JAG PROCESS PLANTS AUTOMATION ROBOTICS

JAG MES Standard

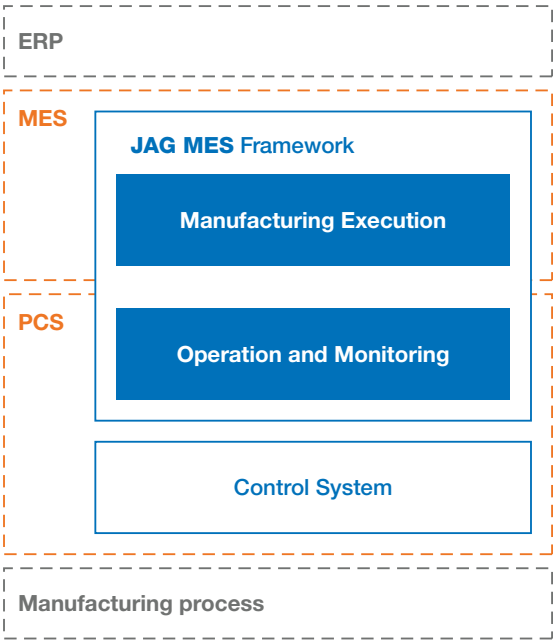
For industrial automation, robotics and small process plants.

JAG MES Standard is designed for a wide range of applications in the field of industrial automation, robotics, infrastructure automation and the process industry.

The core of most solutions created with JAG MES Standard is the Visualisation module. It is designed for Operation and Monitoring and provides the user dialogs for the operators. These dialogs are tailored to the application, so that operators have clean and easy-to-use interfaces to work safely and efficiently with machines, robots or plants.

Other standard modules can be licensed as required to deal with articles, recipes, daily protocols, logbooks and plant parameters. In case the standard modules do not match the specific requirements of an application, the modular design of JAG MES allows us creating customer-specific variants or entirely new modules.

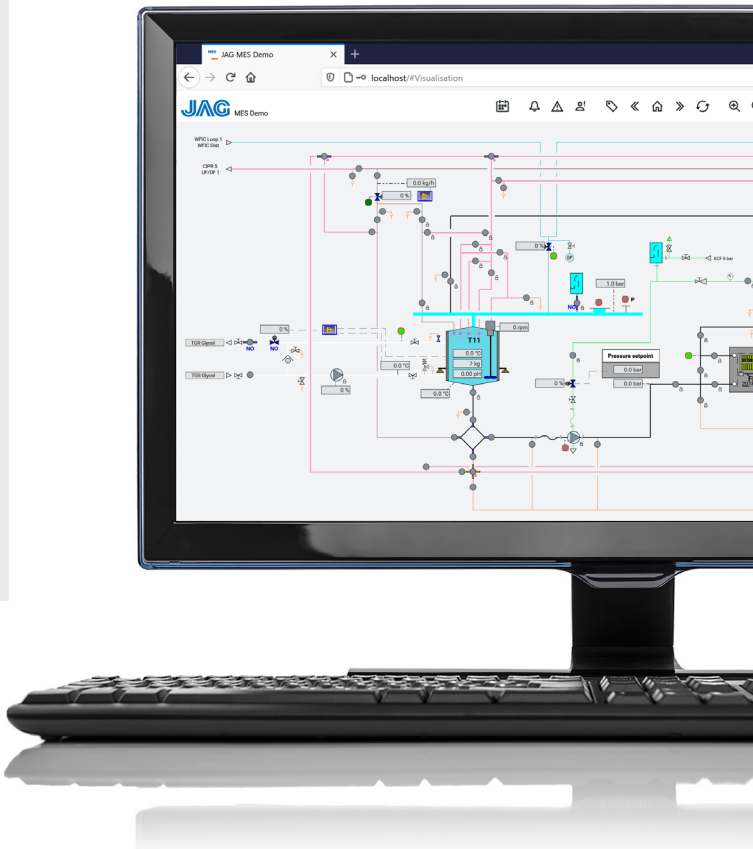
JAG MES Standard is fully web-based. This is very cost efficient thanks to the use of existing hardware as clients and simplifies the deployment and – if desired – remote access.



Features and benefits

JAG MES Standard offers the following features and benefits:

- **Fully web-based solution**
- **Existing PCs, tablets or smartphones can serve as clients. Remote access readily possible**
- **Clean and simple to use dialogs for the operators**
- **Modular design for efficient creation of customer specific modules to cover specific requirements**
- **Up to date technology and architecture**



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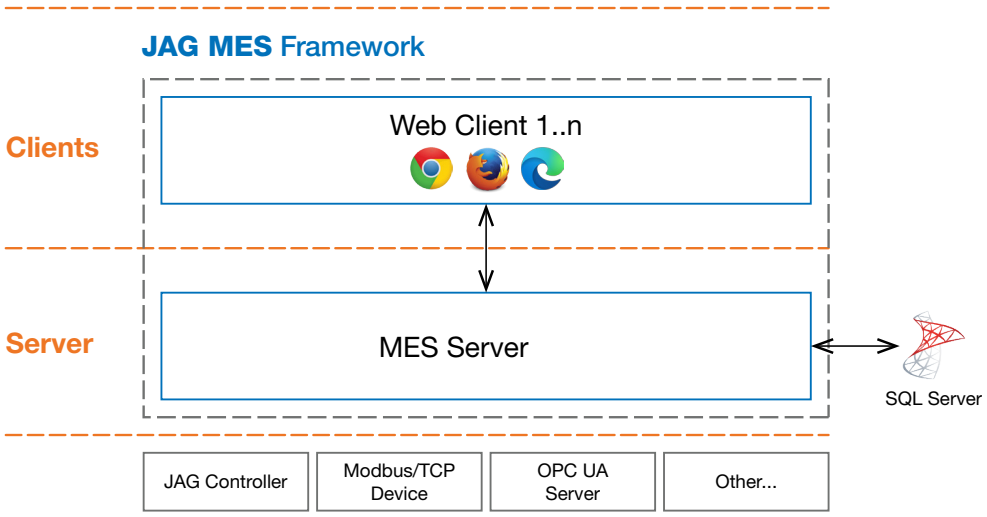
Client / Server architecture.

