PARTNERING WITH MEC TO CREATE ONE OF THE BEST MACHINES IN THE WORLD

CHALLENGE

After surveying key customers, MEC discovered an industry need for a new machine with a platform the size of a double deck scissor, which combined the capacity of a telehandler and the dexterity of a straight boom with platform rotation.

Additional customer mandates required the long side of the platform to be able to accomplish the work task when perpendicular to the chassis, as well as be able to maintain control of torsional loading and still be compact enough for stowing.

STRATEGY

MEC enlisted HydraForce and hydraulics distributor, Hydraulic Controls Inc. (HCI) to help design, test and develop the hydraulic system on a 40 foot tall boom lift with a capacity of 4000 lbs. at full reach and height, and 22 by 7.5 foot platform that can rotate 180 degrees.

Using a HydraForce proportional directional control valve with integral load-sensing allowed for a more compact manifold design, which in turn allowed for a more flexible mounting configuration. Plus, a HydraForce pressure-compensated flow control valve was used to significantly reduce vibration to the point where it was undetectable through the platform floor.

RESULT

The Titan Boom™ 40-S Lift sold out all of the first year’s production and was named Product of the Year by the International Awards for Powered Access (IAPA).

“The seamless teamwork of HydraForce and HCI proved to me that better machine performance could be achieved by strategically leveraging the correct technology partners.”

Gary Crook, MEC
Director of New Product Development
California Manufacturing & Engineering Company