INTEGRATED SOLUTION SAP® BUSINESS ONE WITH PPS ONE

THE IDEAL SOLUTION FOR SMALL AND MEDIUM SIZED MANUFACTURERS

Less complexity, more flexibility, transparency and efficiency

Competitive advantage through flexible production processes

Industrial enterprises today need to survive in a market that is subject to ever-increasing and changing requirements, both on a national and an international level. This makes flexibility key - not just as a catch phrase but as a necessary reality. This is particularly true for small and mid-sized manufacturers. In this kind of market, the ability to adapt rapidly to new manufacturing operations becomes a decisive competitive advantage. Frequently, orders currently being produced must be adapted to different conditions, by adding either BOM items or production steps.

Transparency for good decision making

Companies that want their success to be future-proof require a fully integrated, flexible, end-to-end IT solution that is highly responsive and guarantees access to all of the latest and most important information and operational as well as key performance statistics. It needs to provide total cost transparency - at any time and at any stage of production - and allow you to compare differing production process variations as well as the resulting profits, even as early as the bidding stage.

Fast answers for more efficiency

For small and mid-sized manufacturers, questions regarding capacity, workload and availability of materials arise frequently: Can we produce a product for a client by the date they request? Do we have the necessary resources (materials, machine capacity and manpower) available? How far into the future are we booked? Which work is backlogged or needs to be completed this week? Answers to these and other business-critical questions need to be readily available in order to ensure that operations in the company run efficiently.

PPS One: The flexible solution for transparency and efficiency

PPS One provides active support as you adapt to new processes in production operations. The right tools give you the flexibility you need. Through its cost-based evaluations of production orders and projects, PPS One also provides immediate access to key data for tactical and strategic decision-making. Quick answers to other business-critical questions also increase efficiency.
A few examples:
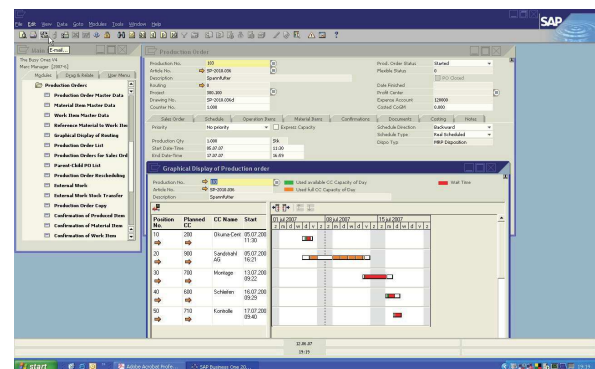
Display of lead time for production orders
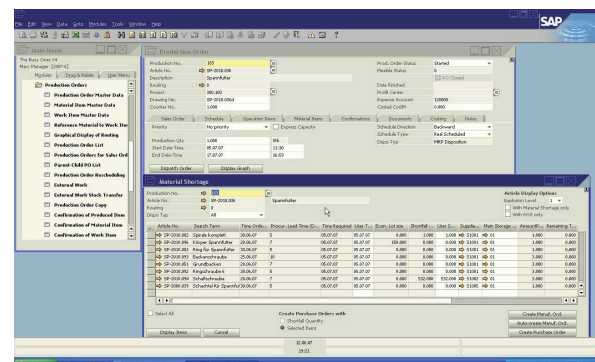
Overview of material availability for a production order
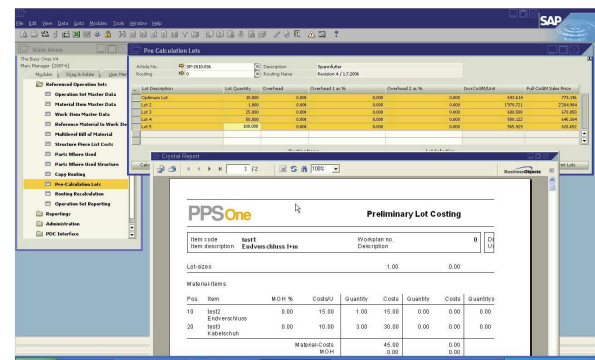
Preliminary lot size costing
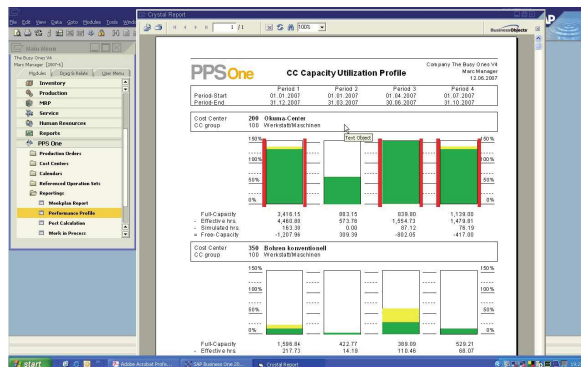
Workload overview for four time periods of the user's choice

PPS One provides you with quick, easy and concise answers to all relevant questions - so you can make the right decision at any time.

