but the company won't provide any parts or information on how to repair it. Their only solution is for me to buy a new pump at a cost of about \$1,000. We've tried installing many different O-rings with some success, but the pump still leaks a small amount. I think parts for older New Holland machines are too expensive."

Gerald Fedler, Fort Madison, Iowa: "It's the best purchase I ever made," says Gerald about his 2002 **Chevrolet** Silverado LT pickup. It's equipped with a Quadra-steer 4-wheel steering system that's designed to add stability and improve maneuverability.

"I bought this pickup used from my son, who had bought it new. It has about 170,000 miles on it now with no major repairs. I pull a 20-ft. gooseneck livestock trailer with it, which it handles with no problem. It rides nice, too."

Dennis Boone, Crystal, Maine: Dennis is impressed with his 2013 **Fujitsu** heat pump (ph 888 888-3424; www.fujitsugeneral.com). "It's quiet and economical and has lowered my cost for heating oil by 75 percent, while increasing our electricity use only about 30 percent."



Stewart Martin says his biodigester from CH4 Biogas turned out to be a "best buy". Photo shows control room for biodigester, with input dump in foreground.

Stewart Martin, Elora, Ont.: "Our biodigester from **CH4 Biogas** has turned out to be a best buy, but it wasn't at first. There was a definite learning curve, and we would do some things differently.

"We have a feedlot and a poultry processing facility and needed a way to handle poultry offal and wastewater. Processing it and the manure through a biodigester made sense. The byproduct is a high-value fertilizer that we can spread on our fields. Plus we figured we could use hot water from the generator's cooling system to heat the poultry plant and 2 homes on the farm.

"We looked at various systems and settled on plans and equipment from CH4 Biogas. Instead of finding someone to handle the installation, my father Earl served as general contractor, thinking he could cut costs. We found firms to do the work, but getting permits was difficult and getting grid connections took a while.

"Although people were interested in the potential of a new industry like biogas, they didn't want to risk the business they had. This meant our job wasn't always their

priority.

"As general contractors in a fairly new industry, we sometimes found it difficult to source components like the liner CH4 recommended. Because we weren't sure of the return on the investment, we tried to be cost effective and use lower cost products.

"It has turned out to be a good investment, and we are almost producing more gas than we can use. However, if starting over, we would try to go with top-of-the-line products and experienced vendors. We would get a commitment from anyone involved that the project was a priority.

"We would also allow ourselves more time to get things running smoothly. You have to get a feel for the product and where inputs can come from. We source recycled fats from grease traps from 2 companies in addition to the offal and manure. It takes time to understand how to feed the biodigester. If inputs are richer, you don't have to feed as much. Also, you need to watch the amount of water in the mix.

"We are still learning. It's an all-inclusive project. If one fuse goes, it can shut down everything."



Hydraulic door installed on Tom Revier's 120 by 200-ft. feed storage building contains a 54 by 44-in. sliding door, which allows grain to pour out for augering into feed trucks.

Hydraulic Door For Grain Storage

Tom Revier, Revier Cattle Co., Olivia, Minn.: Revier installed a new kind of hydraulic door from **Schweiss Doors**, the company that made bi-fold doors famous (ph 800-746-8273; www.bifold.com). It's the first of a new line of doors that are built and designed specifically for grain storage.

Revier runs a beef operation with feedlot capacity of about 16,000 head. He recently put up a big 120 by 200-ft. feed storage building. Concrete walls 16 ft. tall wrap around all 4 sides of the huge structure, which holds nearly 1 million bushels of corn. A Schweiss hydraulic, reinforced steel door measuring 15 1/2 ft. wide by 15 ft. tall is located at each end.

Each door contains a 54-in. wide by 44-in. tall steel slider door, which lets the grain pour out for augering into feed trucks. Once enough grain has been emptied out, the big hydraulic door can then be safely opened and a front-end loader used to load directly into feed wagons.

"The doors provide containment for the

grain without any loss of space, plus once we get enough grain out of either end of the structure, we can then drive in with our power scoops to load directly into our feeding wagons," says Revier.

The hydraulic doors were built to withstand the weight of thousands of pounds of shelled corn trying to push them open. They're constructed with 3/4-in. steel welded into a framework of 8-in. beams. Each door weighs about 2,500 lbs. It takes "oversize" pistons to lift such a heavy door.

To make certain there is zero leakage with several thousand pounds of shelled corn piled against the doors, 4 long steel pegs drop into the concrete footing at the bottom edge plus 2 steel pegs on each edge lock into the steel I-beam framework of each door.

"I think many country elevators using flat storage could use this idea. No moving bunker walls and easy access once you open the doors. No grain loss, no storage loss. It's perfect."