

Operator Cab



In 2001, Manitowoc Cranes and Brooks Stevens, Inc. launched an aggressive effort to develop a new operator cab for a diverse line of lift cranes. The new cab design emerged from the inside-out, with frequent verifications of design milestones using full size mockups to benchmark operator comfort and ergonomic

layout of operator controls. During the project Brooks Stevens, Inc. assumed responsibility for the design research, human factors, industrial design, engineering, prototyping, and production ramp-up support. The solution was completed on-time for a successful introduction at the January 2002 ConExpo in Las Vegas.



Interior Sketch



Exterior Sketch

The design of Manitowoc Cranes' new operator cab clearly not only ranks as one of the most challenging projects in our portfolio, but also as one of our most rewarding. The challenge was to identify opportunities to improve and innovate Manitowoc's low volume crane cab design and to develop a new cab in a 12 month timeframe at a limited tooling budget. The reward was to gain an inside perspective on the manufacturing and operation of some of these impressive 1,000 ton lift cranes.



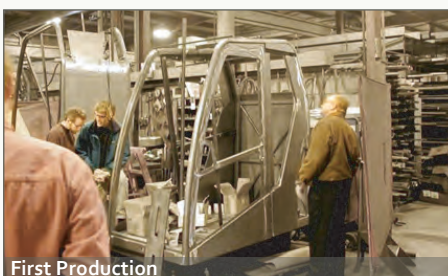
Interior Concept Mock-Up



Exterior Concept Mock-Up

To build a knowledge base for the design exploration phases, the design team visited manufacturing facilities in the US and France, traveled to job sites across the country to learn about the various crane models and applications, interviewed crane operators, and even received some basic hands-on training at a crane operator school.

Once a design baseline was established, a cross function team composed of designers and engineers from Brooks Stevens, Inc. and Manitowoc Cranes worked vigorously on the new cab design, starting with the ergonomic studies and mockups, continuing on to the interior and exterior design, including an all new sliding door. Throughout the program, the team worked closely with suppliers (i.e. controllers, seating, and HVAC units) to evaluate sourced components and ensure that the supplier's schedule meshed with the overall project schedule. ■



First Production