

HERAEUS AND SAP®: HARMONIZED AND REFINED WITH FLEXUS

REFERENCE REPORT

The precious metals and technology group Heraeus relies on mobile apps integrated in SAP® and the material guidance system of Flexus AG for its internal material flow control.

“ Flexus AG convinced us with its extensive SAP know-how and user-friendly design of its flexible solutions.”

Michael Müller
Head of Competence
Center Logistic
Heraeus Infosystems GmbH
Location Neu-Ulm





Hard to comprehend: Anyone who wants to describe the precious metals and technology group Heraeus in a few words will hardly do justice to the diverse activities of the family-owned company. The Hanau-based global player offers products and solutions for the environment, energy, electronics, health, mobility and industrial applications. While the Heraeus brand is not well known among end consumers, it is highly regarded by industrial customers worldwide. The Hanau-based global player offers products and solutions for the environment, energy, electronics, health, mobility, and industrial applications. While the Heraeus brand is hardly known to end consumers, it is highly regarded by industrial customers worldwide.

As part of the “Magellan” project launched in 2013, 20 SAP systems used across the group will be standardized and harmonized in an IT platform. The process should be completed by 2020.

USER-FRIENDLY DESIGN

“Magellan was one of the prerequisites for introducing a mobile booking system for all raw material and goods movements along the internal production and supply chain,” explains Michael Müller, Head of Competence Center Logistic at Heraeus Infosystems GmbH. The main objective of the mobile solution was to increase transparency and inventory security.

“By posting material or goods withdrawals directly at the shelf using a handheld device, we gain process reliability,” says Leon Strack, the solution architect who is responsible for the topic. Without a mobile solution integrated into SAP, these postings can only be done at the control desk of a stationary workstation, which can lead to time delays and inaccuracies.

In the search for a suitable supplier, the SAP partner Flexus AG and the FLX-MOBIL solution were chosen. The user-friendly design of the Flexus solution is particularly evident in the Fiori Apps programmable with FLX-MOBIL. At Heraeus, the device-independent apps appear as clickable tiles on the touch screens of the mobile computers, ensuring a high degree of clarity.

NINE TEMPLATES FOR FIVE CONTINENTS

In joint workshops, nine basic templates were developed for FLX-MOBIL with which almost all posting processes at Heraeus’ 100 locations on five continents can be mapped. “For the remaining scenarios, we can add templates at the relevant locations if required,” reports Müller. The nine standard templates contain, for example, functions for posting incoming and outgoing goods, picking or inventory management.

A further app is planned to support the shipping process from 2020: With the so-called packing table solution for SAP® EWM, shipping employees are guided through the individual work steps such as selecting the required packaging material, packing, weighing and label printing via an intuitive packing dialog. The creation of handling units (HUs) is also supported. This greatly simplifies the process, resulting in shorter training times and greater efficiency.

30 PERCENT FEWER EMPTY TRIPS

By 2016, SAP Fiori replaced the ITSMobile programming platform. The new technology allows a modern design and better usage of hardware functions. Since then, Heraeus has relied on mobile scanners with a smartphone look. In the same year, the FLX-TLS material guidance system came into play, which is a

SAP-integrated component for material flow control. At this point, Heraeus had separated from its external service provider for internal site logistics. A specially established department was therefore looking for a suitable IT system. The decision was ultimately based on the FLX-TLS from Flexus.

Each day, around 250 transport orders are received on the extensive factory premises, for which two route trains and three counterbalanced trucks with a lifting capacity of 4 tons are available. The driving orders generated in SAP or manually are distributed to the forklift terminals via WLAN using special algorithms for route optimization. This reduces the proportion of empty trips by up to 30 percent.

PRINCIPLE OF 4-EYES

The FLX-TLS can also be used to map the safety precautions required at Heraeus, which must be observed, for example, when transporting precious metals. At Heraeus, the principle of 4-eyes applies to the transfer of precious metals between production and logistics.

When a transport order is generated, SAP uses the value of the goods and other criteria to decide whether the principle of 4-eyes must be applied. The solution programmed provides the verified transfer for the forklift driver and the production employee with their respective identification number on the forklift terminal or handheld.



As a further development of this system, Heraeus has developed the Technical Eyes Principle (TEP) which works with camera-monitored lockable collection and transfer boxes. TEP saves the personal encounter of two employees:

Here the driver can pick up the goods directly without waiting times and bring them to their destination.

WIP INVENTORIES UNDER CONTROL

Another important requirement for the material guidance system was the handling of intermediate stocks for which no material number had yet been created in SAP. In SAP, it is not possible to manage these so-called WIP (Work in Process) stocks. Therefore Flexus has developed the FLX-WIP Warehouse Management. The solution was seamlessly integrated into the FLX-TLS at Heraeus. The material guidance system coordinates the supply of raw material to workstations, the transfer of processed material to the next workstation or the supply and disposal of loading aids or additional materials.

In addition, the material guidance system ensures maximum transparency over all internal transports and provides the data basis for further optimization. For example, the share of transports carried out by route trains could be increased from 50 to 80 percent. The less efficient use of forklifts compared to the route train was reduced to 20 percent. Another effect relates to reaction time: "In the past, it took an average of around four hours for a requested transport to be carried out. This value could be reduced to 90 minutes," emphasizes Leon Strack. No surprise that the FLX-TLS will soon be used at other locations as well.

Conclusion: With the material guidance system FLX-TLS and the mobile platform FLX-MOBIL, Heraeus has enriched its central SAP system with several additional functions and increased transparency, quality and efficiency.

BACKGROUND: HERAEUS HOLDING GMBH

The precious metals and technology group Heraeus, headquartered in Hanau, Germany, is one of the world's foremost family-owned portfolio companies. The roots of the company, which was founded in 1851. The company goes back to a pharmacy that has been run by the family since 1660. Today, Heraeus bundles a large number of businesses in the fields of environment, energy, electronics, health, mobility, and industrial applications. Heraeus employs approximately 15,000 people in 40 countries. Heraeus is now one of the top 10 family-owned companies in Germany and has a leading position in its global sales markets.

MATERIAL GUIDANCE SYSTEM FOR SAP®

BACKGROUND

BACKGROUND FLEXUS AG

Flexus AG, based in Würzburg, is specialized in the optimization of intralogistics processes through innovative software products and consulting know-how. The SAP partner with mobility competence offers a holistic approach from the analysis of potentials to the conception and implementation of measures to improve material flow. This is based on many years of experience in mobile data entry and the implementation of forklift and transport control systems. SAP add-ons by Flexus are used for this purpose. Due to direct integration with SAP® ERP, the solutions are particularly advantageous.

BACKGROUND SOFTWARE

Flexus AG, an SAP partner, offers solutions for networked SAP® intralogistics. The solutions improve the interaction of people, processes and technologies within the company. This ensures efficient processes and concrete business benefits in the sense of Industry 4.0. The applications include the FLX-TGS transport and forklift control system for SAP® for simple and transparent control of all existing resources that are required for material flow in a company. This includes the optimization of forklifts, tigger trains, high-rack warehouses, employees with mobile end devices and internal truck traffic. The system ensures a smooth flow of material and reduces empty runs to a minimum. Numerous modules and extensions enable optimal adjustment to your needs.

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The logo for FLEXUS, featuring the word "FLEXUS" in a bold, blue, sans-serif font. A small orange dot is positioned above the letter "X".

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