Creating ideal conditions for small and mid-sized manufacturers

Our 20-year focus on small and mid-sized manufacturers and more than 5,000 customers worldwide make CP CIM-POOL AG one of the most experienced providers of operational management systems. Our methods of implementation are based on decades of expertise and experience working with manufacturers.

Make your business even more successful

The numbers from completed projects speak for themselves:
■ Up to 40% lower procurement costs
■ Increase of supply readiness by over 95%
■ Up to 80% inventory reduction
■ Productivity increase by up to 50%
■ Up to 50% reduction in lead time

The innovative edge

Using the technology of SAP Business One CP CIM-POOL AG integrates PPS One to provide a comprehensive business solution package for small and mid-sized manufacturing companies. PPS One delivers exactly what these companies expect - complete, practical, pre-configured production functionality based on an open, flexible, future-proof system at the lowest possible administrative and operational cost.

The best of both worlds

PPS One was developed in partnership with SAP and is based on SAP Business One. It supports the make-to-order market, where capacity planning, scheduling and utilization of shop floor resources are paramount, and where labor and machine costs are major cost drivers.
PPS One has a modular structure.
Thanks to its scalability and expandability, it can be easily adapted to the specific needs of your company. PPS One grows along with your business. You can simply choose different implementation levels using only what you actually need.
SAP Business One in combination with PPS One is a cost-effective, compact enterprise solution for small and midsized manufacturing companies with anywhere from 2 to 250 employees. It is highly integrated, easy to operate and quickly ready for use with SAP

Business One and PPS One, your business is well equipped for the future. Tap your company's full potential.
Fully integrating all business processes will make your manufacturing company more transparent, more controllable and more profitable.

Flexibility in production

PPS One supports a wide range of manufacturing methods:
• Single-unit and small-batch manufacturing
• Make-to-order manufacturing
• Mixed-mode manufacturing
• Assembly operations
• Job-shop production
• Variant part manufacturing
• Batch manufacturing

A comprehensive, integrated system

PPS One in conjunction with SAP Business One offers all modules that a manufacturing company needs:
• Purchasing
• Materials management
• Material requirements planning (MRP)
• Capacity planning
• Engineering/Design
• Job preparation
• Production
• Assembly
• Costing
• Sales
• Customer service
• Customer relationship management (CRM)
• Human resources management
• Finance
• Banking
In other words, PPS One offers ERP + CRM + PPS + MES in a single system.

Highlights of PPS One

Fast, cost-effective implementation

Installation and implementation, including transfer of legacy data, are done quickly and on budget. Unlike other solutions, the system can be easily adapted to the needs of your company.

User-friendly and well-organized

Despite its generous functionality, PPS One is intuitive and easy to use. The Windows GUI and excellent structure make the application easy for any user to understand,

keeping training costs to a minimum and ensuring fast system availability.

Effective sales for more customer satisfaction

The functionality of SAP Business One allows PPS One to provide comprehensive sales support as well - with integrated prospect management and a sales pipeline that gives an immediate overview using static and dynamic graphics (opportunity analysis).

This allows you to recognize trends, patterns and behaviors in your sales pipeline and sales force quickly and easily so that you can manage your sales efforts more effectively and provide your customers with targeted, faster, and better service.

Software for healthy growth

PPS One grows along with your business. The scalable and expandable system is available in a wide range of languages.

What's more, it provides standard interfaces with internal and external data sources, interfaces with other evaluation applications, and can be integrated into larger SAP solutions.

Easy-to-calculate cost-benefit ratio

In addition to an impressive price-performance ratio of the product itself PPS further minimizes costs through short implementation times. Once implemented, the benefits of increased efficiency, profitability and competitiveness will keep you on budget and help you achieve a fast ROI.

Investment security

Choosing the PPS One solution built on an SAP Business One foundation, means maximum protection for your investment.

This is a healthy basis to build your business on - today and for years to come.

Proven results

PPS One is being used successfully in many small and mid-sized manufacturing companies in a wide variety of industries across the globe. It has a proven track record in companies like Vebo, Maprox and HW Regale.

On-site support

Qualified SAP Business Partners support small and mid-sized businesses on-site. They are extremely familiar with the needs of manufacturers and are fully backed by CP CIM-POOL AG.

Technology advantages you will come to appreciate

Open architecture

SAP provides a compatible Software Development
Kit (SDK) and Application Programming Interface (API). In addition, SAP Business One and PPS One work with Microsoft SQL Server, a commonly used database that has become the de facto standard, especially for small to mid-size enterprises.

End-to-end integration

PPS One is one of the only solutions worldwide that have been certified by
SAP for complete integration with SAP Business One using the User Interface (UI) and
Data Interface (DI) of the Software Development Kit SDK 2005. Processes are end-to-end, and no data (e.g. item, warehouse and MRP figures, or addresses) is redundant.

