



# SUCCESS STORY

## SCHWARZ PROFILBESCHICHTUNG – FOCUSED ON CORE COMPETENCIES

### schwarz

#### SAP Solution with Optimal Profile for Small and Medium-Sized Businesses

End-to-end processes that save time and money in production have become an important factor for success for contract manufacturers such as Schwarz Profilbeschichtungs GmbH & Co. KG. In the face of tight competition, the integration of commercial and technical processes has become indispensable. Integrated IT solutions are required to be able to react quickly to changing supply and demand, uphold delivery schedules, and offer a wide diversity of products.

For more than 20 years, the Schwarz company has dedicated itself exclusively to foil coating. As a specialist in foil coating of profiles, plates and coils, the medium-sized company develops future-oriented solutions for companies in the window industry and for applications in the automotive industry, among others. Thanks to consistent process optimization, combined with cutting-edge machine technology and decades of experience, the company is the leader in its market.

On the basis of streamlined, make-to-order manufacturing, the company's multi-shift operation produces up to two million meters of profiles per month—and with the highest quality standards. This immense capacity guarantees very short delivery times. In order to ensure this level of performance, the contract manufacturer must be extremely flexible and responsive to constantly changing market demands. *“Ten years ago, lot production of 5,000 to 7,000 meters was standard. Today, lot production on average stands at 134 meters. The same goes for coloring. Before, there were only seven to ten colors that were in high demand, and today we use approximately 140 colors in foil coating,”* explains Wolfgang Schwarz, managing director of Schwarz Profilbeschichtungs GmbH & Co. KG. This wealth of variations results in an impressive product catalog that includes 74 million items.

Steadily growing product and variant diversity is balanced against the demand for products of high quality that are supposed to be ready to deliver in the shortest amount of time and at the lowest possible price. After low-cost raw material procurement, effective production and profitable sales were maxed out, Schwarz Profilbeschichtungen faced the challenge of continuing its success by focusing on integrated business and manufacturing processes. After all, every single product from its immense product spectrum has to be delivered to the customer within five days of the order. To achieve this, it is not possible for the company to dedicate significant resources to catalog and product data maintenance. The management team knew the only solution was an integrated IT system.

#### Consulting, Implementation and Operation from One Provider

*“The impetus for the introduction of an integrated IT environment was our central requirement that we wanted to concentrate fully and completely on what we have perfected: the coating of profiles. Our objective therefore was to introduce an IT solution that could enable comprehensive corporate management, intelligently and securely administer our extensive catalog, and flexibly control production,”* says Wolfgang Schwarz. The management team's aim was to replace the previous

# PROJECT DESIGN AND DEVELOPMENT

heterogeneous system infrastructure with an integrated standard business management software. This software is to cover and link up all company units and associated processes and strengthen competitiveness by increasing efficiency and maintaining active customer relationships.

*“The fact that, as a medium-size business, we could achieve these goals with an SAP system was very surprising to me. In personal discussions with several of our customers, I heard several different opinions that suggested that SAP can’t do everything,”* says Schwarz Profilbeschichtung’s managing director about his initial skepticism toward an SAP solution.

All of these preconceptions – namely, that such a solution would be too powerful, oversized and far too expensive for a medium-sized business – dissipated soon after meetings with consultants from various IT providers. *“Over the course of a few meetings, it became clear to me that the SAP consultants at Freudenberg IT understood our business processes and could integrate them into precise solutions. It was quite impressive to see how recommendations for a suitable IT infrastructure developed out of this process expertise,”* says Schwarz about the selection process.

After a comprehensive evaluation of various service providers, IT-service provider Freudenberg IT won the project. After an extensive analysis of the existing network

infrastructure, Freudenberg IT introduced a complete SAP ERP system for about 70 users within a nine-month project timeframe. The project was based on Freudenberg IT’s fixed-price solution, which made it possible to carry out future-proof implementation at a predictable price. The new SAP system maps the applications for financial accounting, controlling and HR management, as well as the entire logistics chain—from sales and materials management to production planning. Freudenberg IT was responsible for the entire project, from infrastructure consulting to implementation and operation of the SAP system.

## **IT Expertise Completely Outsourced**

IT-service provider Freudenberg IT offers fully outsourced IT expertise for small and medium-size businesses with its FIT Compact solution. Freudenberg IT provides all the necessary services for Schwarz Profilbeschichtungen so that the processes in the SAP system are constantly available and error-free. The central component of infrastructure consulting is the recording and tracking of disturbances by the Freudenberg IT Customer Support Center or via a help desk tool. The tool is available to all Schwarz Profilbeschichtungen employees over a low-cost VPN site-to-site connection and makes sure that all error messages can be resolved quickly. *“The help desk system has become well-established here over time, and it is really a great tool. It has allowed us not only to lower our overall*

*system administration requirements, but also to design these requirements to be entirely transparent and reduce our process costs to a minimum as a result,”* comments Wolfgang Schwarz on the advantages of the system’s services. Using this secure connection, Freudenberg IT is also able to implement comprehensive on-site client service and ensure end-to-end error analysis of the SAP system. This ensures disruption-free system operation and minimizes the risk of major system downtime before it occurs.

