

# Implementable Best Practices Speed Chemical Industry SAP ERP Deployments

Chemical companies operate in a complex and demanding environment. They must deal with multiple regulatory agencies, complicated supply networks, and sophisticated trading relationships, while competing with

Manufacturers can get a fast start with their SAP implementation using predefined business scenarios. "Live in Five" (months) is not just a slogan, and "Best Practices" are real, proven, industry-specific business processes, supported by trained implementation partners.

large multinationals as well as nimble niche players. In a difficult economy, chemical producers are at the mercy of large oil and gas companies who have the market power to raise prices on feedstocks. Energy costs are increasing. And big retailers and consumer products companies are pushing harder than ever to lower prices. The chemicals industry is caught in the middle, and is being squeezed on both ends. Chemical companies need cost-effective systems to help them meet these challenges.

SAP has a long history of serving the chemical industry. SAP's first customer was a chemical company (ICI), and today they have over 2,300 chemical customers around the globe. Tapping this experience as well as the chemical industry community, SAP has updated and expanded their chemical industry business process templates. Known as *SAP Best Practices for Chemicals*, this collection of business scenarios provides a quick and flexible means to help generate the *SAP ERP* system configuration and rapidly implement the system. This release more than doubles the number of available process scenarios - with 84 scenarios compared to 32 in the last version - and chemical companies can create their own scope of implementation by selecting only the desired scenarios.

In addition to rapid implementation and the associated cost savings when using solution templates, chemical companies also benefit because both implementation project risk and ongoing maintenance costs are reduced by leveraging proven best practices.



## SAP Best Practices for Chemicals

Don't be deceived by the term "Best Practices." At the heart of *SAP Best Practices for Chemicals* is a set of predefined, industry-specific business processes - or scenarios - which can be used to significantly speed up an *SAP ERP* for chemicals implementation project. These business scenarios can support all of the major business processes of a chemical company. These are not generic business processes lacking in detail, or processes that don't really fit the needs of a chemical company. They have been developed with the help of system integrators, chemical industry solution providers, chemical industry associations, and industry experts. They have been used by many mid-size specialty chemical companies, as well as smaller and larger companies. The template was designed primarily for midmarket companies and subsidiaries of large companies, but experience has shown that chemical companies of all sizes can benefit by starting with these scenarios. They help accelerate implementations, reduce costs, and mitigate the risks associated with an implementation project.

### Implementable Scenarios for Chemical Companies

A good way to match software to the requirements of running a business is to consider the various business processes that must be managed. At a high level, the system must support efficient processes for 'order-to-cash', 'procure-to-pay', and other processes. ERP systems provide the means to manage and enforce these processes, but they need to be set up to operate according to the specific requirements of each company, and this requires careful attention to the software configuration and the creation of many granular business processes to support the overall requirements. The detailed scenarios provided in *SAP Best Practices for Chemicals* support various aspects of an overall chemical company business model that captures the interplay of business processes among the major business functions such as Supply Chain, Sales, Planning, Purchasing, R&D, Manufacturing, Maintenance, and Transportation. By using these scenarios in the blueprinting phase of a project, significant savings can be achieved.

Category	Available Scenarios
Supply Chain Planning & Execution	10
Supplier Collaboration	11
Innovation Management	3
Manufacturing	13
Quality Management & Compliance	7
Sales & Marketing	20
Enterprise Management & Support	20

**SAP Best Practices for Chemicals Consists of  
84 Implementable Scenarios**

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*SAP Best Practices for Chemicals* provides 84 business scenarios, all preconfigured for the

chemical industry and chemical industry sub-segments. Scenarios are provided for material procurement, manufacturing execution (including quality management), blending, packaging of goods, plant maintenance, dangerous goods management, product safety and recipe management, and other functions. Both continuous production and batch-oriented processes are covered, with ten scenarios for Supply Chain Planning & Execution, eleven for Supplier Collaboration, three for Innovation Management, thirteen for Manufacturing, seven for Quality Management and Compliance, twenty for Sales & Marketing, and twenty for Enterprise Management and Support.

### **Partners at the Ready**

Implementation partners must undergo a formal qualification process in order to use *SAP Best Practices for Chemicals*. The qualification process typically takes 4-5 months, and each SI must demonstrate their capability in a training system environment. Some partners take it to the next level by offering a tailored set of best practices to their clients. For example, ChemOne, a qualified SAP All-in-One partner solution offered by YASH Technologies, incorporates many of the chemical industry best practices – from procurement through payment – into a solution that provides chemical manufacturers with a fixed scope solution for a fixed price. (‘All-in-One’ solutions are partners’ packaged solutions based on Best Practices, and typically include services.) ChemOne is priced for small and midsize companies and can be implemented within 14 weeks. As with any *SAP Best Practices for Chemicals* implementation, additional configuration beyond the SAP Best Practices scope can always be done by the customer or implementation partner.

