

## ASTRAZENECA SUCCESSFULLY DIGITIZES MANUFACTURING PROCESSES WITH GLOBAL STANDARD MES CORE SYSTEM

Deployment of AstraZeneca's standard MES on the basis of Werum's PAS-X / Single software version for all sites / Standardized business processes and enhanced data integrity



AstraZeneca, a leading biopharmaceutical manufacturer, had a vastly diversified MES landscape in place at their production sites around the world: from paper-based execution to various legacy systems from different vendors.

### AT A GLANCE

#### Challenges

- Digitize paper-based processes
- Harmonize diversified MES landscape
- Replace legacy systems in production

#### Solution

- Use a common technology platform
- Establish a standard MES core program on the basis of Werum's PAS-X
- Enforce a single software version for all sites worldwide

#### Benefits

- Enhanced data integrity
- Availability of digital information to improve processes
- Use of global content and global implementation services
- Reduced development effort, rollout times and maintenance costs



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**Rod Hoffman**, Senior Manufacturing Business Analyst, AstraZeneca, USA

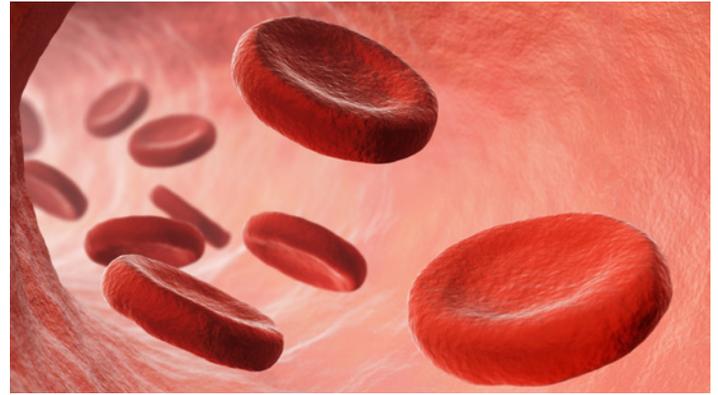
In order to harmonize and standardize its MES landscape, the company opted for Werum IT Solutions as its preferred MES supplier and later decided to establish a global standard MES core system on the basis of PAS-X.

"We conducted a feasibility study and came to the conclusion that PAS-X MES was the best fit for our global requirements," says Rod Hoffman, Senior Manufacturing Business Analyst at AstraZeneca. "But without central coordination and a core program, our PAS-X deployments were not standardized from an IT or business process perspective."

#### Why using a standard MES core

The goal of AstraZeneca's standard MES core program is to use a common technology platform alongside standards and guidelines to help drive business process standardization across their network. The pharma company aims at a single software version in all manufacturing sites, thus reducing development effort, rollout times and maintenance costs. The standardized PAS-X usage allows the development of global content for process harmonization and of global implementation services. Site-specific customizations are no longer supported.

"To sum it up, our core program ensures an uplift in data integrity and availability of digital information to gain valuable insights – our basis to improve our processes for increased efficiency," states Rod Hoffman from AstraZeneca.



### PAS-X choice in the context of global IT program

The decision for Werum's PAS-X MES was made in the context of AstraZeneca's Digital Uplift program. This IT program aims at delivering improvements across AstraZeneca's manufacturing network – including digitizing paper-based processes and enhancing data integrity in manufacturing through delivery of key technology platforms. In addition to PAS-X MES, these platforms include SAP modules, Data Historian, and quality systems.



### Template for standard MES core

AstraZeneca's standard MES core program is based on PAS-X 3.1.7. The system from the plant in Mount Vernon, Indiana served as a template to leverage the ERP interface to the North American SAP instance. In addition to this customized interface, further deviations from PAS-X include a flexible MBR identification approach, calculating and reporting expiry date to SAP, and planning capabilities for campaign weighing.

*“By the end of the program, we could have as many as 13 new standard MES core sites.”*

*Rod Hoffman, Senior Manufacturing Business Analyst, AstraZeneca, USA*

In Mount Vernon, PAS-X replaced a legacy Emerson Synca-de system and is used in primary formulation and packaging of AstraZeneca's diabetes products. Implementation started with replacing the existing system installation used in packaging, weighing & dispensing and material flow. They are now continuing the journey, to replace paper batch records in formulation with PAS-X. This helped establish best practice for AstraZeneca's standard implementation approach.

### PAS-X goes live at key US sites

After the successful first standard MES core go-live in Mount Vernon, the go-lives of Frederick, Maryland and Newark, De-

laware soon followed. Frederick represents AstraZeneca's largest biologics manufacturing facility. Here, the company produces large-scale mammalian cell cultures which are used for oncology and other biologics medications. Newark is a strategic pharma site responsible for the packaging of the majority of AstraZeneca's products sold in North America.

### New standard MES core ensures future upgrades

In order to take advantage of the new PAS-X 3.1.8 features and future upgrade possibilities to 3.2, AstraZeneca decided to lift their MES core to the 3.1.8 basis. This new standard MES core will be completed by various language packages, such as Chinese, French, Japanese, and Swedish.

“From that point, all new sites will go live with our next generation standard MES core. The old MES core sites will be upgraded subsequently. By the end of the program, we could have as many as 13 new standard MES core sites,” says AstraZeneca's Rod Hoffman.

#### CUSTOMER

AstraZeneca is a global, science-led biopharmaceutical company that focuses on the discovery, development and commercialization of prescription medicines, primarily for the treatment of diseases in three main therapy areas – Oncology, Cardiovascular & Metabolic Diseases and Respiratory. The company also is selectively active in the areas of autoimmunity, neuroscience and infection. AstraZeneca operates in over 100 countries and its innovative medicines are used by millions of patients worldwide.

[www.astrazeneca.com](http://www.astrazeneca.com)

#### INDUSTRY

Pharma & Biotech

#### SITE

Mount Vernon, Indiana, USA  
 Frederick, Maryland, USA  
 Newark, Delaware, USA

#### KEY WORDS

**Manufacturing IT, MES, PAS-X MES, Standardization, Digitization, Pharmaceuticals, Biologics, USA**

