



Manufacturing Execution Systems (MES)

Achieve faster batch release through digital systems that reduce time and errors while delivering context-rich data

Manufacturing 4.0 initiatives, data integrity requirements, and compliance and operational efficiency needs are driving more life sciences manufacturers to implement Manufacturing Execution Systems (MES) as a means of realizing their digital transformation strategic goals.

Manufacturers are under significant pressure to reduce batch review & release cycle times and improve operational efficiencies to ensure medicines get to patients faster. Transitioning from paper-based processes into electronic batch records through MES enables you to deal with exceptions on priority and encourages “right first time” manufacturing while facilitating faster batch release. This shift also supports a move towards integrating and connecting IT and OT systems so that you can access and utilize open data to drive insights and influence decision making.

The central role of MES in creating a digitalization roadmap

The life sciences industry is designing and implementing an evolved MES as part of a broader digitalization roadmap to support smart manufacturing initiatives and eliminate inefficiencies. There are several large active opportunities to be realized through a digitalization roadmap that places MES at the core of that strategy.

Expert partner for MES implementation from conception to completion

Cognizant's global presence and knowledge of both the MES market and the life sciences industry, as well as our extensive experience in deploying and supporting MES technologies, enables us to deliver value across the entire lifecycle of an MES solution.

We partner with leading pharmaceutical, medical device and biotech companies, bringing manufacturing execution systems to life from concept through to production, followed by complete end-to-end lifecycle management and support. We help ensure that every MES project runs smoothly on-time and within budget, while delivering speed to value to drive competitive advantage.

Cognizant partners with key cutting-edge vendors to help guide and establish their products within life sciences manufacturing and bring harmonized business benefits.



Guiding your MES system design across a variety of deployments

Our teams have experience working across multiple technology platforms throughout the MES space, including next generation cloud-based platforms and using low code, no code technologies.

Areas of deployment expertise

Electronic Batch Records	Asset Register
Weigh and Dispense	Quality Management
Overall Equipment Effectiveness	Energy Management
Batch Genealogy	Building Management and Repairs
Process Monitoring	

1. Accelerate digital transformation with a customized MES roadmap

Our experts help you transition from paper to digital with ease, building tailored roadmaps for your site's digital production goals. We offer concept studies in platform and technology selection, pilot evaluation, global deployment tactics, manufacturing operations management, electronic batch records and optimal business system integration.

2. Achieve operational excellence through MES program delivery

We help implement MES across life sciences, aligned with ISA-S95. Our consultants map manufacturing processes to digital systems through iterative collaboration. We offer MBR recipe design and MBR development services on-site, remotely, and via a factory model to achieve operational excellence. We design best practice and harmonization guidelines to help ensure your design is aligned to your business requirements.

3. Enhance production efficiency with MES support services

Our MES implementation expertise helps ensure system validation, reliability, continuous improvement and process modification. We provide on-/off-site support based on an ITIL model, production system control and 24/7 remote manufacturing OT support for incident request and problem management. We optimize your operations with tailored solutions for optimal performance and production efficiency.

4. Maintain MES compliance for peace of mind

We deliver MES implementations that adhere to GMP regulations. Our end-to-end solutions incorporate best practices to help you ensure compliance across your MES projects and achieve optimized operations.

Key statistics

Over
25 years'
experience implementing
and supporting MES

750+
MES experienced associates

91,000
hours of MES
validation experience

170+
global site deployments

Completed
300
manufacturing recipes,

2,000
packaging recipes

and
35,000
weigh and dispense recipes

Why Cognizant?

Cognizant's Life Sciences Manufacturing group provides end-to-end digital transformation solutions to the life sciences industry that keep systems running, improve supply chain efficiencies, and support clients' Manufacturing 4.0 initiatives. We specialize in delivering solutions and services across batch automation, data infrastructure and intelligence, MES, Lab automation, CSV, CSA and digital technologies to manage, control and optimize manufacturing. Our team has deep life sciences expertise, and we work closely with our clients to achieve a shared vision of advancing science, technologies and improving patient outcomes.

Cognizant's global network comprises more than 30,000 skilled life sciences professionals who work across global delivery centers in 37 countries to deliver and support our clients' digital transformation initiatives.

Through MES, automation, cloud-based technologies, data and digital technology solutions, we support our clients from project conception through to completion, across the entire manufacturing lifecycle. Our suite of solutions, enable better connected IT and OT systems and more informed, data-driven decision making—all while adhering to Good Manufacturing Practices (GMP).

To find out how Cognizant can help life sciences manufacturing organizations move into the digital age, [contact us today](#).



**Life Sciences
Manufacturing Solutions
Cognizant**



Cognizant (Nasdaq-100: CTSH) engineers modern businesses. We help our clients modernize technology, reimagine processes and transform experiences so they can stay ahead in our fast-changing world. Together, we're improving everyday life. See how at www.cognizant.com or [@Cognizant](#).

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