

Customer Success Story: CLS Sectional Mobile Valve

Market segment
Mobile machinery and equipment



Eaton's New CLS Sectional Mobile Valve Helps TriTech Articulating Boom Mowers Hold Steady

Location:
Delphos, Ohio

Challenge:
Tri-Tech sought to create a sturdy, reliable system with functionality that would set the company apart from competitors.

Solution:
Scott Industrial Systems recommended Eaton's new CLS Sectional Mobile Valve, which offered patented load sense bleed off, pre- and post-compensated load sense relief for each section.

Results:
Eaton's superior CLS mobile valve allows multiple actions for the mower, including extending, tilting or lifting the boom to complete the job at hand.

"The Mow-Master articulating boom arm mowers allow operators to actuate every function at the same time. With different settings for each function, operation is smoother, safer and helps prevent damage to the equipment."

Pete Call, account manager, Scott Industrial Systems

Background

Tri-Tech Manufacturing designs and builds heavy duty roadside management equipment, including boom arm mowing attachments for tractors. The company's Mow-Master™ products are used to mow hillsides and trim overhanging tree branches, requiring heavy duty construction to withstand the stresses of use on rugged terrain.

Challenge

With the opportunity to provide 40 articulating boom arm mowers to a customer, Tri-Tech sought to create a sturdy, reliable system with functionality that would set the company apart from competitors. The customer's specifications required a proportional valve with individual port reliefs and anti-cavitation to actuate the boom functions. Seeking a valve with a combination of four-way and three-way spools that could operate with a custom joystick, Tri-Tech turned to Eaton distributor Scott Industrial Systems for answers.

Solution

Scott Industrial Systems recommended Eaton's new CLS Sectional Mobile Valve, which offered patented load sense bleed off, pre- and post-compensated load sense relief for each section, and a highly modular design. After Eaton supplied several prototype valves, the CLS100 valve with a 10 gpm flow rate was specified for the project, and Scott Industrial Systems used a fixed inlet and five cylinder spools in the work sections. To meet the customer's specifications, Eaton provided a custom three-way spool for the first section and standard four-way spools for the remaining four sections.

All of the spools are actuated with a 12VDC solenoid with a manual override in the event of a coil failure. Additionally, port reliefs were tuned to the pressures required for each function of the articulating boom mower.

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Results

Eaton's superior CLS mobile valve was an excellent fit, providing Tri-Tech with the required performance at a competitive cost. The pre- and post-compensated valve allows multiple actions for the mower – including extending, tilting or lifting the boom to complete the job at hand – while keeping all activities at an even speed.

“The Mow-Master articulating boom arm mowers allow operators to actuate every function at the same time,” said Pete Call, account manager, Scott Industrial Systems. “With different settings for each function, operation is smoother, safer and helps prevent damage to the equipment.”

So far, all 40 of the contracted mowers have been delivered to the customer, and the machine operators are very pleased with the actuation of the boom.

“The new CLS100 valve has helped Tri-Tech's Mow-Master articulating boom arm mowing machines stand apart from the competition,” said Eric McCune, area sales manager, Eaton. “We look forward to continuing to work with Tri-Tech and Scott Industrial Systems on additional Mow-Master orders.”



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