SAP® Solutions for Digital Manufacturing Compendium
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Manufacturing solutions from SAP enable companies to create finished products from raw materials, parts, and assemblies.
Dear Reader,

Welcome to the e-book highlighting digital manufacturing software from SAP, a compilation of value collateral spanning customer success stories, business transformation studies, solution videos, brochures, and press articles.

Our intention throughout this e-book is to provide a compelling digital experience for our readers.

We trust it will inspire you and your teams by showing you how SAP® solutions can help make the work of experts in manufacturing operations easier so they can focus on product execution. With this compilation, we also showcase the power of SAP teams working together with customers and partners – developing customer value in global deployments.

We hope you gain a fresh perspective of our joint successes using this compendium, which is updated regularly. More than ever, partnering with our customers to enable and further innovation adoption drives our mission. We look forward to our continued collaboration and to receiving your valuable feedback and suggestions.

Best regards,

Mike Lackey, Global VP of Solution Management
LoB Manufacturing, Extended Supply Chain
Deliver high-quality products quickly in a mass-individualization economy with manufacturing software from SAP.
New market trends are driving changes in manufacturing. To help customers respond to these dynamics, SAP is utilizing advanced technologies and applications that enable an intelligent digital manufacturing solution aligned with Industry 4.0 philosophies.
SAP Digital Manufacturing Cloud

Introduction

SAP Digital Manufacturing Cloud
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Improve operations visibility with a manufacturing execution system that provides near-real-time data and analytics.
SAP Digital Manufacturing Cloud

Improve operations visibility with the SAP Digital Manufacturing Cloud solution, a manufacturing execution system (MES) of near-real-time data and analytics. Execute manufacturing processes, analyze manufacturing and business data, and integrate systems with a cost-effective, high-quality, and resource-efficient method based on Industry 4.0.

- Cloud deployment
- Visibility across the top floor and shop floor
- Powerful KPIs and analytics
- Detailed execution of production processes

Learn more
Key Benefits

Track and enhance manufacturing performance
Empower key stakeholders to analyze global and plant-level manufacturing performance and associated causes through intuitive, preconfigured analytics.

Improve visibility and reporting consistency
Acquire data from different manufacturing operations management (MOM) systems and automation systems by integrating multiple systems and standards-based interfaces.

Gain faster and more consistent insights
Accelerate root cause analysis with advanced algorithms and machine learning to facilitate continuous business improvement.
Key Benefits

**Improve visibility into manufacturing processes**
Support better, more transparent production management to assess and resolve quality and productivity issues quickly while reducing warranty and liability risk.

**Adapt to individualization requirements**
Meet market-of-one demand; handle extreme product variability; maintain productivity, margin, and quality levels; and improve customer satisfaction.

**Put your business assets to work more effectively**
Keep MOM systems running smoothly by optimizing the use of manufacturing resources, improving quality, and minimizing downtime.
Purposeful and meaningful data

- Define and leverage your S88 or S95 production model
- Map control systems and operations events
- Use analytics and self-service reports on KPIs and live operations data based on industry standards

Harmonized and reliable data analytics

- Acquire data from multiple disparate manufacturing applications and systems
- Blend manufacturing data with SAP S/4HANA® and SAP ERP
- Integrate with MES applications such as SAP Manufacturing Execution and SAP Manufacturing Integration and Intelligence (SAP MII)
Unified manufacturing modeling
• Build on top of our industry standards
• Define your KPIs with our modeling environment and harmonized data model
• Apply existing and predefined integration standards

Preconfigured industry standards
• Use preconfigured industry-standard manufacturing KPIs
• Build KPIs based on your existing enterprise and MOM systems

Advanced, in-depth data analytics
• Find the root cause of quality defects with pattern detection that guides you from the top down
• Use personalized views to improve manufacturing performance continuously
Key Capabilities

Integrated manufacturing operations management

• Collaborate and analyze manufacturing performance securely
• Gain visibility across all plants and operations

Shop-floor execution

• Achieve rapid ROI by implementing top-floor and shop-floor scenarios with integrated SAP solutions
• Monitor the entire manufacturing process in near-real time
• Optimize manufacturing resources and operation execution
Key Capabilities

**Resource orchestration**
- Create a workload for the resources and work centers
- Monitor production progress and events on the shop floor
- Assign employees to shifts and labor to work centers

**Shop-floor engineering**
- Design machine automation in Industry 4.0 scenarios from a central location
- Provide an end-to-end overview of the production process
- Distribute configurations to edge runtimes
Industrial Machinery and Components (IM&C)

Optimize growth and cost savings through digital manufacturing.

