

## Welcome to our Newsletter

The start of spring is an opportunity to embrace new opportunities and invest in the future. Like the start of a new year, spring is a chance to set intentions. So, my question to you is what are your spring intentions? Is it a MES implementation? Do you need to justify MOM investments? Does your team need independent manufacturing education? If so keep reading.



In this latest edition of MOMi's newsletter we highlight MES education and how it can support the business change during your digital transformation journey. For business consultancy in focus in this edition Mathijs Philips looks at [justification of shopfloor connectivity](#). Gerard Ipskamp kicks off a new series of articles around MOM. Article one looks at [Quality Control: In-, on-, at- and off-line testing](#).

As always if the team at MOMi can support your manufacturing requirements, please reach out to either myself, [Gerard Ipskamp](#) or [Mathijs Philips](#).

In the meantime, I hope you enjoy reading the 15th MOMi Newsletter, and don't forget you can find all the other editions at [www.mom-institute.org/newsletter](http://www.mom-institute.org/newsletter) Please, let us know if you have any questions either via our website or by e-mailing me directly [Sarah.Knight@mom-institute.org](mailto:Sarah.Knight@mom-institute.org).

**Sarah Knight**  
**MOMi Team Lead**  
**Global Education Program Manager**

## About MOMi

The Manufacturing Operations Management Institute (MOMi) is an *Expert Division* of ATS Global.

MOMi offers best-practice business consultancy services to support the full change cycle in a dynamic operations environment and provides strategic and tactical advice to manufacturers, delivering the 4<sup>th</sup> Industrial Revolution.

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

Our team has extensive experience in supporting manufacturers around the globe and provides best-practice services to help them to continuously improve their performance (step-by-step).

MOMi's consultants and instructors work from a pragmatic basis to deliver effective, deployable strategies. MOMi's team consists out of independent, professional experts in the domain of Manufacturing Operations Management.

More: [www.mom-institute.org](http://www.mom-institute.org)

## MOMi Education in Focus

### MES All you need to know!

Going back to basics and keeping things simple can be the foundation for remarkable achievements. The manufacturing industry is evolving rapidly with Big Data, the Internet of Things, Digital Transformation, and Smart Factories. But how much of it is truly real?

One thing is certain: manufacturing organizations won't become self-organizing without first achieving manufacturing excellence through Manufacturing Execution Systems (MES).

This comprehensive program—offered as a 2-day in-person course or a 4-sessions online series—provides an in-depth overview of MES and how to maximize its potential both in the short and long term. Achieving real change requires aligning manufacturing operations, governance, workforce skills, and IT systems. This course introduces key industry standards such as ISA-95 and offers a structured roadmap to enhance manufacturing performance.

As you prepare for the future of smart technologies, understanding today's solutions and best practices is essential. Learn how to justify, implement, and sustain MES successfully to drive long-term success in your manufacturing operations

Next opportunity to join MES All you need to know! is April 14 – 17, online 14:00 – 18:00 CET.

[Register here → → → www.mom-institute.org](https://www.mom-institute.org)

### Recognizing the signs for an education initiative inhouse

Education and especially inhouse education can make the success in a MES project. The following signs show a need for education. A team leader or manager could look for the following signs to determine whether an in-house education will have substantial benefits:

#### Trigger 1: Frequent operational errors and inefficiencies:

- Frequent mistakes in MES usage or automation processes,
- High dependency on vendor support for basic troubleshooting,
- Operators are struggling to follow standard workflows.

## **Trigger 2: Knowledge gaps among team members:**

- New hires or existing employees lack familiarity with MES functionalities,
- Limited understanding of automation technologies and integration concepts.

## **Trigger 3: Compliance and quality issues:**

- Struggles to maintain compliance due to poor documentation or misinterpretation of system outputs,
- Errors in tracking and reporting due to improper MES usage.

Other important triggers are:

- Lack of cross-functional collaboration. IT, operations, and engineering teams do not effectively communicate about MES requirements and usage, and there are gaps in understanding between production staff and MES specialists
- The need for continuous improvement & optimization. Teams do not actively use MES data for process improvements and opportunities for automation are missed due to lack of internal expertise.

These are some of the triggers that can indicate that education and teambuilding are needed.

If multiple signs apply, investing in a structured in-house education (e.g., training programs, knowledge-sharing sessions, mentorships) can enhance efficiency of the individuals and the team(s).