Drag & Relate

SAP Business One provides extreme ease of use with SAP's patented Drag & Relate function. Drag & Relate makes your business processes completely transparent. By simply moving the content of a field to a specific function using the mouse (dragging), you can immediately put the information into context (relating) and achieve immediate, relevant information.

Links to Word and Excel

In SAP Business One, Microsoft Word documents or Excel worksheets can be stored directly within an activity linked to a specific business partner. The reverse is also true - data export into Excel worksheets or Word documents is just a click away.

Standard interfaces for CAD and production data acquisition

PPS One provides standard interfaces with common computer aided design (CAD) applications and production data acquisition (PDA) solutions.

High-performance query wizard

In addition to standard PPS One reports, which are created and prepared using
Crystal Reports, the intuitive query wizard provided by SAP Business One allows users to assemble information from various sources and create custom reports. Along with other benefits,

this wizard allows you to have key performance figures for the company at your fingertips.

Workflow-based alarm functionality

Every SAP Business One and
PPS user can set up various alarm functions for specific events, e.g. for reminders, for document release purposes or when specific limits are exceeded. The system automatically notifies the employee in charge according to the setting chosen.

Custom fields

A wide variety of data such as text, addresses, telephone numbers, websites, attachments, images and more can be entered into user defined fields. These fields are automatically updated using the database whenever upgrades are carried out.

Integrating Microsoft Outlook

Synchronize dates, contacts, tasks and e-mail content between SAP Business One and Microsoft Outlook. You can also create "snapshots" that contain SAP Business One data for specific customers. From automatic emails which populate with pre-specified information from your system to synchronizing alerts with your Outlook calendar, the potential gains to be made in efficiency and time-savings are massive.

PPS One Master Data Management

Since complete master data information that meets the needs of small and mid-sized manufacturers is indispensable for the successful, optimized use of PPS One, all necessary master data is structured in a logical (i.e. practice-specific) fashion. This allows the data to be entered and maintained efficiently.

Work centers

The system is able to clearly define work centers.
Generally, it differentiates between four different types of work centers:
• Internal or company work centers (e.g. machines, employees etc.)
• External work centers for suppliers that provide specific operations (extended workbench) externally
• Machine groups to determine the shortest possible lead time of an operation through various work centers

• planned work centers for multi-machine operation.
For every work center, the number of work centers, the corresponding supplier address and (optionally) an image (machine) are recorded.
Time factors:
All key basic data for the determination of available capacity is recorded for every work center.
Cost rates:
Full and marginal cost rates to be used as a basis for costing evaluation can be provided for a work center.
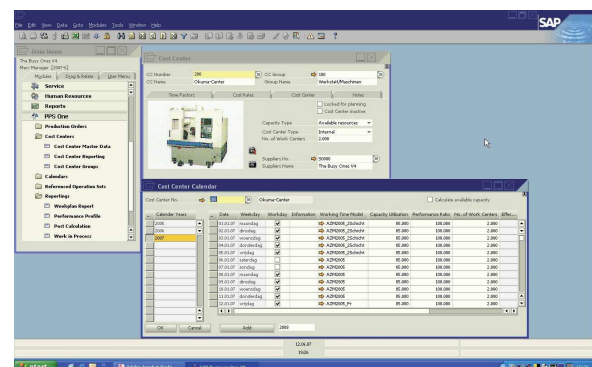### Memos:
Any and all information, notes and reports from revisions, repair reports and even downtime can be entered.
Work center calendar:
An operational calendar can be assigned to the selected work center.
User-defined fields:
Additional user-defined fields can be created and displayed for customer-specific work center information.

Work/Cost center management

Work center groups:
Work centers may be added to listed work center groups. This assignment can be used as a basis for all planning and costing evaluations.
Machine group
When scheduling/dispatching an operation to which a machine group has been assigned, the operation is scheduled for all work centers assigned to the machine group, and lead times are calculated. The work center with the shortest lead time will subsequently be saved with the corresponding operation.
Multi-machine operation
The complex requirements of multi-machine operation can be met easily and efficiently by assigning different internal work centers to a single planned work center.
The setup and run times (target times) of an operation within the manufacturing process are

dispatched and scheduled following verification of available capacity, required internal work centers and in combination with the assigned planned work center.

Operating calendar

Operating calendars can be automatically generated for several years in advance. Leap years are taken into account. Saturday and Sunday are defined as non-working days (default values), so that only general holidays need to be entered.