Increase revenue, reduce cost, and optimize assets by supporting your most compelling manufacturing and production priorities with customer centricity, “segment of one” service, digital smart products, digital supply chain and smart factories, and new business models and services.
Ensure Superior Customer Experiences by Delivering Solutions at Scale and as a Service with IM&C Solutions from SAP

R&D/engineering
• Collaborative product lifecycle management
• Project and portfolio management
• Product compliance

Sales and marketing
• E-commerce for customers and partners
• Industrial marketing
• Quote to cash for configurable products and solutions
• Sales force automation
• Sales performance management
• Usage-based billing and revenue management
Supply chain
- Demand management and insights
- Response and supply management
- Sales, inventory, and operations planning
- Track-and-trace and logistics networks
- Transportation management
- Warehouse management

Manufacturing
- Asset management
- Environment, health, and safety
- Industrial insights
- Manufacturing execution for Industry 4.0
- Manufacturing networks
- Manufacturing operations
- Manufacturing process planning
Aftermarket service

- Complaints, returns, and in-house repair
- Field service management
- Intelligent asset management for customers
- Omnichannel customer service
- Service monetization
- Service parts management
Intelligent Component Manufacturing

Accelerating profitable growth in the digital economy

Discover how component manufacturers can achieve operational excellence and accelerate profitable growth in the digital economy with a cross-industry cloud solution for component manufacturing companies from the automobile, aerospace and defense, high tech, and IM&C industries.
Unlocking New Business Value with Intelligent Technology

Optimize, extend, and transform your industrial manufacturing business by connecting new technologies with integrated business solutions to create an intelligent enterprise.
Industry 4.0: What’s Next

Look ahead to Industry 5.0, where further restructuring of product development and production will redefine not only manufacturing processes but also what a product is and the value it provides. Incorporate digital technologies in products, enabling them to become platforms for value creation for users and producers.

KEY FACT

76% higher plan adherence

When equipment, machinery, and tool usage is tracked in real time, industrial manufacturers are 76% more likely to meet planned production targets. Want to benchmark yourself with peers?
Digital Transformation

Digital transformation is a fundamental rethinking of customer experiences, business models, and operations. It’s about finding new ways to deliver value, generate revenue, and improve efficiency – and companies are using innovative technologies to do it.
Streamline manufacturing operations by monitoring, controlling, and optimizing your production processes.
SAP Manufacturing Execution

Digitalize manufacturing processes and integrate business systems using a cost-effective, high-quality, and resource-efficient methodology based on Industry 4.0 technology. You can improve operational visibility with near-real-time information that increases reliability and product traceability using solutions based on the Internet of Things.

- Cloud and on-premise deployment
- Simplified integration with SAP ERP
- Flexible production of one-process modeling
- Detailed production visibility
SAP Manufacturing Suite Road Map

The SAP Manufacturing Suite product road map describes how the product capabilities are planned to progress over time. The road map provides information on recent innovations as well as planned innovations and a summary of future direction for the product.

Find out how SAP solutions for digital manufacturing enable companies to produce individualized solutions for customers. Open Integrated Factory – Generation 2017 was presented at the Hanover Industrial Fair Industry 4.0. From SAP Customer Experience solutions for e-commerce using SAP S/4HANA to SAP Digital Manufacturing Cloud, the customer follows the process from the lot-size-of-one customer order through manufacturing execution with the full orchestration of digital manufacturing solutions.
SAP Intelligent Digital Manufacturing
SAP Solution Video

New market trends are driving changes in manufacturing. To help customers respond to these dynamics, SAP is utilizing advanced technologies and applications that enable an intelligent digital manufacturing solution aligned with Industry 4.0 philosophies. Learn how becoming an intelligent enterprise can prepare you for Industry 4.0 with digital technology that enables real-time visibility and delivers high-value outcomes.
Key Benefits

**Improve visibility into manufacturing processes**
Assess and resolve quality and productivity issues quickly, while reducing warranty and liability risk, through better, more transparent production management.

**Adapt to meet individualization requirements**
Meet market-of-one demand and extreme product variability while maintaining productivity, margin, and quality levels and improving customer satisfaction.

**Utilize assets effectively**
Improve asset and equipment effectiveness, facilitate predictive maintenance, minimize downtime, and keep manufacturing operations running smoothly.