MOMi can help you with this. We can train you in MES, LIMS, ISA95, and MESA's Manufacturing Maturity Model assessment and roadmap to grow in maturity.

## Business Consultancy in Focus

### Value at the basis: shopfloor connectivity

By Senior Business Consultant [Mathijs Philips](#)

Many conversations around digital manufacturing operations often start with functional topics: what functions are required from IT solutions to make sure they support shopfloor operations and improve shopfloor performance? Which new features can be valuable for operations?

Connectivity to shop floor equipment often comes second: if new solutions need data from the shop floor, or if the plan is to send instructions to machines, the connectivity question comes up on how to make this happen.

And don't be surprised if shopfloor connectivity starts to play a big role in an implementation project to get all that functionality running. Process automation equipment like SCADA systems and PLC systems on the shop floor are often a collection of different brands, ages, standards and technology. So, the ambition to connect with all may require a step by step, PLC journey to PLC, impacting project, timeline and energy.

Three tips:

- Understand what is happening on the shop floor in terms of automation and connectivity: make the incentivization to find out: What is where? What are the connectivity options? Who owns what? "and how" is it supported?
- Consider that the future will be more digital and connected. Instead of building point to point connections for the scope of the project, consider a more fundamental approach: How would your connectivity solution look like in a green field, or if you design not for the current question, but for the questions in the coming years to come as well?
- There is a technical dimension to the topic of connectivity, addressing the tools, systems, platforms, and protocols to use. But there is also a data dimension that needs to be addressed: what data do we need, where do we have it, how do we assess its quality and availability? Both dimensions, the technical and the data dimension, deserve attention.

If the topic of shopfloor connectivity is approached structurally and with care, data becomes available, can be managed and can be built out further in each digitalization step. A load of applications and solutions are available that can help you get value out of that data and improve the shop floor performance. It just needs to be available, timely, in the right detail, and of the right quality.

If you are looking for solutions that can help to bring shopfloor data together and manage it uniformly in context in one source, you may explore the solutions that help to build up a Unified Name Space.



*Figure 1: You want to keep what is good. Change what can be done better. And innovate with additional features.*

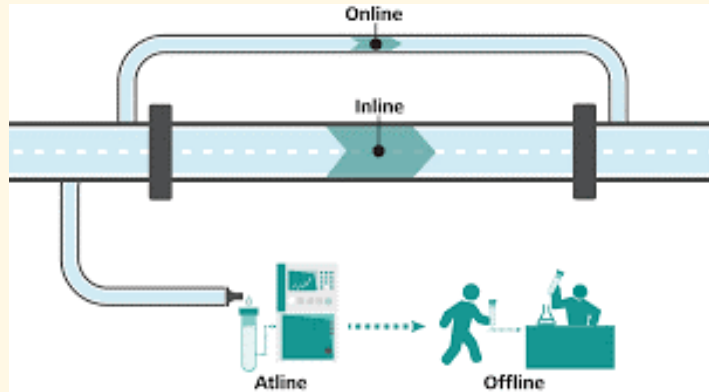
## Quality Control: In-, on-, at- and off-line testing

By Senior Business Consultant Gerard Ipskamp

The best picture I ever found to explain the differences was in a blog of Metrohm (<https://metrohm.blog/on-in-at-offline/>).

For **online/inline** testing it is essential that the time range in which information about process or material properties is obtained is shorter than the time in which these properties change.

Online/inline testing allows 'continuous' process control. Because of this characteristic it is more logical to map this capability on production solutions like MES or SCADA (SPC) systems than on quality solutions like LIMS, inspection tool, LES, or ELN.



**Offline and at line** testing, on the other hand, are characterized by manual sampling followed by discontinuous sample preparation, measurement and evaluation.

The material properties can change during the time between sampling and the availability of the results, so direct process control is not intended. LIMS and inspection tools are solutions for offline situations.

The at-line situation depends on who is responsible for the execution of the testing. So, let's dive a little deeper into this case, assuming the situation that an operator is responsible.

You need product master data for the testing executed by an operator available. The master data is managed either in a PLM/PDM or in MES. This master data management is version controlled and will tell the operator when to take a sample, what to measure and when to approve. If relevant for the tests, management of references and calibration lines are also mandatory functionality.

If the operator is executing a test plan for a sample or group of samples, an event in MES will trigger the automated creation of a measurement, like after material receiving by the operator.