## **From Efficient Procurement...**

What makes this project unusual are the additional IT applications that were introduced in addition to the standard project within the tight project implementation timeframe. The error-free electronic transfer of data provided by the EDI (Electronic Data Interchange) interface, which connects all business partners and customers, was an especially noticeable benefit of the integrated IT system environment that extended to all departments. The integration of the interface into the preexisting SAP system environment enabled efficient management throughout the entire supply chain. *“Thanks to the full automation of our business processes, including monitoring, we can execute our complete procurement and supplier processes without paper. This enables us to profit from optimized order processing and avoid the potential errors of manual data entry,”* says Schwarz. With the introduction of the EDI interface,



the company has laid another foundation for quickly processing customer orders, producing them on time, and efficiently delivering them.

### **... to the Complete Mapping of Processes**

In order to take advantage of integrated data handling in custom production planning, Freudenberg IT expanded their SAP system to include another key function. The SAP Variant Configurator was also installed within the framework of the implementation project. Since then, the company has used the variant configurator to optimally control the production of 74 million variants of their product range. The configuration software improves the information exchange between sales and production. With the aid of variant configuration, a customer or sales employee can specify the product and ensure that it can be manufactured in the desired manner and timeframe. Furthermore, one can make sure that the production costs will not exceed the planned budget. *“With this solution, we can react quickly and appropriately to the most diverse customer requirements, optimize and control the entire production process, and concentrate entirely on our core competencies,”* says Wolfgang Schwarz about the SAP Variant Configurator.

According to Schwarz, this is absolutely necessary, since the company, as a contract manufacturer, must always produce faster and at a lower price than other profile ma-

nufacturers. The high quality of its products is constantly under review. The owner adds that this is the only way the company can demonstrate the added value and associated expertise of these services at any time. The customer thereby enjoys the highest priority. Because he determines how the end product should look. The customer chooses the required product specifications from the product catalog to fit his needs and puts them together individually. With Freudenberg IT's integrated complete package, Schwarz Profilbeschichtungen can satisfy the need for optimized, make-to-order production. Internally, the company creates more transparency and integrated business structures while also accelerating and improving sales and logistics processes for the entire range of products.

### **Personnel Planning at the Highest Level**

The SAP application HR (Human Resources) ensures that Schwarz Profilbeschichtungen can constantly adjust its staff schedules for flexibly designed, make-to-order production. The application can completely map time accounts, hourly account balances, shift schedules, and leave statuses, and save this information for targeted personnel planning. For this purpose, Freudenberg IT installed time-recording terminals throughout the company that are based on its own Adicom Software Suite MES (Manufacturing Execution System) solution. All employees report their clock-in and -out times, as well as their times of attendance

and absences, via these terminals. The terminals then transfer all of the captured data via IDoc (Intermediate Document) interfaces to the SAP system. Using this extensive automation of processes, Schwarz Profilbeschichtungen optimizes staff scheduling for all employees and streamlines downstream processes, such as in payroll accounting. The comprehensive database available in the SAP system permits precise, interdepartmental planning. This allows the company to react appropriately to deviations from defined requirements and to act quickly and flexibly. *“With IT-supported personnel time management, we have an open, flexible solution that increases the transparency and efficiency of processes at both administrative and production levels. With its multiple evaluation options, we can optimally plan and orient our staffing schedules to incoming orders,”* explains Schwarz.

### **Planned Implementation of Further MES Functionalities**

In any case, the chapter is hardly over with regard to Schwarz Profilbeschichtungen's MES integration with the time-recording terminals, including certified interfaces to the SAP system.

The company is currently holding planning meetings about the future implementation of Shop Floor Data Collection from the Adicom Software Suite. With the extensive functionalities that would be available to the company, entire core processes and transaction data from production could

be fully captured and exported to the SAP system. In this way, the company would be able to more precisely schedule planned orders in the SAP system, taking into account the extensive materials catalog. Production orders would be generated from the planned orders and automatically transferred to the Adicom Software Suite. There, they can be automatically scheduled and arranged in the optimal sequence after consideration of material stocks, input components, presence/absence of required personnel, availability and status of operating resources, and, of course, machine allocation. *"If we consider that we administer our extensive product catalog for each order and want to deliver on time and in the correct quantity to our customers every time, it is certainly a logical step to integrate further MES components into our SAP system. One such system that is particularly relevant is an application such as Adicom's Shop Floor Data Collection, which collects full transaction data and enables comprehensive planning in the SAP system,"* explains Schwarz.

#### Perfectly Designed System

*"We are using an SAP system now that is custom-made for us as a medium-sized business and fits us perfectly. Our new solution offers us flexible and powerful resources that allow our IT infrastructure to grow with us. Also, it can be adapted to new market and customer demands without significant further investment. We*

*are covering all of our processes, completely mapping them, and administering them at minimal cost. Exactly what we had planned to do,"* summarizes Wolfgang Schwarz. With Freudenberg IT, Schwarz Profilbeschichtungen has contracted an IT service provider that flexibly meets all requirements with a clearly defined cost/benefit ratio, guarantees seamless monitoring of all processes within the system infrastructure, and provides the entire IT system with the necessary and appropriate profile.

#### About Schwarz Profilbeschichtungs GmbH & Co. KG

Schwarz Profilbeschichtungs GmbH & Co. KG is a specialist in film coatings and surface treatment for diverse parts. The company uses films and similar materials to coat primarily long and straight surfaces such as window profiles, handle and storage compartments in buses, and plates and profiles in furniture construction. Today the company produces up to two million meters of profiles, plates, and rolls every month. The majority of its customers come from the window and furniture construction, shopfitting, and automotive sectors. The company, which is based in Binsdorf, Germany, in the Zollernalbkreis district, was founded in 1985 and currently employs around 90 employees.

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