### **Flexibility in Deployment**

With this release of *SAP Best Practices for Chemicals*, companies can create their own scope for implementation by selecting required scenarios, and can personalize the organization structure. It is also possible to bring in other best practice scenarios from other industries, for example Consumer Products, and activate them in the same client. All SAP Best Practices templates all incorporate the same, highly flexible approach, so if additional processes from other industry templates are needed, they can be implemented on top of the chemicals solution. Although additional testing or customizing might be necessary in this case, significant time and cost savings can be obtained.

### **Compatibility and Localization**

*SAP Best Practices for Chemicals V1.603* is based on SAP ERP 6.0, Enhancement Package 3. It is free of charge to SAP partners and SAP customers. *SAP Best Practices for Chemicals V1.603* is currently localized for Germany, France, Russia, USA, China, and India. Additional localized versions are planned for Q3 2009.

### **Industry Dynamics Create the Need for New Business Software**

As opportunities arise, chemical companies may divest or acquire facilities to better align their organization with their evolving business strategy. When companies are divested, they can experience a bit of a shock as they learn to cope with the loss of centralized business functions that they have taken for granted. In order to move ahead, these companies need to rapidly get processes in place to manage basic 'corporate' functions such as purchasing, logistics, customer relationship management, and IT support.

### **FutureFuel Goes Live in Five**

One company recently found itself in just such a situation. FutureFuel Chemical Company (formerly named "Eastman SE, Inc.") is located near Batesville, Arkansas. With over 400 employees, the manufacturing facility has a 30 year history of specialty and custom chemical development and production, first as a member of the Chemicals Division of Eastman Kodak Company from 1976–1993, and then as a member of Eastman Chemical Company from 1994–2006, when it became a subsidiary of FutureFuel Corp. For the first time in its history, it had to survive on its own - without help from the centralized services that its former parent company had always provided. FutureFuel wanted to enter new segments of the booming biofuels market - with the potential to substantially increase its revenues - but was constrained by its limited experience with basic business functions and its inability to efficiently support its SAP users.

At first, FutureFuel continued to use its former parent company's SAP software installation, but the installation was heavily customized for lines of business of no interest to the agile young firm. In addition, the existing installation required significant IT resources, presented upgrade problems, and could not provide the IT landscape necessary to support FutureFuel's new directions.

In order to achieve independence, FutureFuel set several high priorities: implement new business software that matched its needs; develop the capability to perform business functions previously conducted by its former parent company; and keep ongoing IT costs as low as possible. With SAP Business All-in-One for Chemicals solution, based on *SAP Best Practices for Chemicals*, FutureFuel accomplished all three goals in record time.

With limited experience in certain areas, FutureFuel wanted to leverage industry best practices as a starting point. By taking advantage of *SAP Best Practices for Chemicals*, the company wanted to get the expertise it needed to develop business processes that were a good fit. In addition, the SAP Best Practices offerings would be a low-cost mechanism to integrate those practices into the company's business culture. At the same time, SAP Best Practices helped FutureFuel avoid significant customization and the associated high cost of implementation and ongoing maintenance.

FutureFuel chose Hitachi Consulting, an integrator with extensive industry experience and the necessary background to deploy *SAP Best Practices for Chemicals*, as its implementation partner. FutureFuel dedicated a core team of 14 members who worked alongside 12 Hitachi consultants. When the team began the blueprinting stage of the project, they found it very powerful to be able to see live system transactions and data. During the realization stage, the team implemented applications for production planning, materials management, warehouse management, finance and controlling, and plant maintenance. Other applications included supply chain management; railcar tracking; environmental, health, and safety processes for managing dangerous goods and material safety data sheets; and sales and distribution functionality.

In addition, the team used the software's quality management functionality to implement an enterprise laboratory information management system (enterprise LIMS) that replaced a legacy LIMS inherited from the former parent company. To provide the knowledge needed by staff working with the new applications, the team offered a mix of classroom and on-the-job training. Even though the undertaking to train users was significant, the project team managed it well.

Hitachi's project manager, very experienced in implementations, had never seen a project of this magnitude take less than nine months. Nonetheless, knowing how much SAP Best Practices would expedite the deployment,

the team committed up-front to a six-month schedule. In the end, the team surprised the company's managers by doing even better – they completed the project one month ahead of time.

Even more good news followed. Some implementers had predicted the company would need a post-implementation support staff of 6 to 15 people. However, ongoing support is now provided with far fewer resources. Support requires only one dedicated IT specialist. To complement the specialist's expertise, approximately 10 superusers provide further functional support. These superusers dedicate 25% of their time to support SAP users in the business areas where they have experience and expertise. In addition, one full-time equivalent augments the work of the superusers by providing consulting support.

