

# Merkur Partners with a Leading EV Manufacturer To Successfully Design & Build A Greenfield Plant with Speed & Proficiency



With very stringent time-to-market requirements, Merkur rose to the challenge as a trusted end-to-end design & build partner for our client to help carry out a 1 million sq. ft. production plant for zero-emission vehicles.

## Case Study

Merkur helped design & build a large-scale greenfield EV plant for a top electric vehicle manufacturer by driving a high-level strategic & implementation plan to achieve:

- End-to-end plant design & build
- Faster project implementation & time to market
- Large-scale equipment procurement & quality management
- Delivery of detailed layouts including 80+ bus-sized assembly line stations
- Simulation of critical operations
- Effective knowledge transfer to client's new hires

## Project Overview

A top electric vehicle manufacturer in North America approached Merkur to design and carry out a new factory plan for producing zero-emission vehicles in Joliet, IL.

Merkur partnered with the client on several levels:

- 1 Established a multidisciplinary team of experts to plan and execute the project, who first defined the project plan and conducted needs analysis.
- 2 Participated in the development of the manufacturing strategy and financial plans (budgets, schedule, and square footage requirements).
- 3 Developed processes, implementation of management tools and implementation of a document management plan.
- 4 Manufacturing strategy, technological optimization and overall layout of the plant and workstations as well as detailed engineering management.
- 5 Support for the implementation of the plant layout and the launch of production.

### Stringent Time to Market Needs

Successfully met a tight schedule, driven by the competitive nature of the electric vehicle industry, to meet client's time to market needs.

### Evolving Project Requirements

Worked in an agile mode to allow for resequencing of milestones and restructuring of the project to align to changing market needs.

### Large-scale Project Coordination

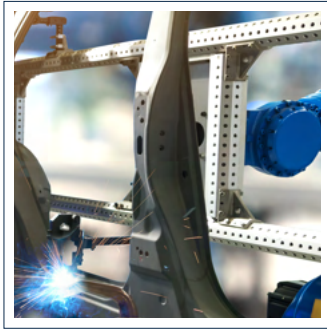
Managed procurement, equipment, jigs and tools specifications and implementation along with industrial engineering and product development resources in three global locations.

### Design of Structures and Processes

Created structures and processes that allowed our client to manage their first major project in the US.

### Management Strategy Design

Transformed existing strategies and implemented new manufacturing strategies to help our customer reach their target production rates.



Merkur was proud to partner with our client on this important and strategic turnkey project. Our project management and technical skills were put to the test, and we delivered!

~ **Louis Labonté**  
Project Director, Merkur

## Results

Despite a limited time to production, need to adapt to a fast-changing market, and a complex, matrixed, multi-language, international team, Merkur was able to build a 40+ person multidisciplinary engineering based team that led to fast and competent project implementation and time to market.

In a true Merkur spirit, we enabled education and knowledge transfer to our client's new hires in key roles across the organization.

- Development and implementation of all equipment, jigs, fixtures, & tools
- Development and implementation of required utilities (electric, air, gas)
- Full project management of 40+ person integrated team
- Customized real-time Department Smartsheet Dashboards
- Organizational effectiveness analysis and optimization

**40%**

Takt Time Reduction

**\$40M**

Equipment & Tooling

**2000+**

Timeline Tasks

**80+**

Bus-sized Assembly Line Stations

**40+**

Three-dimensional Dashboards



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For over 30 years, our goal is to enhance the performance of your manufacturing business. Our focus is on empowering our clients through engineering & manufacturing projects that elevate productivity, business strategies that lead market expansion, and operational excellence that drives down costs.