

The 10 - tips for successful MES-introduction

Industry 4.0 plans and smart factory, guide many industrial companies to MES-projects. So that the implementation due to bad planning doesn't finish in a „no go“, we offer the following view points to **simplify the complexity and keep your budget in focus**. Mistakes can easily cause unnecessary cost and misguide you. If you follow the ensuring 10 steps, you already have the basis for a successful implementation for the MES-system.



1. The managing directors support the decision to your MES-Implementation.

The realisation of a MES-Project presupposes the conviction of the managing director, which can be based on the following benefits.

- Create highest transparency in production.
- Early detection intervention by faults.
- Controlling and optimising of production processes.
- Communication and linking between humans and machines as in the interest of Industry 4.0.
- Increased usage of machine capacity as well as objective communication.
- Time-saving by detailed fault analysis.
- Any time and everywhere receive real-time-data for your production.
- Minimize rejects, Interruptions, setup-times, run-times, search-times, stoppages.
- Setting the foundation for paperless production.
- Following and analyzing and repairing technical defects of machines during a certain period and such improve work-quality and security.
- Precise data for calculation and controlling.
- Detailed past-calculation, on which price-finding and competition is based.
- Increase the employee motivation.
- Increase key-figures e.g. OEE or degree of usage.

2. Analyze your status quo.

Your first thought should always be based on your status quo. It should be based on actual faults and difficulties as well as challenges which an MES-System could master. That's how you can judge later whether the MES-Project leads you into the right direction and faults in the production could be solved.

3. Set yourself realistic goals.

Easy reachable goals

... should be defined before you decide on an MES-System. These requirements support the keeping and following of realistic goals during the entire project-phase and guarantee continuous progress supervision. That way intern delays and misunderstandings are avoided.

A precise goal-definition

...should be given so there is no room for mis-interpretation and core-goals can be followed right up to the end. Additional goals should only be added after implementation, as these will show up all by themselves during the project-run when the first efficiency-optimisation is taken place. You can adjust your goals according to the benefits formally defined MES-Implementation and redefine them.

Organize your projects goals into small steps

...That way you gain faster and sustainable success and create the base to measure your progress.

4. Create requirement documents.

If you are sure of your goals you can begin to create requirements documents. These include detailed requirements and offers the project partner the possibility to judge whether the MES system can do justice to the process or more work needs to be done. Provide first a brief overview by describing the original situation and only then proceed to describe the details. Now describe precisely which functions the system is supposed to cover and what you expect from the MES system. Should there be any restrictions then sum up these precisely and feel free to ask questions.

5. Project organization, naming a project manager.

Name in time an MES-project-manager

... or a project group, in which responsibilities and functions are clearly defined. Make sure that the employees can spend enough time on the project without neglecting their daily tasks.

Create milestones

... and plan times, deadlines and tasks, based on the specifications and agreements as well as completion date of the MES provider.

Observance of the implementation across several departments

... which can reach within a company from the production floor to the management level. An MES-system though cannot only be deployed in one factory, but can be as to request include further factories, countries and languages, which have to be integrated into the structure.

Informing the IT-department and electricians on time

... and include them into the project. The implementation of necessary servers and interfaces can then be done on time, so that a connection of an MES-system to existing structures can be guaranteed, as well as for the creation of a linking structure and the collection of machine signals.

6. In time information for employees and works council/completion of an operations association.

Don't ever face anybody with a fait accompli, but inform affected employees and the works council before time. That way rules and personnel problems can be cleared and fears concerning for example the observation of the system can be resolved. They will soon understand that the data collection of machines can quickly turn into a positive result for the company, advantages of efficiency and ease the stress of employees via transparency and less discussions.

7. No hurried actions!

Probably you found it difficult to start with to adjust to the idea of digitalization, however when you finally get there, you should keep the overview of the operation and shouldn't rush into anything. Follow-up operations become apparent on their own by working with the system and the wish to optimize further levels. From experience with a great deal of clients we can advise you to advance step by step and avoid not manageable projects even when they include the minutest idea. Please ensure that your MES provider is ready to implement individual customizing and programming, concentrate however first on the core elements, so that a promising success story doesn't turn into a failure.

8. Presuppose Interfaces.

With the help of an interface configurator of the MES provider an integration of any ERP system should be possible. That way you will be independent in the choice of your ERP provider and will remain so within your running production. This means that the most important will stay in your focus: the ease of usage for you as the user of the software solution – with a clean connection to your ERP-system.

9. Create a comprehensible operation manual.

You will receive documentation for the operation of the system. These you should adjust to the work departments and included employees to avoid misunderstandings and ease the work with the system.

10. Plan training for your users and create acceptance.

To ensure that your employees can work with the system immediately you should provide a workshop e.g. schooling for all involved following the go-live.

To achieve acceptance of the involved employees, an open communication about the project should be guaranteed, this way an efficient usage in their own department can be recognized. Via early information sharing and integration, the fear of change can be resolved and quicker identification with the new system achieved.