Read about additional benefits
Key Capabilities

- **Centralized operations**
  Manage and control manufacturing and shop-floor operations using a single, centralized solution.

- **Automated data collection**
  Reduce the need for manual data entry, improve accuracy, and accelerate management processes with automated data collection.

- **Defect tracking and resolution**
  Enforce process rules, provide instructions, and track defects to help ensure error-proof manufacturing.

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**Key Capabilities**

- Manage and control manufacturing and shop-floor operations using a single, centralized solution.
- Reduce the need for manual data entry, improve accuracy, and accelerate management processes with automated data collection.
- Enforce process rules, provide instructions, and track defects to help ensure error-proof manufacturing.
ASK Automotive Pvt. Ltd.
SAP Business Transformation Study

Read how SAP Manufacturing Execution and SAP MII implemented by Mawai Infotech Ltd. help ASK Automotive keep monthly materials usage and daily profitability visible at a glance.
As we weathered a growth spurt and a turbulent market, SAP solutions gave us best practice–based processes for the twin requirements of control and scalability in plant operations. We are well positioned for intelligent manufacturing with SAP S/4HANA today and tomorrow.”

Naresh Sharma, CFO, ASK Automotive Pvt. Ltd.
Baoxiniao Holding Co. Ltd.
SAP Business Transformation Study

Get an idea of how this Chinese retail leader of Chinese fashion brands established a smart factory by deploying the SAP Manufacturing Execution and SAP Apparel and Footwear applications. See how the SAP Digital Business Services organization helped it achieve its digital transformation.

Read the BTS
"Only Industry 4.0 can deliver results in fashion production with a lot size of one without losing efficiency and raising costs. Smart manufacturing solutions from SAP make that dream of ultimate customization come true."

Kehuang Bao, CIO, Baoxiniao Holding Co. Ltd.
Continental AG
SAP Business Transformation Study

Read how ContiTech Air Spring Systems connected shop-floor systems with business processes and increased production efficiency with SAP Manufacturing Execution and support from implementation partner IGZ.

Read the BTS
"SAP Manufacturing Execution helped us standardize and digitalize our production processes. With preconfigured templates from our partner IGZ and the positive experience from our first implementations in Germany and Hungary, we are now perfectly set for our global rollout."

Hendrik Neumann, Project Lead, Continental
JianXin Chassis System Co. Ltd.

SAP Business Transformation Study

Read how the Chinese auto parts manufacturer JianXin Chassis System Co. Ltd. built a smart factory with SAP Manufacturing Suite. With the help of Shanghai Thinkway Information Technologies Co. Ltd., JianXin Chassis was able to multiply efficiencies and cost savings.
With the help of Shanghai Thinkway, we built a smart manufacturing system that paves the way to Industry 4.0 success in Ningbo and at all our sister companies throughout Asia. We are now well positioned to become a global leader in the auto parts industry.”

Haifeng Yang, Senior IT Manager, JianXin Chassis System Co. Ltd.
Customers depend on KAESER KOMPRESSOREN for quality parts and service, and it delivers. But the majority of its purchasing was decentralized. So the company implemented SAP Ariba® Procurement solutions that centralized control and increased department-level efficiency.

Read the BTS
Strengthening our competitive position while protecting our reputation for high quality, reliability, and service is critical to KAESER. SAP Ariba solutions help us achieve this by putting our entire company and our suppliers on the same page with complete transparency.”

Jörg Hülsmann, Head of Strategic Purchasing, KAESER KOMPRESSOREN SE
TECO Electronic & Machinery Co. Ltd.
SAP Business Transformation Study

Review how this Taiwanese manufacturer of motors and pumps increased visibility into its production by implementing SAP Manufacturing Execution and SAP MII. See how partner ITTS helped it digitalize its manufacturing processes and integrate business systems.
Our implementation of SAP solutions in our manufacturing operations ensures real-time control of all aspects of production and operation, enabling us to develop data-driven strategies.”

James Shih, CIO, Wuxi TECO Electric & Machinery Co. Ltd.
SAP S/4HANA Manufacturing
Enable enterprise-wide manufacturing collaboration within an integrated environment based on SAP S/4HANA.
SAP S/4HANA Manufacturing Solutions

Built on the same SAP S/4HANA platform, the SAP S/4HANA Manufacturing solution for planning and scheduling and SAP S/4HANA Manufacturing solution for production engineering and operations deliver an enhanced, comprehensive, and simplified user experience that enables enterprise-wide manufacturing collaboration within an integrated SAP S/4HANA environment.

