

# Cable Manufacturing Execution System

We developed CableMES for the wire and cable manufacturing industry to support Industry 4.0 advancements, and to help the manufacturers maximize plant production, improve product quality, manage inventory, and support on-time delivery.

### About CableMES - What is CableMES

This innovative cable manufacturing execution system harnesses extensive industry knowledge to assist you in monitoring, managing and controlling many aspects of the manufacturing process so you can focus on making custom cables.

CableMES leverages the global scope and scalability of the AVEVA™ system platform for data acquisition by quickly and cost-effectively connecting to any compatible shop floor device. The manufacturing execution system (MES) software integrates into your enterprise resource planning (ERP) system and conducts real-time data transfers in both directions, helping to keep the business in sync with the shop floor at all times.

# Digital transformation

CableMES integrates seamlessly into CableBuilder Enterprise, UL Solutions's flagship cable design software.

The MES software effectively manages resources by tracking customer order dates, length of cable required, availability of stock, and manufacturing production capabilities.

Production orders are automatically generated when integrated with CableBuilder and your ERP.

CableMES monitors and tracks many aspects of manufacturing to help ensure that your orders are processed on time and to cost while also finding hidden production capacity.

The integrity and accuracy of data intelligently combines operator progress reporting with automatic data gathering from the production lines, validating and minimizing operator interaction.



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# A closer look at CableMES capabilities

# **Operations**

- Real-time production information and automatic data capture highlight nonconformance issues using alarm systems, empowering you to take the immediate action required to resolve identified issues, e.g., if a machine is running below its target speed for production.
- Such data is also crucial for analyzing trends across product groups, process types, shift formations and shift patterns for production and process improvement, including automatically generating overall equipment effectiveness (OEE).
- The software tracks stock movement and availability through barcodes, allowing "at a glance" visibility to help ensure accurate stock management by location or item, and complete traceability of raw materials.



# Quality

- Quality control is inherent in every aspect of CableMES, from well-conceived plans to exceptional data recording.
- Analysis of quality losses, traceability and nonconformance management is crucial in managing products through the manufacturing cycle. CableMES helps you prevent errors from occurring by blocking incorrect raw materials from being used. It will immediately highlight a mistake and make it visible to all. Once an error has been identified, CableMES will not allow the reel or drum with the error to progress any further in the production process.



### Performance

- Each key role within the manufacturing process
  has specific requirements to maintain operational
  effectiveness. Whether it's the day-to-day
  sequencing of production orders or longerterm analysis of OEE, these operations need
  to mesh into a single, coherent team.
- CableMES utilizes the extremely powerful historian tool provided by AVEVA™, which can collect all process data from the manufacture of custom cables.
   Users can correlate this data with process and quality alarms down to an exact cable length produced to identify trends and provide long-term benchmarks.
- The historian tool and CableMES come with a wealth of reporting features that help management to take a strategic view of the business.



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# **Why UL Solutions**

We remain committed to digitalizing the cable certification process to address the key challenges that the wire and cable industry are facing today. "Our services are intended to help you be able to...."

- Achieve simpler, faster and more efficient certification
- Reduce errors through digitization
- Introduce efficient review of multiple standards from a single design
- Enhance in-house quality management for manufacturers globally

To help achieve a greater return on your investment, we offer:

- Implementation services to help maximize the benefits of CableMES – includes scope and system setup
- Training services to help train your personnel in the use of CableMES
- Support services to help maintain high availability of the application
- Integration of MES with your ERP and/or CableBuilder
- Customisation according to your needs

