How Does a Next-Generation Manufacturing Platform Tackle Climate Change?

Producing 300,000 batteries each day across more than 100 production lines

Established just seven years ago, Contemporary Amperex Technology Co. Ltd. (CATL) quickly established itself as one of the world’s leading producers of lithium-ion batteries used in electric vehicles. With demand growing fast, the company wanted to expand its production capacity while maintaining stringent safety standards and high quality. To achieve this, CATL established an intelligent manufacturing platform that supports process automation and enables detailed monitoring at every stage of the production process.
Faster production due to process automation is helping CATL meet increasing demand, strengthening its competitive position.

By implementing SAP® Manufacturing Suite running on the SAP HANA® platform, CATL was able to:

• Increase production volume by approximately 25% thanks to streamlined, automated processes
• Integrate more than 8,000 machines onto a single intelligent manufacturing platform using IoT technology
• Collect and analyze vast amounts of data from machine sensors using in-memory computing
• Provide real-time updates to improve monitoring of shop-floor operations
• Enable end-to-end traceability across production processes
• Support business decision-making with production intelligence based on a single source of truth
• Provide process analysis to enable quality improvements, helping to differentiate its products in the marketplace
• Cut time to market for introducing new product lines based on predefined standards for automation equipment
• Achieve a smooth implementation with expertise and guidance from SAP MaxAttention™ services and SAP Digital Business Services

“Thanks to SAP Manufacturing Suite and SAP MaxAttention, we have the visibility we need to run efficient, automated processes that speed up production while gaining help to ensure we maintain the highest quality standards.”

Chen Ling, CIO, Contemporary Amperex Technology Co. Ltd.