- On-premise deployment
- Enhanced manufacturing collaboration enterprise-wide
- Enriched and seamless digital manufacturing capabilities
- Real-time enterprise analytics for better decision-making
Key Benefits

**Simplify functionality**
- Improve and extend digital enterprise collaboration to simplify product planning, change management, and operations
- Decrease days in inventory by integrating scheduling and execution for a consistent view of inventory and product data

**Optimize adaptability**
- Minimize production disruptions from changed routings, work instructions, and production orders while aligning with shop-floor execution
- Reduce manufacturing cycle time by quickly adapting production schedules to current plant conditions

**Enhance planning capabilities**
- Streamline manufacturing build package creation, planning, and shop-floor operations for global production environments
- Reduce revenue loss from stock-outs by improving flexibility through fast and responsive production planning scenarios
SAP S/4HANA Manufacturing for Planning and Scheduling

Extend the SAP S/4HANA digital core with completely embedded advanced planning and scheduling functionality usually only offered by ERP extensions.

**Comprehensive, end-to-end planning**

- Improve and extend plan production resources finitely beyond classic material requirements planning functionality
- Consider capacity and material availability constraints in your planning model
- Integrate manufacturing master data, such as routings and bills of materials, to define the basis for production planning data structures
Integrated, insightful scheduling

- Streamline scheduling processes throughout global production environments
- Use an industry scheduling repository for block, campaign, shelf-life, and model-mix planning
- Perform detailed scheduling with a setup matrix, sequence constraints, minimum and maximum distances, and alternative modes
SAP S/4HANA Manufacturing for Production Engineering and Operations

Bridge the gap between engineering and manufacturing by extending the SAP S/4HANA digital core to support digital collaboration and capabilities.

Streamlined engineering

- Facilitate digital collaboration of manufacturing master data, design structures handovers, process planning, and intelligent change management
- Simplify manufacturing build package creation, management, and delivery throughout global production environments

Learn more.
Enhanced operations management

- Analyze change impact and support change implementation
- Perform system-optimized monitoring of all shop-floor operations with automatic issue detection, root cause analysis, and decision support
- Automate monitoring and product data collection for root cause analysis and tracking, tracing, and genealogy
SAP Manufacturing Integration and Intelligence
Harness the **Industrial Internet of Things**, and tightly integrate your manufacturing processes with business operations.
Gain value from the Industrial Internet of Things (IIoT) by connecting the four Ms of manufacturing – man, material, method, and machine – to your extended supply chain. Get the manufacturing intelligence and visibility you need to run in real time, and tightly integrate your manufacturing processes with business operations.

- On-premise and private cloud deployment
- Predefined content integrated with SAP S/4HANA
- Local and centralized KPIs for overall equipment effectiveness and energy
- In-memory Big Data analysis
Key Benefits

Boost employee productivity
Deliver actionable information to the shop floor and enterprise simultaneously

Increase business value
Improve synchronization between production and logistics teams, and stabilize operations using IIoT and machine-to-machine technology.

Gain new enterprise insights from analytics
Optimize overall equipment effectiveness and energy utilization with insights derived from real-time event processing and manufacturing Big Data.
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Manufacturing analytics platform
Support cross-data store analysis, statistical process control, predictive analytics, and storage for Big Data with an in-memory analytics platform.

Energy monitoring and analysis
Identify issues and provide corrective measures using sensor data. Collect and analyze data across various plants to better monitor energy consumption and pinpoint misuse.

Overall equipment effectiveness
Measure and analyze plant performance, both historically and in real time, using common data sources that offer equipment availability, performance, and quality metrics.

Business process integration
Connect intelligent business processes from the enterprise to production – including device connections.

Key Capabilities

View all capabilities
Kennametal Inc.
SAP Business Transformation Study

Discover how SAP MII enabled this IM&C company to digitalize its global plant and field operations to gain greater automation and control at the machine level, real-time monitoring of equipment and factory performance, and higher shop-floor productivity across 21 production locations.

Read the BTS
With SAP MII, we went live in only four months. We were able to quickly ‘move the needle’ for our shop-floor staff, helping them shift focus from computer interfaces and finding missing data to core manufacturing activities and great business outcomes.”