After that most or all activities in the following process should be possible in MES.

- Sample labels can be printed
- Check if operators are qualified to execute the measurement
- Test results can be entered into or interfaced from equipment (for example: balance)
- Register resources like equipment and check validity of equipment
- 'Normal' calculations can be made (i.e. calculated fields are possible) in the solution.

- The operator receives immediately feedback of the evaluation against the specifications (status like Planned, In Spec, Out of Spec, On Hold).
- Create quality related work alerts/events like non-conformity in case of an out-of-specification.
- Status of the test plan execution of all the samples.
- Some results (from production record) may be interfaced to an ERP, WMS, APS, LIMS or Inspection tool.

This example use case shows that whatever you decide to implement, be aware of the requirements that should result from that.

## What our Customers Say...



*"Thank you for the great training and inspiring discussions. The course gave practical improvement ideas for our value delivery model to reach higher value by utilizing standard products more rapidly in customer projects. I found the manufacturing*

*strategy/maturity, enterprise architecture, and process design perspectives most intriguing."*

**Sakari Aulanko, Technology & Innovation Lead at Novotek Oy**

*MESA Methodologies CoC*



## **Royal Swinkels** Master Data Quality and PLM/LIMS Selection

*"MOMi has been fantastic in helping us select both a PLM and LIMS system. Thanks to their expertise and guidance, the entire process was very structured and efficient. Gerard Ipskamp, with his expertise and sharp insights, guided us through the entire selection process and ultimately helped us make an informed decision.*

*Thanks to MOMi, we were able to select the right suppliers within a short period of time. Their approach was professional and goal-oriented, and with their guidance, we were able to identify the best options for our organization.*

*We are very pleased with our collaboration with MOMi and Gerard Ipskamp and would definitely recommend them to other companies looking for a PLM or LIMS system. MOMi helped us in making this important decision, and we are confident that with their help, we made good choices."*

**Marye Klaasen; Head of QESH; Swinkels**



## Education Schedule

MOMi's education programs are delivered as public sessions as well as in-house. In the last case, the content can be tailored to your specific situation.

Please ask [Sarah Knight](#) for more details about In-house programs, typically for 10 participants or more, or if you want to participate with a smaller group. Attractive reduced fees may apply.



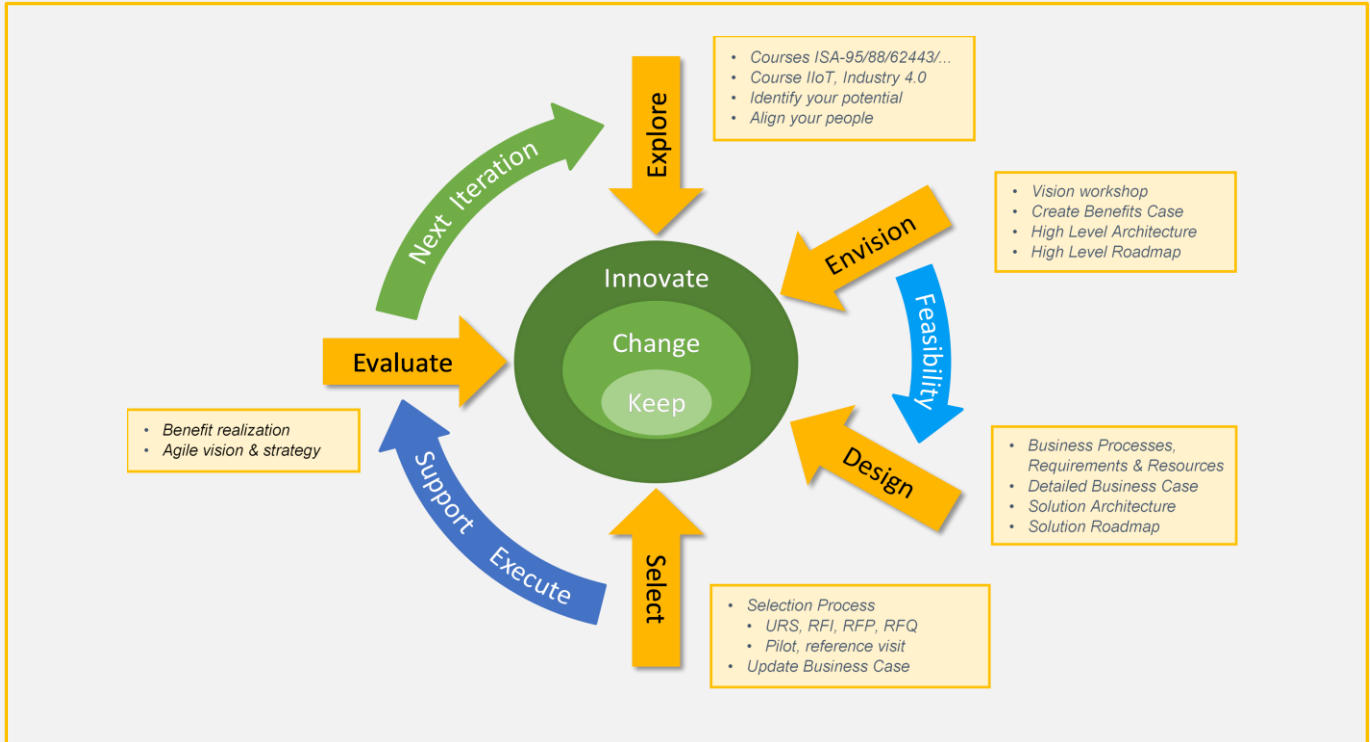
For more information and registration, see our [website](#).