Work center calendar

A specific operating calendar is assigned to every work center. Specific differentiators such as level of use, revisions, etc. for any given work center can be defined down to the day. Opening and/or assigning multiple calendar years allows production orders to be scheduled over the course of several years.
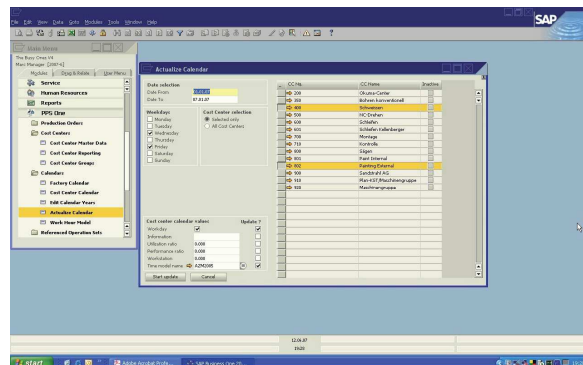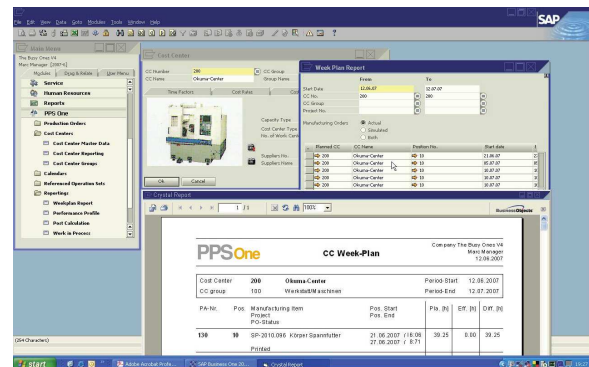

Work/cost center calendar

Work schedule models

Various work schedules can be precisely defined using the available daily capacity, taking into account the beginning and end of the working day as well as breaks. This not only displays the expected completion date when scheduling production orders, but also the exact time of shipping and delivery.

Weekly schedule

All work operations yet to be completed by the selected work center can be directly viewed for any selected time frame. The corresponding link button (orange arrow) provides direct access to production orders and/or operations.

Weekly schedule view

Work center calendar: Daily information

The work center calendar displays all factors that influence daily capacity for the selected day and work center as well as the actual or simulated hourly workload triggered by manufacturing orders.

Work center calendar: Updating

Updating allows available capacity information to be adapted to the current operating situation easily and efficiently.

Planning horizon

An unlimited number of calendar years can be set up, allowing complex orders and projects that often extend over the course of several years to be scheduled.

PPS One Routing and BOM management

Items to be manufactured are assigned an operation plan that defines the materials (BOM - bill of materials) and work processes required for production. This plan is the key to success since it forms the basis for costing evaluations, the manufacturing process and logistics – and that's where the power of PPS One can help you achieve success.

Operation Plan

Any given number of different and/or alternate operation plans (versions) can be entered. This allows for maximum flexibility in BOM design and the selection of manufacturing processes.
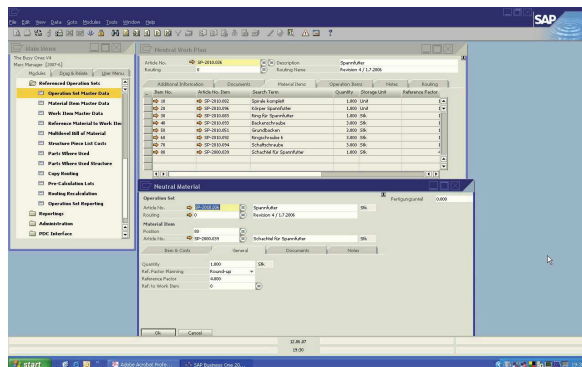
Operation plan with BOM overview

The link button (orange arrow) provides direct access to item master data.

Additional information

The operation plan header can list additional information depending on the requirements at hand:
• Drawing number
• Compartment number (e.g. for plastic injection molding operations)
• Customer ID and name (e.g. for job order production)
• Originated by/Date of creation
• Calculated manufacturing costs
The calculated manufacturing costs per unit determined during pre-costing can also be transferred directly into SAP Business One as needed.
The link button provides direct access to the master customer data for the selected customer.

Operation plan status
This area allows the user to determine whether a neutral operation plan for production is released or locked.

User-defined fields
Additional user-defined fields can be created and displayed for customer-specific information.

Memos/Documents
Memos allow the user to add further information, notes, clarifications etc. regarding the work plan to be created. In addition, all relevant documents (e.g. inspection instructions) can be assigned for the item to be produced.

Material items
You can use various criteria to search for items to be listed as material/BOM items and incorporate them into the operation plan. The link button provides direct access to master item data and the corresponding item. Information regarding amounts, allocation base, memos, documents (e.g. for QA reports) and other data can also be added to material/BOM items. For

pre-costing purposes, a price per unit can be assigned specifically to material items.

Assigning material/BOM items to operations
One or more material/BOM items can be assigned to an operation. This optimizes the requirement date for material procurement (planning).

