

zenon Werum MSI Interface

Direct communication between MES and production

Körber Software, manufacturer of the Werum PAS-X has configured a communication interface called MSI (Message-based Shopfloor Integration) as a means of overcoming the limits of current OT and IT integrations. For companies equipped with the PAS-X MES system, Werum MSI is a solution that fulfills data integration requirements according to GAMP5 software category 4.



Using a centralized process historian is a classic approach to integrating data from machines and production lines. Although this method works, it does not make it possible to record all the relevant information that is required regarding compliance. This challenge forces you to your alarms, events, etc. in two or more systems in order to meet data integrity requirement. This challenge forces you to duplicate your alarms, events, etc. in two or more systems in order to meet data integrity requirements. In contrast, modern software platforms and SCADA systems that operate at the OT level are able to create and directly save electronic recordings while complying with said data requirements. Thanks to the Werum MSI Interface, machines can be connected directly to PAS-X MES.

THE RIGHT INDUSTRIAL CONTROL SOFTWARE FOR EVERYDAY'S CHALLENGES

This is where a communication interface called MSI (Message-based Shopfloor Integration) comes into play in order to solve the limitations of current OT and IT integrations. Today, WERUM PAS|X is the leading Pharmaceutical & Biotech MES used to implement Electronic Batch Records (EBR). To communicate with shop floor equipment, PAS|X offers the MSI adapter. The adapter is designed as a message-based solution and builds on the industry-standard communication technology OPC-UA and REST-based web services. PAS|X sends batch parameters in

messages to the Industrial Control Systems and receives values or GMP exceptions. Using zenon as Industrial Control System you will be able to bridge the gap with Werum PAS|X by offering an integrated configurable MSI connector to connect machines and manufacturing lines with ease.

CONNECTING EXISTING EQUIPMENT VIA MODULAR MIDDLEWARE

Existing machines that do not feature a direct interface to Werum PAS-X or integrated data retention require middleware to continuously transfer data. The zenon Software Platform offers a middleware solution that is both modular and scalable. In this application, zenon offers integration with existing machines through extensive connectivity with PLCs and field devices and integration with Werum PAS-X via the MSI interface.

DOES WERUM PAS|X INTEGRATE WITH ZENON?

zenon's MSI interface allows you to receive and send batch information from/to PAS|X directly to your equipment as well as sending GMP alarm data to PAS|X. Zenon MSI interface is a configurable module, as a GAMP5 CAT.4 Software module. The zenon Werum PAS|X integration will allow you to reduce errors, improve batch release time and reduce downtime between batches. But most importantly, it allows you the much-needed flexibility of a modern life sciences facility.

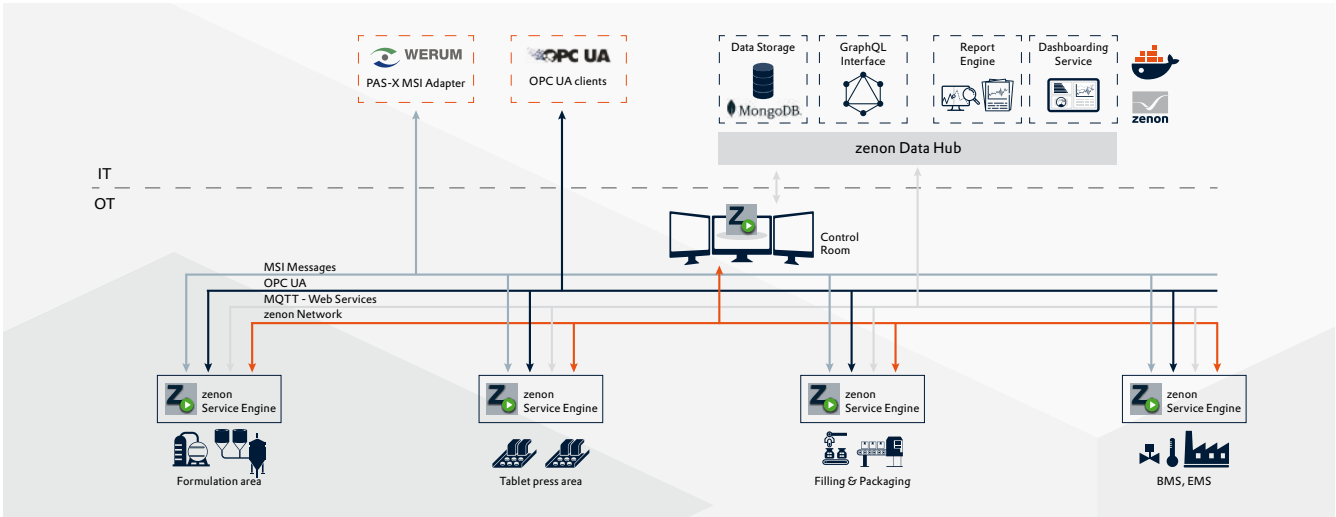


Figure 1: zenon as a modular Automation Integration Layer (AIL), including Data Storage, Reporting and IT integration

ZENON IS SUPPORTING THE FOLLOWING MSI MESSAGES:

Order Parameter Message: Used by PAS|X to send parameters to zenon, or by zenon to send back counters and values. (e.g., Start Batch, In-Process Control for examples, End of Batch).

Exception Message: Triggered by zenon when a GMP relevant deviation occurred during batch execution. (e.g., when the Sterilization Temperature Low Limit Alarm is activated).

Order Status Message: Triggered by zenon to inform PAS|X about current equipment status or operation in progress. (e.g., “Recipes download to PLC in progress ...”).

Order Abort Message: Triggered by zenon to inform PAS|X to indicate that the order or recipe on the equipment has been aborted.

With the push for productivity and flexibility in pharmaceutical production lines, the Werum PAS|X zenon integration provides the functionality your operation needs.

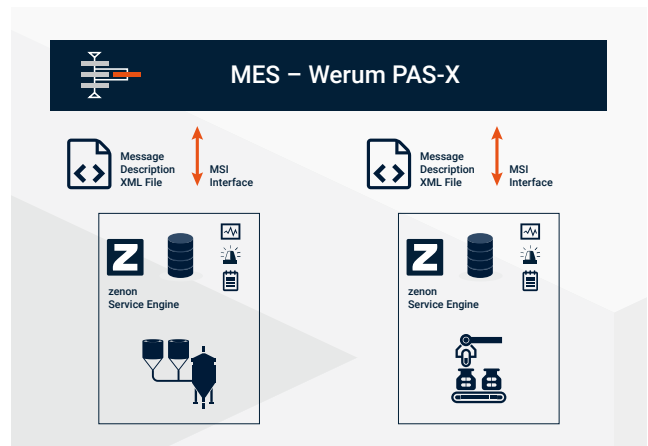


Figure 2: direct integration of PAS-X MSI Plug&Produce Ready machines with integrated Data Storage capability

FAST FACTS

- ▶ Native interface to Werum PAS-X
- ▶ Seamless IT/OT integration
- ▶ Networking and extension of heterogeneous hardware and software landscapes
- ▶ Configurable module according to GAMP5 software category 4
- ▶ Plug&Produce integration of equipment into MES
- ▶ highest level of data integrity
- ▶ Reduce equipment integration and validation costs