Education Program	Days	Start Date	Location	Price	Register
<a href="#">MES: All You Need to Know!</a>	4	April 14, 2025	Online (14:00 - 18:00 CET / 08:00 - 12:00 EDT)	€1,940	<a href="#">Registration</a>
<a href="#">Manufacturing Maturity to Improve Performance</a>	2	April 22, 2025	Online (14:00 - 18:00 CET / 08:00 - 12:00 EDT)	€1,120	<a href="#">Registration</a>
<a href="#">MESA B2MML &amp; Integration Fundamentals Certificate of Competency</a>	2	April 24, 2025	Online (14:00 - 18:00 CET / 08:00 - 12:00 EDT)	€1,500	<a href="#">Registration</a>
<a href="#">MESA MES/MOM Certificate of Awareness</a>	3	May 6, 2025	Online (14:00 - 19:00 CET / 08:00 - 13:00 EDT)	€2,450	<a href="#">Registration</a>
<a href="#">MESA MES/MOM Certificate of Competency</a>	5	May 12, 2025	Online (14:00 - 19:00 CET / 08:00 - 13:00 EDT)	€4,000	<a href="#">Registration</a>
<a href="#">Integrating Manufacturing (MES/MOM)</a>	2	May 20, 2025	Online (14:00 - 18:00 CET / 08:00 - 12:00 EDT)	€1,120	<a href="#">Registration</a>
<a href="#">MESA MES/MOM Certificate of Awareness</a>	3	May 21, 2025	Online In French (10:00 - 16:00 CET)	€2,450	<a href="#">Registration</a>
<a href="#">LIMS in Manufacturing: All You Need to Know!</a>	2	May 22, 2025	Online (14:00 - 18:00 CET / 08:00 - 12:00 EDT)	€ 1,120	<a href="#">Registration</a>
<a href="#">MESA MES/MOM Certificate of Competency</a>	5	June 2, 2025	Online In Dutch (10:00 - 15:30 CET)	€4,000	<a href="#">Registration</a>

<a href="#"><u>MESA MES/MOM Certificate of Awareness</u></a>	3	June 24, 2025	Online In Dutch (10:00 - 15:30 CET)	€2,450	<a href="#"><u>Registration</u></a>
<a href="#"><u>MESA MES/MOM Certificate of Awareness</u></a>	3	July 15, 2025	Online (14:00 - 19:00 CET / 08:00 - 13:00 EDT)	€2,450	<a href="#"><u>Registration</u></a>
<a href="#"><u>Applying ISA-95: All You Need to Know!</u></a>	4	July 22, 2025	Online (14:00 - 18:00 CET / 08:00 - 12:00 EDT)	€2,460	<a href="#"><u>Registration</u></a>
<a href="#"><u>MESA MES/MOM Certificate of Competency</u></a>	5	July 28, 2025	Online (14:00 - 19:00 CET / 08:00 - 13:00 EDT)	€4,000	<a href="#"><u>Registration</u></a>



## MOMi Business Consultancy: Control the Business Change Cycle



## MOMi Education: A Comprehensive Set of Programs

