



**#CompuTec**  
**ProcessForce**

Process Manufacturing with SAP Business One



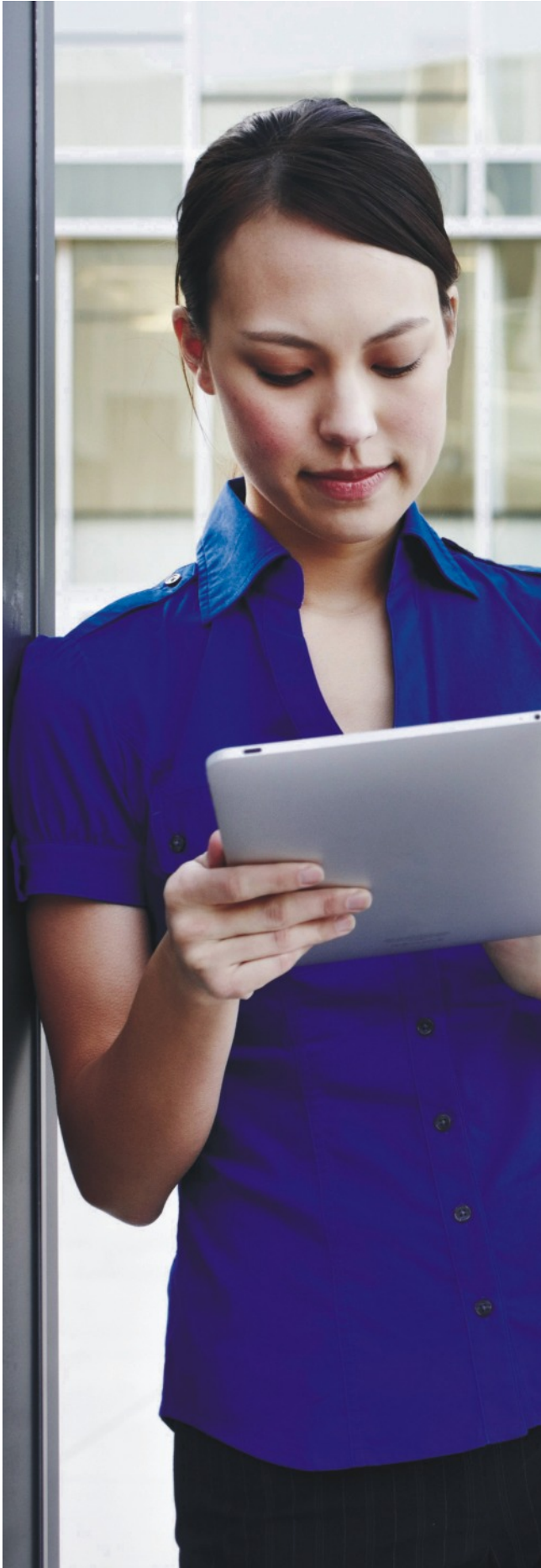
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**#CompuTec**  
**ProcessForce**

**Process Manufacturing  
with SAP Business One**

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# Company Overview



CompuTec S.A. is a growing privately owned business comprising of over 50 employees with 4 offices located across Poland. We are recognized as one of the top SAP Business One Gold partner within the region, as well as one of the country's leading providers of IT business solutions and related services.

CompuTec received major global awards such as: **SAP Business One Excellence Award, SAP Business One Global Solution Partner Award – Leadership in Innovation, SAP Quality Award, SAP Global SSP Best New Industry Solution, SAP Best Performance Challenge 2012 Winner.**

We have formed strategic partnerships with innovators and leaders of industry such as SAP, Microsoft, Cisco, IBM and EMC to name but a few.

Our business practice comprises of a customer focused team of certified consultants and engineers who deliver value based solutions, addressing the needs of our customers and partners.

With over a decade of experience we have the know-how to implement end-to-end solutions ranging from network infrastructure, to desktop productivity tools, to ERP and customer specific software solutions.

## The Best of Both Worlds

SAP Business One, a solution for small and medium sized businesses and subsidiaries of Large Enterprises, includes all the processes you need to run your entire business. It is a powerful solution, simple to use and affordable. It provides complete business management functions covering financials, sales, customers, inventory, and operations.