Operation items

Depending on the requirements, different information can be assigned to operations to define an activity or work process.
• Remarks describing activities
• Tool/Application
• Splitting
• Overlap
• Non-recurring price/price per unit (for extended workbench)
• TR for setup time
• TE for run time
• Allocation base
• Documents
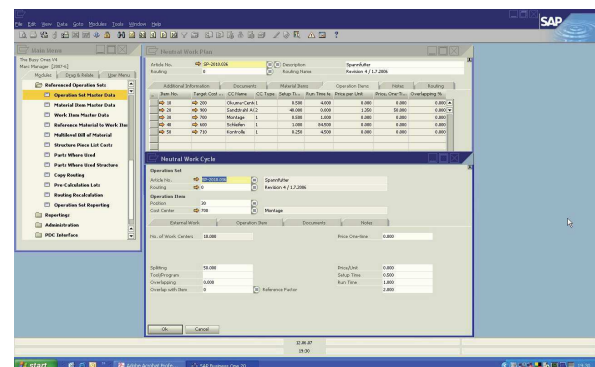
Operation plan with operation item display

Copying operation plans

This function makes setting up additional operation plans easy, efficient and straightforward.
It is possible to copy, as an example, only the BOM from one operation plan and only the work processes from another, into a new product.

Use of structural components

The structural components utilization history allows the user to display which assembly contains the item, and what the higher-level assemblies are, all the way to output of the final/finished product.

Structural pre-costing

Product costing can be carried out across all BOM levels (costed multilevel BOM) and issued in a manner that separates all material and manufacturing costs. Correspondingly, to calculate the material costs of a complex system,

only the prices for purchased items (standard items and raw materials) need to be available; to calculate manufacturing costs, only the set-up (TR) and run times (TE) of the necessary work processes need to be known.

Operation plan recalculation
Following increases in material prices or changes to work center cost rates, it is possible to recalculate all operation plans and enter the calculated cost of production as part of the master data.

Costed multilevel BOM
The structural display immediately shows the composition of a product across all levels.

Costed multilevel BOM with direct access to sub-assembly

Parts usage / Component exchange
The parts usage component displays all BOMs in which the selected item is listed. The component exchange feature allows you to replace one item with another. Optionally, this can be done across all levels.

Parts usage with component exchange

Preliminary lot size costing
A product routing can be calculated for five lot sizes simultaneously and printed out together

with the relevant information (e.g. price of materials, internal and external assembly costs, production costs, cost of goods sold, sales price).
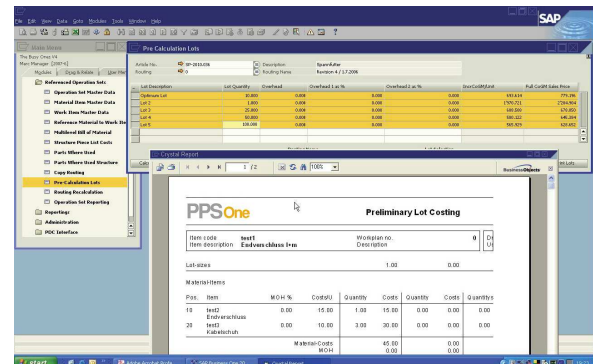

Preliminary lot size costing

PPS One Production Order Management

Extreme user-friendliness and comprehensive direct access to all necessary information and data ensure efficiency in day-to-day operations.
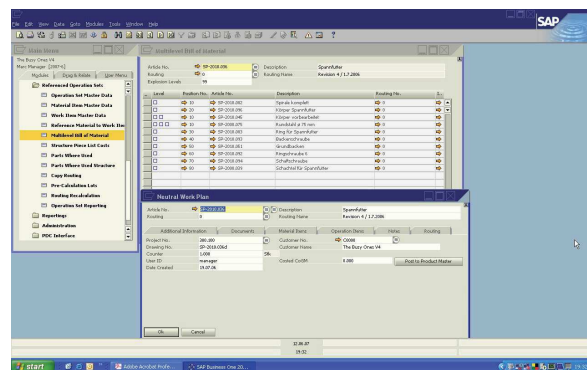
Production orders
You can search for and display all production orders according to various criteria. This allows the user to directly select, reschedule and edit an ongoing production order or query its details.
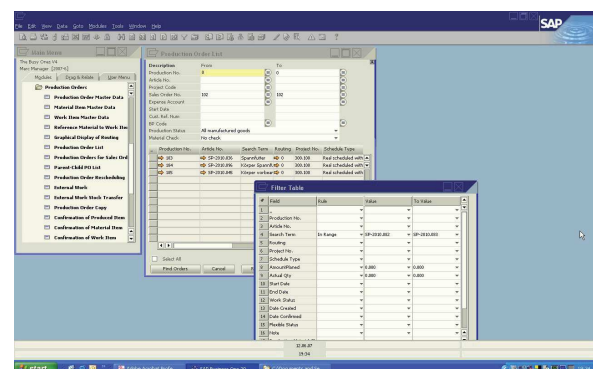
Selecting and listing production orders

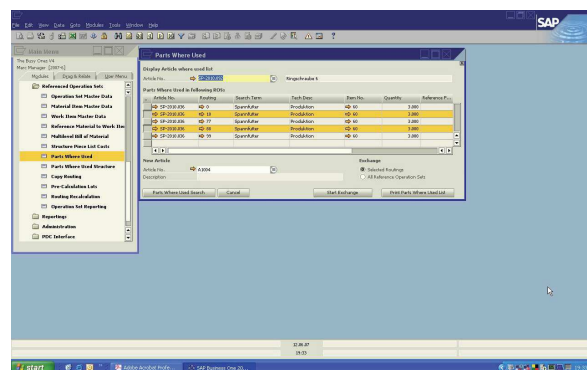### Entering and copying production orders
Existing production orders can be selected and copied in order to enter new production orders. Where needed, the actual values of an existing production order can be used as target values of the production order to be created.

