

CASE STUDY:

**SHARPER**<sup>®</sup>

## HYDRAFORCE HELPS ALAMO MAVERICK™ MOWERS REACH THE LONG AND THE SHORT OF IT



The Maverick<sup>™</sup> boom mower, made by Alamo Industrial®, has the ability to reach up to 30 feet to mow down steep slopes, over guard rails, around waterways, or high up into trees. That's the long of it. This mower, which is mounted on a tractor, also has a 180 degree swing, and can mow in tight spaces within 6 inches of the tires. That's the short of it. All that capability is controlled by hydraulics, and Alamo prides itself on making the hydraulics on its Maverick mower very simple and easy to control. They also value having the mower hydraulics self-contained and not dependent on the hydraulic system of the tractor.

## STRATEGY

Alamo actively looks for innovative hydraulic and electronic solutions, so they turned to their fluid power distributor, Womack, and HydraForce, for application assistance for all three sizes of the Maverick<sup>™</sup> boom mower. A self-contained hydraulic system mounted on the front of the tractor independently controls all hydraulic functions of the mower – boom lift, swing, dip, tilt and telescoping; opening and closing the mulching door, and rotating the mower head so it can be positioned at a 90-degree angle for compact transport. The first generation system utilized a stackable spool valve that was replaced with a flow sharing bridge circuit using HydraForce HSPEC high pressure proportional valves. "The flow share was better with the Hydraforce circuit," said Mark Hamann of Alamo.

## RESULT

With application assistance from Womack and HydraForce, Alamo effectively integrated electrohydraulic control on the mower's main manifold. "The support was great," said Hamann. "Any time we had an issue come up, we've been able to get an answer quickly. We've not found any other companies able to provide that level of support and expertise. The application team was great. We received help even when it wasn't HydraForce's issue." Developing a custom rather than off-the-shelf solution was another factor that Alamo appreciated. "We found it extremely amazing how much quicker we could get a customized system from HydraForce versus getting an off-the-shelf product from other manufacturers. We've waited up to eight weeks sometimes," said Hamann.



The Alamo Maverick<sup>™</sup> Mower reduced cylinder drift during boom extension with HydraForce cartridge valves.



Four EVDR controllers mounted right on the valves in the manifold were a compact and convenient way to add electronic control.



Running diagnostics on the main manifold is made easier with EVDR controllers, since you can adjust parameters right on the machine.