

CASE STUDY

Reducing Complexity and Cost with EAS-i Integrated Hydraulic Technology

Construction Market | Truck-Mounted Crane Outrigger System |
Texas Hydraulics EAS-i Solution

Executive Summary

A leading truck-mounted crane manufacturer partnered with Texas Hydraulics to simplify a conventional electro-hydraulic outrigger system. By integrating critical hydraulic control functions directly into the actuator, the EAS-i solution reduced component count, lowered assembly labor, improved serviceability, and enhanced overall system reliability.

Customer Challenge

The existing design relied on numerous hoses, fittings, remote-mounted valves, and supporting components. This increased assembly time, created additional leak paths, complicated troubleshooting, and added inventory management burdens.

Texas Hydraulics Solution

Texas Hydraulics implemented its **Electronic Advanced Subsystem Integrated (EAS-i)** technology, incorporating directional control and relief valve functionality directly into the cylinder assembly. The result was a fully tested plug-and-play solution designed specifically for the application.

Results at a Glance

- 12 hours of assembly labor eliminated
- Hose count reduced from 42 to 28
- Approximately 128 feet of hydraulic hose removed
- Fittings reduced from 44 to 8
- One complete outrigger relief valve assembly eliminated
- Improved field serviceability and troubleshooting
- Reduced leak points and improved system reliability

Business Impact

The EAS-i architecture delivered measurable cost savings while improving machine performance and maintainability. By moving hydraulic intelligence closer to the actuator, the customer gained a simpler hydraulic circuit, faster assembly, reduced maintenance complexity, and greater long-term reliability.

Why EAS-i?

EAS-i technology is ideal for applications where multiple cylinders interact and require precise control, including outrigger systems, lifting equipment, booms, synchronized motion systems, and other advanced mobile hydraulic applications.

Texas Hydraulics Advantage

Texas Hydraulics combines engineering expertise, vertically integrated manufacturing, and application-specific hydraulic design to deliver innovative solutions that reduce total system cost while improving performance in demanding operating environments.