Agriculture

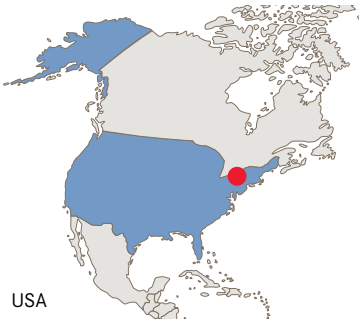
MTU powered Oxbo harvester delivers greater productivity and profits

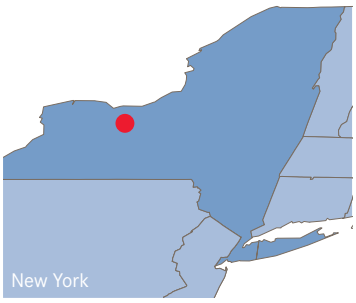
Who: Oxbo International Corporation

What: Series 460 engine for harvesters

Why: Fuel efficiency, low-end torque and exceptional hours to overhaul

Where: Byron, New York, USA





When Oxbo set out to upgrade the engine in its pea harvesters, it had high standards for torque, fuel economy and reliability. The MTU Series 460 passed the test with flying colors. Running constantly in a wide range of conditions, the Oxbo 6160M Pea Harvester is reaping impressive yields – including more revenue.

The Oxbo 6160M Pea Harvester can slice, de-vine, de-pod and transport up to 3.5 acres and 12,000 pounds of peas per hour. And now, thanks to MTU's Series 460 Tier 3 engines and distributor Penn Power Group (Cranberry Township, Pennsylvania), the 6160 is more productive and fuel-efficient than ever before.

The perfect fit

Oxbo International Corporation (Byron, New York) is a worldwide leader in the design, manufacturing and distribution of innovative harvesting equipment and related products for the global agribusiness industry. By focusing on innovative equipment that increases productivity and harvest quality, Oxbo has earned success and a wide following in the specialty agriculture community, as well as a technological advantage over its competitors. As demand for agricultural products has increased – and with it greater pressure on farmers' profit margins than ever before – the company has consistently delivered cutting-edge harvesting machinery to keep pace.

That's why when Oxbo zeroed in on improving fuel efficiency, low-end torque and hours to overhaul on its popular Pea Harvester series, the MTU Series 460 was a perfect fit to replace a competitor's engine, according to Penn Power's OEM sales manager Harry Spreng. Like farming itself, the testing process was methodical and thorough. "Oxbo field-tested our engine for more than a year before they put the MTU engine into full production on the 6160 and began delivering machines to customers," Spreng notes.

Harry Spreng, OEM sales manager, Penn Power Group

"Oxbo tested the prototype harvester in extreme muddy ruts and it was able to negotiate without bogging down, unlike other machines."

Power. Passion. Partnership.

Rated at 422 horsepower, the reliable Series 460 engine is engineered for exceptional low-end torque and fuel efficiency.

During the process, Spreng worked directly with the company's project engineer, Allen Russell, and with assistance from MTU application engineer Deanne Wise, provided the engine-related engineering assistance, installation data and engine option selections required by Oxbo.

Reaping benefits

Oxbo's goals for their harvester were demanding and specific: a diesel engine that delivered longer time between overhauls to keep the machine running longer and more reliably in the fields; more low-end torque to keep the all-wheel drive harvester moving in muddy, rutted conditions; lower noise output and better fuel economy.

Spreng says Oxbo customers live their lives on a very tight schedule. "A harvester and its diesel engine have to be capable of 24/7 operation in a wide temperature range. Crops harvested have a limited duration of freshness, so harvesting is time sensitive to maximize the value of the product. Even 24 hours difference can have a dramatic impact on revenue," he explains. After researching the Series 460 engine, Spreng says Oxbo engineers were impressed with both the engine's reliability and MTU's reputation for standing by its agribusiness products and customers – a business philosophy shared by Oxbo. "Strong distributor support and effort won the business," Spreng declares.

The strong, silent type

The Series 460 engine, rated at 422 horsepower, is based on a Mercedes Benz OM 460 LA engine. It proved itself during Oxbo's test. Powerful low end torque ensured maximum uptime – which is good for business. "Oxbo tested the prototype harvester in extreme muddy ruts and it was able to negotiate without bogging down, unlike other machines. Low end torque carried the day," recalls Spreng.

Oxbo project engineer Russell says he's pleased with the engine noise reduction achieved by switching to the Series 460 engine. "This is important for both the operator and for nearby homes, since many pea fields are planted next to houses. Harvesting occurs 24/7, so we need Oxbo equipment to keep the noise down at 2:00 in the morning," he explains.

A leader in the field

The company's engineers were also impressed with the fuel economy of the Series 460 engine, which reportedly was 1.5 gallons per hour better than the competitor's engine it ultimately replaced. Over time, the fuel savings really add up. And when combined with the new Series 460's improved efficiency and uptime, the impact on an owner's bottom line is unmistakable – thanks to greater productivity and lower overall cost of ownership.

Having passed its field tests with flying colors, the Series 460 is now standard on all Oxbo 6160 Pea Harvesters. These highly productive machines are already hard at work on farms in Washington, California and Minnesota, with more headed soon to New York, the Midwest and Canada. In the future, Oxbo plans to transition to the Tier 4i version of the Series 460.

Spreng says that Oxbo will consider MTU diesel engines to power other harvesting machines. That's music to the ears of David Combs, MTU's senior construction and industrial sales manager, who notes, "Part of MTU's strategic plan is to focus on the agricultural market, and Oxbo is an important part of that. The success of the 6160 Pea Harvester is a testament to other OEMs that MTU is dedicated to the agriculture market."

MTU America Inc.
A Rolls-Royce Power Systems Company

www.mtu-online.com

MTU is a brand of Rolls-Royce Power Systems AG. MTU high-speed engines and propulsion systems provide power for marine, rail, power generation, oil and gas, agriculture, mining, construction and industrial, and defense applications. The portfolio is comprised of diesel engines with up to 10,000 kilowatts (kW) power output, gas engines up to 2,150 kW and gas turbines up to 35,320 kW. MTU also offers customized electronic monitoring and control systems for its engines and propulsion systems.

Power. Passion. Partnership.

08 234 (52 5E)