Stefano Pandini, Senior Manager, Business and System Integration, Kennametal Inc.
Zentis GmbH & Co. KG
SAP Business Transformation Study

Read how Zentis implemented SAP MII with support from SAP partner IGZ. Learn how this enables Zentis to manage and track containers through the logistics system based on their serial numbers, supporting vertical integration.

Read the BTS
"With SAP MII, we have a key component for implementing our digitalization strategy."

Peter Stelter, Head of IT/Organization, Zentis GmbH & Co. KG
Smurfit Kappa Group plc
SAP Business Transformation Study

Get insight into how this world-leading provider of paper-based packaging solutions went paperless on its shop floor by implementing SAP MII.
SAP MII connected our shop floor to the top floor and gave us a platform that lets us take advantage of technological trends in the domain of manufacturing.”

Tewfik Noumri, Director SAP Competence Center, Smurfit Kappa Group plc
SAP Environment, Health, and Safety Management
Move beyond compliance to operate more safely and reliably by proactively identifying, analyzing, and mitigating risks.
SAP Environment, Health, and Safety Management

Move beyond compliance to operate more safely and reliably. With the SAP Environment, Health, and Safety Management (SAP EHS Management) application, you can proactively identify, analyze, and mitigate EHS risks, manage chemicals safely, monitor industrial hygiene, and reduce your environmental impact.

- On-premise or cloud deployment
- Tight integration with other SAP solutions
- Best practice–based workflows
- User-friendly functionality
Key Benefits

Make operations safer
Engage the workforce and identify and act on hazards before they impact safety, through ongoing analysis of operational data and the provision of relevant information in real time.

Manage EHS more efficiently
Improve EHS performance by incorporating risk management into daily operations with integrated business processes and shared data and workflows.

Safeguard operational continuity
Protect asset integrity and optimize production by reducing unplanned downtime and outages through proactively identifying and mitigating safety risks.
Key Capabilities

Incident management
- Use standardized, workflow-enabled processes to investigate, track, and follow up on incidents
- Access data from other SAP software with prebuilt data and business process integration
- Improve visibility of EHS risks with automated global reporting and real-time analytics

Health and safety management
- Establish a unified approach to EHS risk assessment including different risk analysis methods
- Manage chemicals effectively, including vendor safety management and hygiene monitoring
- Track employees’ health and support a risk-based occupational health process that’s integrated with central HR data

Continued
**Key Capabilities**

**Environment management**
- Manage air and water emissions to fulfill legal requirements
- Calculate and aggregate emissions while fostering proactive data transparency and monitoring
- Detect and communicate deviations, manage investigations, and track follow-up activities

**Compliance management**
- Provide a central legal registry with integration processes with regulatory changes
- Assign legal requirements and internal policies to operations within your organization
- Establish consistent compliance workflows

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**SAP Environment, Health, and Safety Management**
- Manage air and water emissions to fulfill legal requirements
- Calculate and aggregate emissions while fostering proactive data transparency and monitoring
- Detect and communicate deviations, manage investigations, and track follow-up activities
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- Establish consistent compliance workflows

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Continued
Worker safety

• Integrate risk management and asset management processes
• Pull risk information into work orders and propose relevant safety measures automatically
• Provide standard icons and clear instructions on job cards
Givaudan used the SAP Custom Development and SAP Consulting organizations to migrate its SAP EHS Management application to the SAP HANA® platform. Now it has a robust determination engine for chemical compliance that can evaluate products in seconds, helping ensure consumer safety as well as satisfaction.

TOP BENEFITS ACHIEVED

10x faster interactive compliance determination
20x increase in daily mass calculation capacity
0 calculation backlog, where a backlog of several weeks existed before
“Our high-performing chemical-compliance determination engine powered by SAP HANA and built in collaboration with SAP Custom Development and SAP Consulting is critical to our business and solidifies our position as the leading innovator in our industry.”

Yves Courbot, Compliance and EHS Portfolio Manager IT Demand, Givaudan SA
MMG Limited
SAP Business Transformation Study

Discover how MMG Limited, a global resources company, tracks and shares the results of EHS and community management efforts. With SAP EHS Management and other SAP software, MMG can report on hazards, incidents, and near misses more quickly and easily.
Working with the team from SAP Digital Business Services helped us prepare for our upcoming migration. The support was great, and it was very good to know we could rely on prompt support whenever needed.”

