

CASE STUDY: A GLOBAL MES TEMPLATE FOR A GIANT IN AGRICULTURE



About the Customer

The customer is a multinational agrochemical and agricultural biotechnology corporation, and a leading producer of GE seed and the herbicide glyphosate. The customer's manufacturing is split into 2 lines of business – Chemical/Crop Protection and Seed/Row Crop Production.

Project Summary

Having won a competitive bid against some of the Big Five consulting firms, Engineering was chosen as the customer's strategic partner for an advanced Digital Manufacturing program aimed at delivering a global template that would standardize Manufacturing Execution Systems (MES) and digitalize processes across more than 70 production sites worldwide.

Project Activities

- » Customer's ongoing strategic partner and dedicated team for Digital Manufacturing (5+ years)
- » Designed, developed and validated MES template to be implemented at all plants globally and across both lines of the customer's agricultural business
- » Integrated MES with ERP, production systems and shop floor machines at each site
- » Ongoing execution of site-by-site MES rollout, go-live and hypercare support worldwide
- » Continuing to support the maintenance and enhancement of new MES while providing training and knowledge transfer to customer's team

Business Drivers

- » Deliver on customer's global digital supply chain vision and reinforce their competitive advantage
- » Automate, synchronize, integrate and standardize processes within each plant and across the global enterprise
- » Simplify and optimize production operators' daily tasks
- » Facilitate communication between all levels of the organization
- » Enable real-time production reporting to drive productivity and optimize performance

More About The Project

Having won a competitive bid against some of the Big Five consulting firms, Engineering was chosen as the agricultural giant's strategic partner for an advanced Digital Manufacturing program aimed at standardizing their Manufacturing Execution Systems (MES) and processes across more than 70 production sites worldwide. For the last 5 years, our Industries eXcellence team has been guiding and supporting the customer's team at every step of this ambitious program. In addition to providing consulting and project management services to support the initiative, from a technical standpoint, Engineering's main undertaking involved the design, development, validation and implementation of an effective and reusable Manufacturing Execution System (MES) template that could and would be applied globally to all plants as well as to each of the 2 lines of the customer's business.

Not only did the customer want to leverage the new global MES template to standardize their manufacturing operations across all sites worldwide, but they also wanted a system that was customized to meet the specific needs of their processes. The new MES would replace a legacy system that was mainly focused on production reporting. The most critical capabilities our team was tasked to include in the development of the final template included: order management; monitoring of order execution; integration with LIMS; OEE, KPI and performance monitoring; packaging management; inventory management; and an integration between their MES and ERP system.

Leveraging Siemens Opcenter Execution Process (SIMATIC IT UAPI) software, continuous stakeholder feedback, our unique agile methodology and our world-class team of solution architects and developers, Engineering delivered 2 flexible

and powerful global MES templates for each of the customer's manufacturing lines of business. Following the delivery of the template, Engineering was also the system integrator chosen to lead the rollout phase of this initiative, supporting configuration and deployment execution at chemical and seed production sites worldwide.

Engineering's Advantage

While it is difficult to pinpoint a single deciding element given the overarching scope of this initiative, we believe that the delivery of a reusable MES template has been our greatest contribution to the customer's digital transformation program. Our Industries eXcellence team built a scalable solution that could be applied globally across both lines of the customer's business, and yet one flexible enough to be adaptable to each plant's specific processes and needs. At the most basic level, the template has facilitated the implementation of a standardized and effective MES solution at all production sites worldwide. The customer now has a global MES template that they can evolve and adapt to their future plants. As their strategic partner for Industry 4.0, our team will continue to work with the customer's team to add enhancements, developments and functionalities if needed, but we believe that the emblem of an effective IT program is the successful handover of solution governance to the customer. Throughout this project, our team has provided documentation, knowledge transfer and end user training to ensure that the customer will be able to take full ownership of their MES solution with confidence at the end of the global program.

Would you like to learn more about this customer case study? Contact us at info@engusa.com.

ENGINEERING Industries eXcellence Global

Industries eXcellence is a division of the Engineering Group, a global software maker, system integrator and provider of innovative technology solutions and services. Our division specializes in the digital transformation of the manufacturing and transportation sectors. We design, build and implement solutions that drive process automation, operational efficiency, supply chain optimization and intelligent data analytics for leading industrial enterprises worldwide.

CONTACT

 Engineering USA
55 W Monroe Street
Suite 2575
Chicago, IL 60603

 +1 630.625.0045

 info@engusa.com

www.engusa.com