Scheduling

The following options and others are available for scheduling or entering a production order:
• Assigning a production order to a project
• Assigning a customer (by directly accessing the address management module) with desired customer date and sales price
• Production quantity
• Starting date and time, ending date and time
• Priority
• Advance/retroactive scheduling
• Simulated or actual production order
• Easy conversion of simulated to actual production orders

Dispatching / Graphical control Station

An overview graphic with relevant information is available for verifying and displaying the lead time of a production order and its individual work processes at specific work centers.
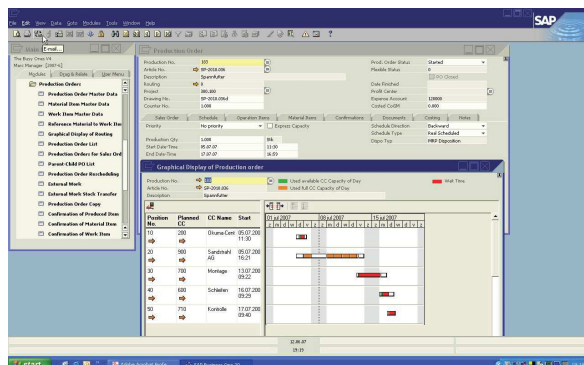

Display lead time for production orders

The link button (orange arrow) gives direct access to detailed information about the corresponding work process or the weekly schedule of the selected work center.

Material shortage display

The detailed listing of availability for all BOM and material items down to the most basic step (costed multilevel BOM) can be issued. Additional limiting options allow you to display the desired figures precisely.
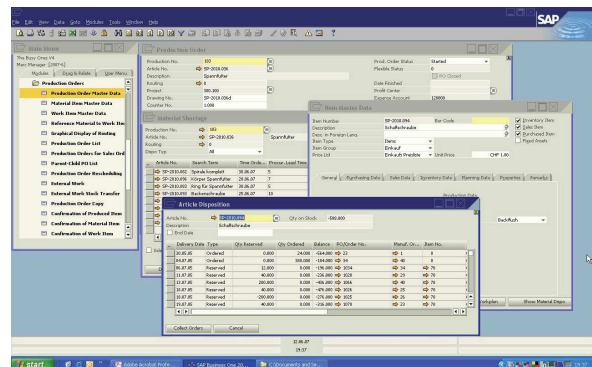
Material shortage display with material master/MRP access

MRP/BOM items

Where necessary, missing parts, target amount and date required etc. can be altered for every individual material/BOM item.

MRP overview

The warehouse and MRP (material resource planning) figures are immediately available through direct access to the selected material item for the product. The SAP Business One item master allows the user to choose the MRP overview for the selected item. All relevant scheduling figures are listed concisely and by date. Users can directly access the corresponding customer, purchase and manufacturing orders from every MRP line by clicking the link button.

Purchase order from material shortage

Purchase orders for parts such as standard parts and raw materials can be created directly in the system. The connection between the manufacturing order and material items with created purchase orders will be directly displayed in the material shortage display. The link button grants direct access to the order.
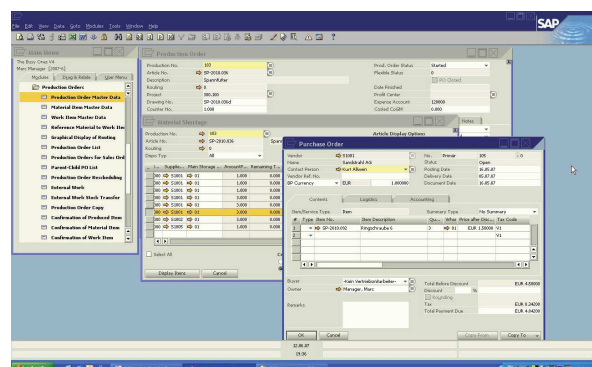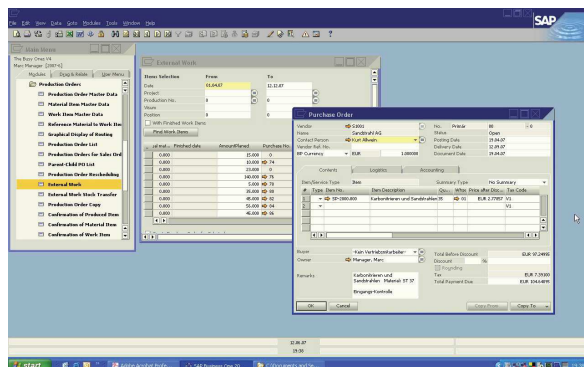

Material order created from material shortage

Work processes for external production (extended workbench)

Orders for work processes carried out at a supplier's site can be created directly within the system. The link button provides direct access to the corresponding order from the production order.