Built for modularity and extensibility.



JAG MES has a classical Client / Server architecture which is designed for multiuser environments.

The core of the MES Framework is the **MES Server**. It runs as a service and offers a large number of interfaces. For the graphical user interface it provides the backend to the Web Clients. At the same time it interacts with the JAG and third party automation components and stores all data in SQL databases.

Thanks to the **LUA scripting** capabilities of MES Server, data can easily be exchanged in a large number of formats, e.g. Modbus/TCP, OPC UA, EtherNet/IP, MQTT, REST and database connections. This means that third party machines, package units and other devices can easily be integrated.

The advantage of the **Web Clients** is that only a current generation web browser and a network access to the MES Server is required. This allows using existing hardware as clients, simplifies the deployment significantly, and allows a remote access to be setup easily within the LAN or via VPN.

When working with historical data, the Visualisation Module seamlessly works with **JAG Historian**. The TAGs for the storage of historical data are created by the visualisation automatically. With the optional Replay feature, the pictures of the visualisaton can be animated based on data of JAG Historian. This allows not only to see the state of the plant for moment in the past, but as well to see a movie of past visualisation in normal speed, timelapse or slow motion.

JAG MES Standard offers an integrated **User Management**, which allows defining user rights and enforcing authentication during operation. In environments where the requirements regarding traceabilty are high, the JAG USR User Manager can be used instead. It offers a role-based user right management, the reference to active directory users, the use of the JAG IDS identification system based on RFID TAGs, and logs all user activities that require specific user rights.

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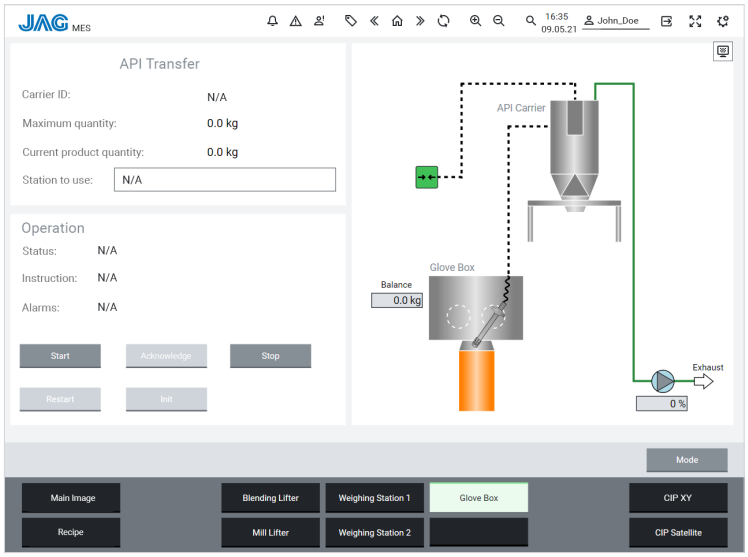
Modern and simple to use graphical user interfaces.

Examples of what the operators see.

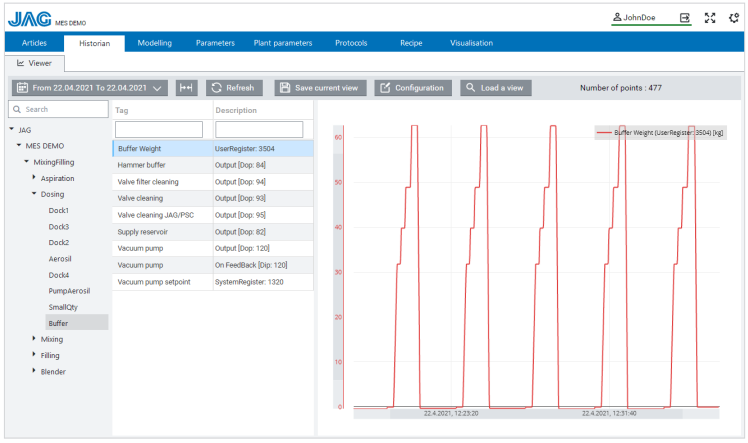


Visualisation

The Visualisation module is the heart of JAG MES Standard and is used for Operation and Monitoring.

In order to visualize the status of the installation and to provide the controls required to interact, the images are tailored to the needs of the operators.

Thanks to the use of web technology the images can be viewed on all devices that have a last generation web browser installed and have got network access to the MES Server.



Ad hoc analysis of historical data

JAG Historian provides historical data to the Visualisation module so trend curves can be viewed for individual elements.

As a complement there is a dedicated viewer, which is particularly useful for the ad hoc analysis of historical data.

The TAGs to be included in the analysis can be dynamically selected by simple drag and drop from the TAG list to one or several canvases. This allows creating custom views in a breeze.

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