

## Mobile Interactive Crane Simulation: The Merritt Synergy System



### Profil

Based in Stratford, Connecticut (US), J.R. Merritt Controls provides innovative, custom joystick control technology and seating systems for a wide variety of applications, including crane and on- and off-highway applications.

### Challenges

J.R. Merritt was looking for a way for potential clients to test their joystick controls and seating systems in interactive applications that were relevant to their industry. In particular, they wanted to highlight the adjustability of their chair systems with integrated operator controls. This adjustability promotes operator comfort and efficiency, and therefore productivity. However, these benefits can only truly be experienced in the context of actual work — asking a client to operate a disconnected joystick is like asking a driver to imagine the performance of a car while sitting in the show room, rather than actually taking it out for a test drive. J.R. Merritt determined that integrating their controls with realistic crane simulations would not only provide potential clients with a sense of interactivity and purpose — it would also be the best way of conveying the real on-the-job adjustability of their seating systems, and the quality of their solutions in action.

### Solution

After evaluating a number of simulation providers, J.R. Merritt selected CM Labs Simulations, based on several criteria: The realism of the Vortex simulations was critical, of course, but J.R. Merritt was also looking for outstanding support, as well as a strong reputation. “We were very impressed with the support that we received and the ability to customize the simulation,” said David Marks, J.R. Merritt’s VP, Sales and Marketing. “Besides that, whenever we mentioned the name ‘CM Labs’, people were making the association with high technology and innovation. This supported the message and the benefits that we are promoting.”

CM Labs provided two simulators to replicate equipment in two of J.R. Merritt’s key markets: A Vortex STS Crane Simulator for ports applications, and a Vortex Overhead Crane simulator for steel mill applications. Both simulators include multi-display visuals, and are integrated into J.R. Merritt’s seat consoles, hardware switches, and onscreen LMIs.

A frequent challenge with shipping simulators to tradeshow is disassembly and reassembly, as well as having to rely on third-parties to deliver the simulator safely and on time. That's why, in addition to using a simulator for tradeshow demonstrations, J.R. Merritt was also eager to design and build a mobile solution that would allow them to bring the interactive demonstration directly to the customer site. This led to J.R. Merritt's design and development of the Merritt Mobile simulation unit, which would enable quick and reliable transport of the simulator.

**"The Merritt Mobile protects our investment, but it also means there's no need to pack it up and ship it around," said Marks. "We can run it remotely with just the vehicle running on the diesel engine, or we can run off external power, so it's very flexible."**

## Results

Potential customers don't always have the time to travel to J.R. Merritt's facilities to evaluate the latest technology. But with the Merritt Mobile, a complete demonstration system can travel to them, allowing them to experience the productivity and efficiency gains that can be made with state-of-the-art equipment from J.R. Merritt. "With the simulator," says Marks, "we can set up the operator chair system so it's comfortable and adjusted properly for each individual operator, and then have them experience the increased productivity achieved by operating from a comfortable position. When they sit on our operator chair and go to simulation, they immediately understand the benefits of our technology."

The Merritt Mobile is now cruising across the country, booked solid for product demonstrations at ports and mills throughout North America.

The simulator draws enthusiastic crowds at customer sites, trade association meetings and both regional and national trade shows. "We're always looking for the best way to prove the value of what we bring to the market," says Marks. "Vortex brings to life the things that we used to just talk about."