Work process order

Creating a production order based on material shortage

From the material shortage display, submanufacturing jobs can be generated and/or scheduled directly for items manufactured inhouse.

Customer order-based production orders

Production orders for items manufactured inhouse can be generated directly from the customer order. All relevant information (amount, customer order number, customer etc.) are automatically entered into the production order.
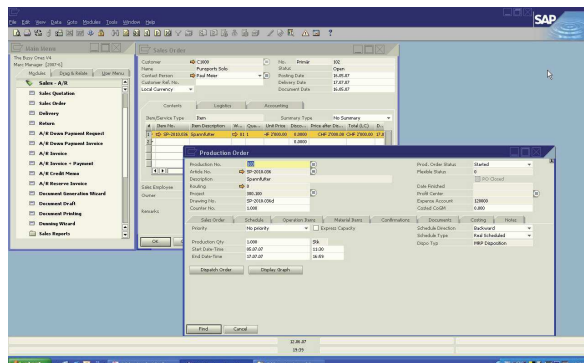
Creating production orders from customer orders

MRP-based production orders

Within the MRP (material resource planning) component, production orders can be generated directly from the order recommendation report.

Issuing shop papers

A wide selection of options is available for issuing different types of shop papers.

Flexible manufacturing based on production order

Material/BOM items and work processes can be added to or edited in created or existing production orders. In addition, production amounts that differ from the production order amount can be entered in the individual work processes (work process splitting). Changed production orders can be rescheduled repeatedly.

Sequence planning

Multiple production orders can be selected and re-scheduled simultaneously. In ongoing, already started production orders, dates and production quantity can be changed at any time. The order in which the selected production orders must be processed can be freely determined. Unless dispatching has been completed with the "Dispatch all" function, all rescheduled production orders can be returned to their original status at any time.
Simultaneous changing and rescheduling of multiple production orders
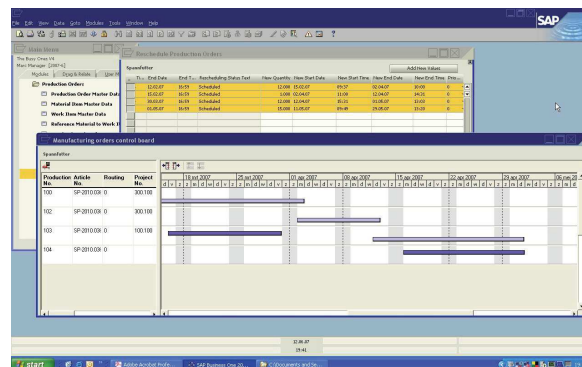
The planning process is supported by various visualization graphics:
• Display of a production order with expected variances for planned changes
• Display of scheduling situation of selected production orders and variances based on effected changes

Confirmation of material/BOM items, work processes

Planned as well as unplanned acquisitions of materials can be entered into the production order without switching applications. Working hours can be confirmed manually or via an

interface with a wide range of production data acquisition (PDA) systems.
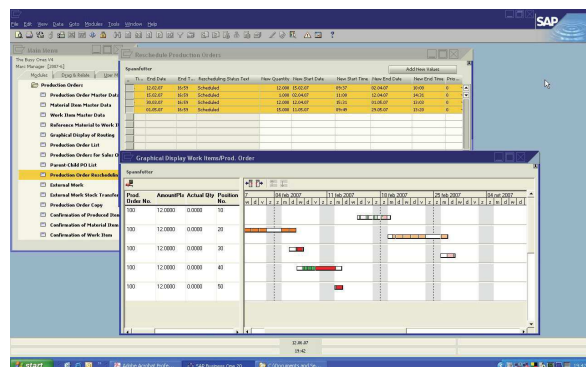
Production order confirmation
All salable finished products can be booked directly into the warehouse via full or partial delivery. In addition, various selection criteria are available for individual postings.

Costing information
Continuous or rolling product costing analysis can be viewed at any time for the selected production order. Online tracking is carried out with every confirmation message posting.

Graphical support
If dates or production amounts are changed while planning/scheduling a production order, the effects on the process can be displayed in comparison to the original/current status.

Variance in production order lead time

Confirmations
All material deliveries per BOM/material item and all confirmations (detailed times) per work process are stored in detail with every corresponding production order and can be accessed at any time.

Shop papers
Shop papers can be freely configured using the Report Generator supported within PPS One and customized to company specifications.

PPS One Analyses

Every manufacturing company is different, and their requirements for analyses and reports are just as unique. Corresponding selection options and freely definable analyses (Report

Generator) make it possible to extract custom reports from an overwhelming amount of available data. One-click access to key figures and performance indexes is available at any time.