Stefan Gabriel, SAP Technical Lead, MMG
Digital Twin
A digital twin is a virtual representation of a physical object or system – but it is much more than a high-tech look-alike. Digital twins use data, machine learning, and the IoT to help companies optimize, innovate, and deliver new services.
Digital Twins and the Future of Industry 4.0

See how digital twins – and networks of digital twins – are transforming how engineers design products, how manufacturers collaborate with end users, and how companies generate revenue and provide value.

- Monitor a constant stream of usage and performance data in real time
- Combine end-to-end asset or product lifecycle data into digital threads
- Support new product-as-a-service business models
- Drive innovation in manufacturing, R&D, supply chain, asset management, service, and logistics
The **Network of Digital Twins**

A network of digital twins helps keep systems up to speed on operating efficiency, maintenance status, and collaboration for new design ideas and product improvement.
NETZSCH Pumpen & Systeme GmbH
SAP Business Transformation Study

Learn how SAP Asset Intelligence Network enabled NETZSCH to standardize its asset portal and provide a global collaborative database to better serve the needs of its customers.

Read the BTS
This new network helps our customers and partners, as well as our company, to be more efficient and reduce the risks of operating equipment.”

Michael Sigl, Team Lead, IT Infrastructure and Communications, NETZSCH Pumpen & Systeme GmbH
Should Businesses Be Scared to Meet Their Digital Twin?

Forbes Article

As digital twins mature, we’re finding more and more ways to use the data they track and generate. Should businesses be scared of this new reality – or embrace it?

Read the article
Production Engineering and Operations
Increase process visibility and performance. Improve your plan-to-produce process with SAP software for production operations management.
Production Planning Solution Capability

Shorten lead times at low cost with responsive production planning.

Use responsive production planning – critical in today’s dynamic business environment where customers increasingly seek shorter lead times and companies have to respond at lowest cost – with SAP solutions.

Enable fast and responsive production planning scenarios closely linked to manufacturing execution. Increase your visibility into manufacturing capacity, and react to changes on the plant floor more efficiently to maintain quality products and customer service while decreasing costs.
Production Scheduling Solution Capability

Ensure feasibility of production plans with integrated scheduling.

Tightly integrate production planning with scheduling and execution with SAP solutions. Gain a consistent view of inventory, capacity, and detailed material flow.

Schedule resources optimally by considering finite capacity, rules for sequencing and setup, and material availability constraints. Take advantage of our solutions with configurable multilevel production scheduling and optimization capabilities that address many industry-specific sequencing requirements.
Production Warehouse
Solution Capability

Improve your enterprise productivity with efficient production and process material flow.

Improve your visibility and optimize enterprise material movements between warehousing and production operations through synchronized material flow with SAP software for production warehouses. Stage materials that are required for production and process operations in production supply areas in timely and required quantities to support efficient consumption during the production process cycle. Improve your enterprise productivity, supporting agile manufacturing principles.
Extended Production Operations Solution Capability

Manage shop-floor operations with real-time insight, monitoring, data collection, and analytics:

- Monitor production orders and operations
- Optimize system monitoring of shop-floor production operations with automatic issue detection, root cause analysis, and decision support
- Manage adjustments to existing production orders and related master data
- Manage the work queue as well as get all information necessary to streamline operations
- Use tracking and tracing of individual parts and part-specific genealogy by shop-floor item
Enable continuous improvement with integrated, accurate, operational performance data.

Integrate knowledge and disparate software solutions by reporting live data and passing it in a generic way to other systems with SAP solutions for enterprise performance management. Quickly connect and integrate a wide range of manufacturing systems for reporting and system collaboration. Resolve operational issues with communication and data sharing in near-real time.
Exceed expectations with quality management and compliance.

With SAP software, manufacturers can run enterprise-wide, closed-loop quality management processes to prevent deficiencies, enable continuous process improvement, and sustain quality control. Quality managers are equipped with the visibility needed to continuously improve operations and produce high-quality goods at a low cost. They can even help ensure compliance with regulatory and manufacturing regulations at the same time. As a result, manufacturers can drive down operating costs, limit poor product quality, and meet customer and stakeholder expectations.
Manufacturing Networks
Easily balance production capacity in your existing resources for greater success. Have the ability to scale up and down quickly based on market demand in a cost-effective way with SAP software for production networks.
Ensure the value of process improvements through shared situational awareness.