## SAP Business One

But, as a process manufacturer, depending on the level of your business complexity and sophistication driven by customers, product, industry and regulatory compliance, an additional solution is often required to cover your specific industry requirements.

ProcessForce, a CompuTec solution, developed specifically for the process manufacturing industry and fully integrated with SAP Business One can bridge this functional gap. Bringing you the best of both worlds, SAP's strength and security and CompuTec's process manufacturing domain expertise.

This next generation manufacturing solution designed from the ground up, built 100% utilising the SAP Software Development Kit (SDK).

Thus taking advantage of SAP's business platform and latest innovations, creating a functionally rich and easy to consume industry solution, benefiting both customers and partners.

### Industry Focus

*SAP is excited to see CompuTec become a Software Solution Partner (SSP) for SAP Business One. Their solution – ProcessForce – provides a functional rich solution for the Process Industry. Our SSPs, like CompuTec, are the backbone of SAP Business One's success in helping more than 30,000 small enterprises world wide become best run businesses.*

Patrick Carpreau, Senior SSP Manager  
EMEA, Software Solution Partners, SAP

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To provide value to all our customers, present and future, we have combined our manufacturing expertise and industry knowledge, with validated business requirements from our existing customer base to build a solution focused on four key process manufacturing industry verticals:

- Consumer Products
- Life Sciences
- Chemicals
- Building Products

## Solutions for Business

Leveraging the proven business processes of SAP Business One, ProcessForce provides seamlessly integrated value based solutions, which support the day to day business operations and issues that are unique to the industry and enable those businesses to become a better run process manufacturer.

*As a provider of food, we have to know exactly where our inventory comes from and where it ends up so that, if there is a need to recall a given product, we can do it easily.*

*Thanks to ProcessForce we now have full control of our production processes, we know exactly what are the costs of production and can easily monitor batches of both finished and raw materials.*

Maciej Pieprzyk, Project Manager,  
SPA Foods

Broken down into a set of functional yet integrated components, ProcessForce covers a wide spectrum of business activities and processes:

- Product Data Management
- Bill of Materials/Formulations
- Co-Product/Scrap Management
- Routing and Resource Management
- Batch Control and Traceability
- Production Management
- Ingredient Declaration
- Quality Control
- Complaint Management
- Product Costing
- Production Scheduling
- Handheld devices & Data Collection



## Global but Local

With an established global footprint, SAP Business One is available in 27 languages, and localisations for 40 different countries. ProcessForce has localisation built into its core, taking advantage of SAP Business One configuration and display settings, for example master data, multi-dimensional accounting and languages. ProcessForce User Interface is available in all the languages that are supported by SAP Business One via CompuTecs's "Fast Start" translator service.

*We understand that our "Fast Start" translations are not 100% accurate, but when you looking to expand into new markets offering such an option, where the partner or customer only has to change between 10% to 20% of the field strings, significantly reduces the investment time.*

Adam Łebkowski, Channel Manager  
CompuTec S.A.

## It is all about Standards

With more than 40,000 customers globally, SAP Business One offers a set of standard tried and tested business processes and functions. ProcessForce application extensions leverage these standards to operate within the framework partners and existing customers who may wish to upgrade to ProcessForce are used to.







*The Dutch market is full of process manufacturing enterprises and for a while we had no such offering. With ProcessForce we now have a solution to strength our position within this vertical which is a competency of our business. We have deep knowledge of manufacturing and together with ProcessForce we can provide real added value to many food and beverage, and plastic molding manufacturing companies*

Hans Numan, Managing Director,  
PlanLogic B.V.

## SAP® Certified SAP Business One Integration

*We achieved our primary goal of gaining SAP Business One Integration Certification status, next we want to be part of the "Qualified" logo program, therefore becoming a recognized premium SAP industry solution*

Adam Łebkowski, Channel Manager  
CompuTec S.A.

### Industry Requirements

At the heart of the ProcessForce solution resides a bill of manufacturing. This is a concept which allows process manufacturers to define the resources that are consumed and produced as part of the production process. As a process manufacturer you need the "ease of use" to define your products as simple recipes/formulas or require the flexibility of complex recipes/formulas to define the component/ingredient relationships.

