

### Integrating Manufacturing (MES/MOM) (MS004)

Many manufacturing firms have made significant investments in flexible shop-floor execution systems (MES/MOM) and in sophisticated enterprise planning (ERP) systems. Those investments, however, cannot yield their full potential until each has access to the information and capabilities of the other.

The MESA B2MML (Business to Manufacturing Markup Language) and ISA-95 (Enterprise – Control System Integration) standards address that coordination problem by providing a sound, robust definition of business activities and the information that must flow between those two realms of Enterprise Planning and Manufacturing Operations Management.

This program is offered as a one-day course (classroom) or in 2 four-hour sessions (online). It defines an approach to integrating manufacturing systems (MES/MOM) with other applications in the business planning & logistics domain as well as in process control domain and explains applicable standards.

This is a comprehensive program for MES/MOM Consultants, System Analysts, Industrial IT Architects, Programmers, and Project Managers.



#### Agenda

- Introduction
- Recap of the ISA-95 models
  - Functional Hierarchy model
  - Equipment Hierarchy Model
  - Activity Model
- Object Models and Attributes for MES/MOM Integration
- Demarcation of MES/MOM with other applications
- Integration standards
  - B2MML
  - OPC UA
  - MQTT
- Other standards for Integration
- Manufacturing Services Bus
- Conclusions and Wrap-Up

**Prerequisites:** Basic knowledge of MES/MOM and ISA-95

### Price and Schedule

**Registration Fee:** EUR 895

**Schedule:** see [www.mom-institute.org](http://www.mom-institute.org) or ask Sarah Knight ([sara.knight@mom-institute.org](mailto:sara.knight@mom-institute.org)).

### Vision

MOMi's vision is to support manufacturers embarking on manufacturing excellence programs, MES/MOM deployment and the transition to the 4th Industrial Revolution.

MOMi offers best-practice education and business consultancy services to support the full change cycle from awareness and feasibility to continuous improvement initiatives in a dynamic operations environment.

MOMi provides independent education programs to manufacturers, preparing their people to leverage new smart technologies through the power of knowledge.

### Our experience, your success

#### MOMi's Instructors Thought Leaders in Manufacturing Operations

- MOMi's team of instructors has extensive experience in manufacturing and education. The instructors are also excellent business consultants.
- MOMi's education services comprise many standard courses and workshops on relevant topics.
- Programs are delivered as public sessions as well as in-house. In the last case, the content can be tailored to your specific situation.
- MOMi's education programs and workshops are delivered by independent, professional instructors.