Weekly schedule for work centers
The weekly schedule or control station shows the operations started/not yet completed for one or more work centers for a specific period of time according to preset selection criteria.
Users can also determine whether only operations of actual production orders and/or simulated ones as well are to be displayed.
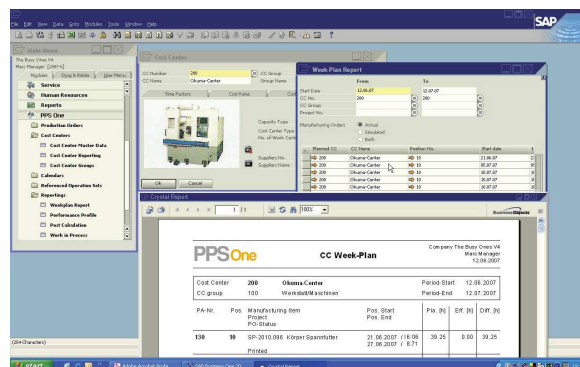
Weekly schedule view

Workload overview
The workload of the work centers is displayed in a clear, easy-to-understand graph. It can also be created in absolute values – as a condensed table-form display over four time periods of the user's choosing.

Backlogged production items
All backlogged operations can be displayed according to various selection criteria. The backlog duration of specific processes/operations is given in days.

The product costing analysis
The very extensive selection options help users meet the most diverse and if necessary even extremely strict requirements for cost accounting evaluations. A few examples:
• Start date of production orders
• Completion date of production orders
• Reported completion date
• Production orders
• Routing
• Project
• Item/product
• Customer
• Sales order
• All production orders or only completed

Ones

The "work in progress (WIP)" label
Within selected options such as
• Project
• Production order
• Item/product line
All evaluations labeled as work in progress are
listed separately according to material and
production costs. Partial manufacturing order
deliveries are taken into account during the
evaluation and are explicitly displayed as such.
The "work in progress (WIP)" label is available at
any time and on any freely chosen date for
specific points in time.

Company-specific evaluations
The Report Generator allows evaluation results
to be used or processed further almost without
restriction and in line with customer-specific
requirements. A few examples:
• Project overview
• Both the target and actual cost comparison and
all production orders for a project can be
displayed.
• Open production orders
• An overview of the accumulated and target
costs of current production orders yet to be
processed can be issued, including order queue
as based on production costs.
• In addition, the hourly and turnover totals of all
work processes executed at the specific work
centers can be generated.
• The comparison of target and actual material
expenses and work center expense can be
evaluated across periods of time of the user's
choosing according to the company's specific
requirements.

Workload overview
The simultaneous display of four time periods of
your choosing gives you the maximum possible
overview of the capacity utilization of individual
work centers (machines etc.).

Workload graph
This clearly structured, easy-to-comprehend
graph makes it easier to evaluate the company's
overall operational workload.
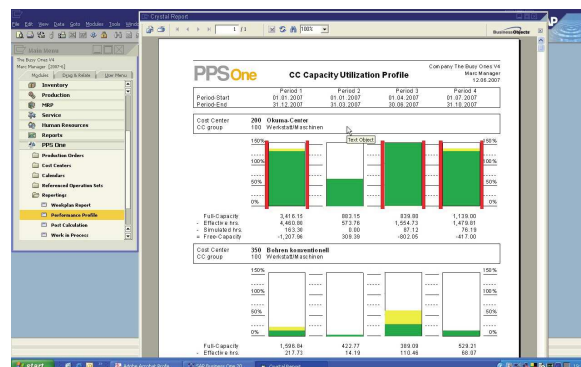
Workload overview of four time periods of the user's choice

Weekly schedule/Control station
All operations still to be completed are displayed
for the corresponding work centers over a
selected time period.

Product costing analysis
The progressive and/or continuous product
costing analysis shows the results of one or
more specific production orders, projects etc.
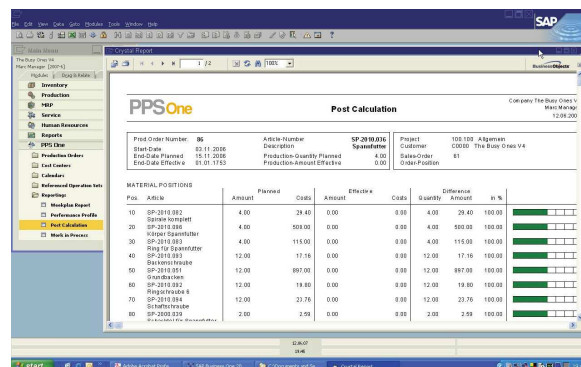
View of selected product costing analysis

Your next steps

Arrange a consultation with one of our SAP
Business One Partners to find out more. Our
partners will be happy to show you how SAP
Business One + PPS One, the integrated,
modern, end-to-end solution for small and mid-
sized manufacturing companies, can meet the
unique requirements of your business.