



## Polaris Industries

### Full Throttle

Proactive MTS service solutions help a test program confidently accelerate testing.

#### CUSTOMER CHALLENGE

In a way, Polaris and MTS have evolved together. In Polaris' quest to dominate the power sports industry with vehicles that outperform the competition while remaining affordable, the company has been among the first to adopt new MTS testing innovations over the last three decades.

"My team's mission is to reduce product development time with increasing quality and reliability so that Polaris products can get to market more quickly," said Jerry Olson, the Polaris Test and Validation Manager who oversees facilities in Roseau and Wyoming, Minnesota. "MTS has been vital to helping us conduct meaningful testing with increased efficiency, which has allowed us to accelerate product validation while keeping costs down. As MTS has grown in sophistication, so have we."

The use of MTS solutions at Polaris began in the 1980s with a single-degree-of-freedom test stand. This technology has since progressed to include a variety of MTS load frames, a damper test system, road simulation systems in multiple degrees of freedom, and several generations of testing software.

According to Lead Test Technician, Tony Schreifels, a primary challenge for the Polaris test team involves meeting the extremely high expectations of their internal customers. "Having fast access to meaningful test results has become an assumption for our product developers, who rely on this feedback to develop new Polaris products," Schreifels said. "Since frequent introductions are part of what differentiates us, any unscheduled downtime at our test labs is not only an inconvenience, but a threat to our competitiveness."

Further complicating matters, Polaris manufactures a multitude of products for every season—from snowmobiles and motorcycles to off-road vehicles for commercial and military use. "There is no slow season at our test labs," Schreifels said. "Our various products have different testing requirements, and those requirements are constantly changing from day to day and product to product."

#### MTS SOLUTION

Polaris was pleased to learn that MTS offers a full suite of programs for maintaining uptime and extending the operating life of MTS test equipment in a proactive and cost-effective fashion. One of the programs used successfully by the Polaris team is the MTS Exchange Program. The idea behind this program is simple: replace high-use components before they wear out and threaten failure, while offering the luxury of planning and budgeting for the replacement in advance.



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— Jerry Olson  
Test and Validation Manager,  
Polaris Industries



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Lead Test Technician  
Polaris Industries

be certain.

With an MTS Pump/Motor Module Onsite Exchange, an MTS field service engineer arrives on site at a scheduled time to install a remanufactured pump/motor module that offers like-new, fully warranted performance. The removed module is then remanufactured at MTS for a future exchange. “We’ve done the exchange program for our SilentFlo™ pumps and servovalves, and we have used rebuild kits with our road simulators,” Olson said. “Without exception, these programs have helped us preserve our uptime and reduce our maintenance costs.”

Polaris also keeps several spare parts kits on hand that conveniently package consumable parts for a specific MTS test system. These kits are designed to eliminate the lost time associated with ordering a new part only.

Additionally, Polaris appreciates the ability to monitor their test equipment: “Some of our equipment is very expensive, so having to replace it wouldn’t be economical,” Olson said. “So these programs help us monitor certain parts of the systems so that we can schedule time to refurbish the equipment, as hard as that is sometimes, instead of waiting until something breaks, which could create a domino effect and lead to total system replacement and major disruptions to the test schedule.”

MTS responsiveness and knowledge were also mentioned as positive attributes. “We’ve really appreciated the flexibility of our MTS service staff. MTS has been willing to do what it takes for minimal disruption to our test schedules,” Olson said. “And MTS



testing expertise from other industries has helped us achieve and maintain an extremely high level of testing capability.”

#### CUSTOMER BENEFITS

With proactive maintenance programs and on-demand access to MTS service expertise, the Polaris test team is helping the company get new, feature-rich and affordable vehicles to market with unprecedented speed and efficiency. “Our uptime levels have always been high, but this planned approach with the MTS service team gives us peace of mind that we can meet our testing schedules and commitments,” Olson said.

Schreifels sees similar improvements in cost-efficiency. “These programs have certainly reduced our costs, and MTS has been helpful in pointing out things that we need to watch for,” he said. “Just having access to MTS expertise has kept our maintenance expenses down and our confidence high.”

Confidence in the availability of advanced testing and validation capabilities is another benefit. “Knowing that we have accurate load data empowers us to do reliability analysis and accelerated testing, and we can validate chassis design, for example, in an incredibly short amount of time,” Olson said. “Accelerated testing has really helped us become leaders with our quality in several industries because we know exactly how our equipment is going to perform in the field.” That ability to create quality products is recognized in an increasingly competitive industry. The Polaris Victory cruiser motorcycle has won the J.D. Power Customer Satisfaction Award four years in a row.

“MTS has really raised the bar for new programs coming out,” said Olson. “We are very proud of all that we have achieved, and MTS has definitely helped us get there.”



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