### **CABB Doubles in Size**

When Gilde Buyout Partners identified a subsidiary of Clariant International Ltd. as a market leader in specialty chemicals, it purchased the operation. The new company, CABB GmbH, had no support services of its own – no administration, no financial accounting, no legal or HR departments, no IT – and was given 12 months to disengage from its parent's systems. SAP ERP software and *SAP Best Practices for Chemicals* enabled CABB to address the IT issue in four months.

Sulzbach, Germany-based CABB implemented the SAP ERP and SAP Recipe Management applications to support order-to-cash and procure-to-pay processes, production planning, quality management, finance administration, controlling, and corporate reporting. On becoming a small independent company, they picked *SAP Best Practices for Chemicals* because it was the best solution for a rapid implementation. The reason CABB was able to reduce implementation time significantly was that *SAP Best Practices for Chemicals* provided a template with all the industry business processes. It was a big advantage not having to spend time configuring software to make it work for their business.

To get this capability up and running quickly, CABB worked with SAP partner Accenture, who has a lot of experience with chemical industry business processes. The Accenture consultants worked with CABB on-site during blueprinting, gap assessment, and final testing. During the build phase, they went off-site to tailor and extend the industry-configured software to match some of CABB's company-specific processes. This was very

helpful, because there was little disruption to the CABB team, which was busy setting up the new firm.

Accenture provides ongoing application management and hosting services from its delivery center in Kronberg, Germany. Between the rapid rollout and support from its outsourcing partner, CABB realized significant financial gains, reducing IT costs by 20% compared to their previous IT costs as a subsidiary.

CABB depends on flexibility, flat hierarchies, short decision-making processes, and maintaining close contact with their customers. They manufacture products for customers in the agrochemical and pharmaceutical industries as well as in the performance and specialty chemicals industry. CABB is the global market leader in the production of monochloroacetic acid and holds leading positions in the manufacture of reagents and intermediates. In addition, they develop tailor-made solutions for new products for their customers.

CABB anticipated that *SAP Best Practices for Chemicals* and SAP ERP software would give them a strategic advantage: they would have a proven system that could be implemented quickly in other regions as they opened new offices and manufacturing plants. Today, they have more than doubled in size, and are a globally operating fine chemicals company with core technologies of chlorination, sulfonation, and methylation. CABB now has more than 750 employees and achieves an annual turnover of more than 300 million Euros.

## **Conclusion**

SAP ERP software enables manufacturers to meet the dynamic challenges of the chemical industry, where producers must respond to regulatory and compliance requirements, competitive pressure, changing demand patterns, and market consolidation. Notwithstanding the capabilities of the software application, a successful solution also depends on the actual software implementation and the associated system configuration to make the application work for each business.

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system. The latest release more than doubles the number of available process scenarios, with 84 scenarios compared to 32 in the last version.

With *SAP Best Practices for Chemicals* solution templates, companies can achieve a rapid implementation ('Go Live in Five') and significant startup cost savings. Chemical companies also stand to benefit because both implementation project risk and ongoing maintenance costs are reduced by leveraging proven best practices. With this release, manufacturers can create their own implementation scope by selecting required scenarios, personalize the organization structure, and add in other best practice scenarios from other industries.

To achieve the benefits of using implementable best practices, another important consideration is the quality and availability of implementation partners. In order to use *SAP Best Practices for Chemicals*, partners must undergo a formal qualification process. The qualification process typically takes 4-5 months, and each SI must demonstrate their capability in a training system environment. In addition, some partners further help their clients manage costs and expectations by offering a tailored set of best practices based on *SAP Best Practices for Chemicals*.

ARC has been a longstanding advocate of using standard industry 'best practices' to improve operations, but in too many cases we have seen manufacturers use their own unique needs as justification for highly customized software implementations. The availability of better tools - such as *SAP Best Practices for Chemicals* - makes this approach even less desirable. The argument for extensive customization stands only in two cases: where the available set of template scenarios is insufficient compared to the overall business needs, and where the scenarios are too rigid to be selectively utilized. With this release, SAP has overcome both issues. The majority of mid-market chemical companies will find that *SAP Best Practices for Chemicals* is an excellent starting point for SAP ERP implementations. And there is plenty there for larger companies as well.

**ABOUT THE AUTHOR:**

As ARC's Vice President for Collaborative Manufacturing and Architecture, **Greg Gorbach** is a thought leader in Collaborative Manufacturing and provides clients in a number of manufacturing vertical markets with strategic advice in dealing with boundary-crossing business processes. Greg's primary areas of focus are Collaborative Manufacturing, Sustainable Manufacturing, Production Management, Business Process Management, Manufacturing Intelligence, and the synchronization of plant systems with CRM, ERP, PLM, Supply Chain and other business systems. He brings over twenty years of hands-on experience to ARC, with direct experience within manufacturing organizations, as well as extensive experience with suppliers to manufacturers.



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