Eaton pumps and motors are star performers in Thailand’s remote rice-harvesting terrain

The high reliability of Eaton pumps and motors has led to standardization on Kaset Phattana Group’s rice combine harvesters.

Background
Thailand has a strong tradition of rice production. It has the fifth-largest amount of land under rice cultivation in the world and is the world’s largest exporter of rice.

Kaset Phattana Group, headquartered in the Chachoengsao province, is Thailand’s leading manufacturer of rice combine harvesters. With growing demand for larger machines that maximize output and increase efficiency, Kaset Phattana Group turned to Eaton for pump and motor solutions that would ensure optimum performance for its KT-08 and KPH-22T models.

Challenge
Eaton in southeast Asia and its premier distributor in Thailand, Thai Agency Engineering Company, Ltd. (Thai-A), learned that high reliability and durability were at the top of Kaset Phattana Group’s requirement list—and for good reason. Kaset Phattana Group explained that with Thailand’s 23 million acres of rice-producing farmland, rice harvesters are often operating in remote, undulating terrain that is not easily accessible for machinery repair and maintenance.

Therefore, the company needed the highest quality components that could withstand high shock load. To be sure they are durable, reliable, robust and rugged enough to minimize any unwanted downtime during harvesting, selected pump and motor prototypes undergo stringent performance tests during lengthy in-field trials.

Solution
With a long history of business development and working closely with end-users to identify the real needs of rice

Eaton Corporation is a diversified power management company ranked among the largest Fortune 500 companies. Eaton is a global leader in electrical components and systems for power quality, distribution and control, hydraulics components, systems and services for industrial and mobile equipment; aerospace fuel, hydraulics and pneumatic systems for commercial and military use; and truck and automotive drivetrain and powertrain systems for performance, fuel economy and safety. Eaton has approximately 73,000 employees and sells products to customers in more than 150 countries.

farmers, Eaton and Thai-A put together a proposal based on Eaton's Series 1 heavy-duty hydrostatic variable pumps and motors. The pumps and motors would work in tandem to drive a dual path system for propulsion and steering functions.

In order to meet improved performance and small package requirements, Eaton responded quickly by developing a customized Series 1 motor with a new end cover incorporating a built-in crossover relief valve based on Eaton’s Series 2 hydrostatic motor design. The design was recommended by Thai-A.

Results
Eaton’s tandem heavy-duty pumps and motors successfully passed in-field trials, thus ensuring Kaset Phattana Group would keep its combine harvesters operating at peak performance.

“The test trials were a great success,” said Eaton’s Louis Tee, product marketing manager. “Kaset Phattana Group was very impressed with the excellent performance of Eaton’s heavy-duty pumps and motors and made the decision to standardize on them for its KT-08 and KPH-22T models.”

Just to make sure Eaton products continue to be star performers, Eaton and Thai-A personnel make frequent joint visits to end users to verify the functionality of Eaton Series 1 products.

This customized Kaset Phattana Group KT-08 harvester is ready for rice harvesting.

Eaton Series 1 pumps and motors provide rugged, reliable power on the rice combine harvesters.