Sharpen production insights to foster continuous improvement in industrial environments using sense and respond software from SAP. Gain a common understanding of the priority, cost, and impact of driving new and challenging improvements in standard processes and workflows, track the resources – people and machines – performing the work to assess progress, and manage the variations that arise from changes to the process.
Collaborative Supply Network Solution Capability

Improve supply network visibility and collaboration for profitable outsourced manufacturing.

Connect with contract manufacturers using SAP software for outsourced manufacturing collaboration. Use automated functions to view the status of materials at outsourced locations, track milestones, and identify issues proactively.

Create, publish, and finalize work orders fast, including subcontractor purchase orders and orders for configure-to-order items. By improving visibility of multitiered supply networks, our software helps shorten lead times and reduce manufacturing costs.
Product Genealogy
Solution Capability

Trace batch-managed products and components across the supply network.

With SAP software, companies can establish complete product genealogy by tracing batch-managed products and components across the entire supply network and linking them to related business activities, such as deliveries and purchase orders. Browser-based graphical tools enable plant personnel to analyze and find the root cause of product defects, and then perform and report on targeted holds, withdrawals, or recalls. The comprehensive view into batch genealogy reduces the risks associated with product issues, improves service levels, and facilitates regulatory compliance, which helps protect brand equity.
Distributed Manufacturing Solution Capability

Increase local and central operational visibility and production flexibility.

Efficiently address fluctuating customer demands by connecting supply chain solutions with the 3D printing capabilities of a global manufacturing and logistics network. The SAP Distributed Manufacturing application enables you to meet the ever-changing demands of your customers quickly and efficiently by connecting our supply chain and manufacturing solutions with the 3D printing capabilities of a global manufacturing and logistics partner network.

This provides you with unprecedented opportunities to drive innovation by revolutionizing your design, optimizing manufacturing and logistics processes, and creating reimagined business models.
Thought Leadership
Manufacturing plays an integral role in the digital transformation of any organization today, as it has touch points in every segment of the business, including design, planning, development, supply chain, operations, and service. This close collaboration across domains is necessary to meet the multiple challenges that manufacturing faces, including variable demand and product individualization, the complexity generated by massive IIoT data influx, and the assurance of enterprise-wide quality. With this shift, production processes and teams are becoming strategic contributors to business success. Read the IDC report on how digital manufacturing is empowering design to operate.
Contact
Get Maximum Value from SAP Digital Manufacturing Cloud

Jump-start your implementation and drive ROI by collaborating with industry experts, consultants, and support engineers throughout your journey.

Services
Transform your business quickly and effectively by taking advantage of our holistic service and support plans, expert consulting services, custom application development, best-practice support, and deep industry and technical knowledge.

Support
Get the support you need to keep your SAP solutions running at peak performance with our IT experts and support services, including long-term plans, embedded teams, remote technology support, a self-service portal, and innovation strategies.

Explore our services
See our support plans

Continued
Security and Compliance
Focus on your business and customer relationships while knowing that your data is safe and reliable. With a proactive, predictive approach, SAP helps ensure compliance and data security in the cloud and within an on-premise data center.

Learn about security at SAP
Transform Your Business Faster with Help from SAP Digital Business Services

Jump-start your SAP solutions and drive ROI by collaborating with industry experts, consultants, and support engineers to receive guidance, support for prescriptive best practices, and expertise – no matter where you are on your journey.

Realize your business goals by simplifying and accelerating your digital transformation.

In an era focused on continuous innovation and anticipating customer needs, it can be hard to turn your vision into reality. This is where SAP Digital Business Services can help. We’re part of SAP, so we know SAP software better than anyone else. With over 40 years of experience, we can help you reach your business transformation goals – and everything in between.

Continued
Transform your business with unparalleled service support enterprise-wide

SAP Digital Business Services connects business and IT to help you close the gap between your digital transformation strategy and execution. From designing and value discovery to accelerated innovation and productive usage for tangible business results, you can evolve your business by breaking new ground with a trusted advisor who knows SAP software best.
Leading the Way in the Digital Economy

Follow this link and relive key moments of events.
SAP Digital Supply Chain
“Connect Digitally to Perfect Reality”
About SAP

As a market leader in enterprise application software, SAP helps companies of all sizes and in all industries run better. Founded in 1972, SAP (which stands for “Systems, Applications, and Products in Data Processing”) has a rich history of innovation and growth as a true industry leader. SAP applications and services enable more than 365,000 customers worldwide to operate profitably, adapt continuously, and grow sustainably.

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