Depending on your micro-vertical industry needs and the products you produce, there are other factors which have to be taken into account for example:

- Yield and Factor calculations
- Co-Product and By-Products production
- Scrap management

Variables which affect inventory levels, product costs and recipe accuracy, all of which impact the bottom line.

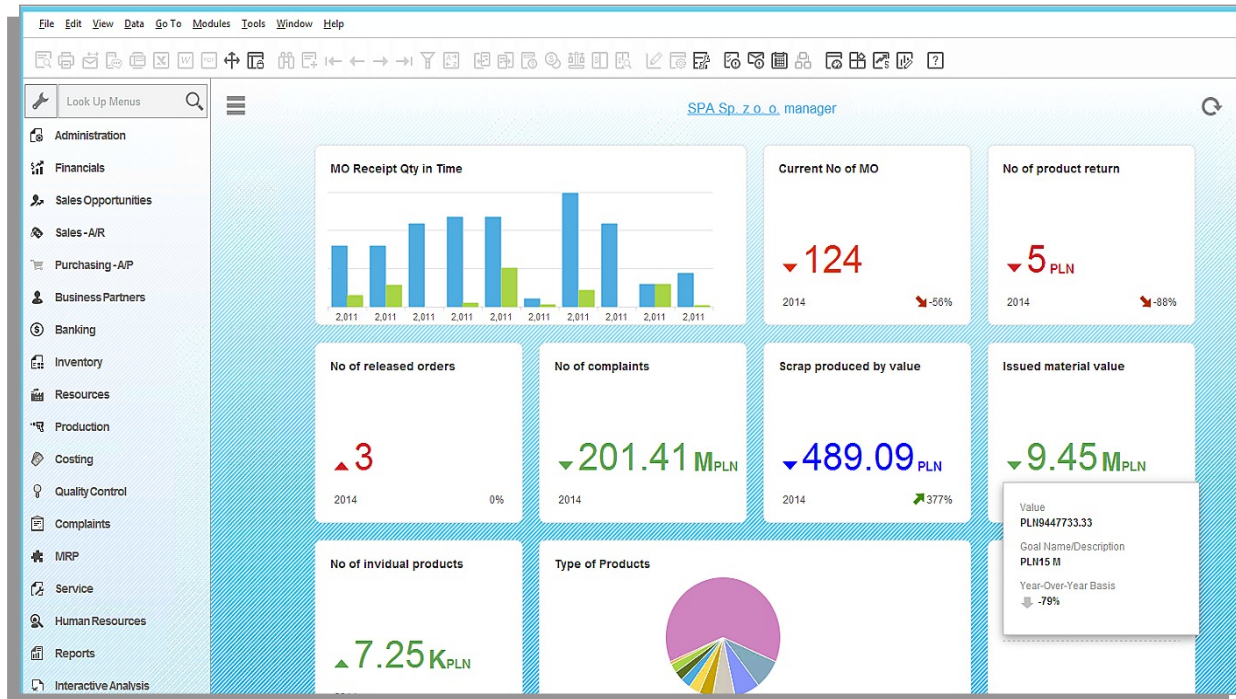
### Easy Adjustment

Like SAP Business One, ProcessForce can be adapted to meet your unique or changing business requirements without creating a heavy, ongoing IT burden. In fact to adapt ProcessForce the application uses the same tools as SAP Business One, therefore the learning and education curve is kept to a minimum, thus reducing the total cost of ownership.



# SAP HANA

If you are considering the SAP® Business One application, version for the SAP HANA® platform, there is also a version of ProcessForce for SAP HANA®, with embedded analytics and high-performance apps, making you work more efficiently than ever before.



## Partners Quotes

SAP Business One is the corner stone of our strategy for SME and Large Enterprise subsidiaries, and we have a strong industry focus dedicated to first-class Process Industry companies in the fields of Cosmetics, Chemicals, Pharmaceuticals and Agribusiness, just to name a few. While engaging with CompuTec has been a significant step in bringing additional value to our customers and helping them cross the bridge between state-of-the art IT solutions and their business processes says **Eric Lonqueux, Director of International Business Development, Viseo.**

Our strategy at Signum has been to focus on food and beverage, chemicals, food service and wholesale vertical markets. Focusing on the food and beverage sector, where we already have a good base of foodservice customers, meant that we started to see an increasing number of enquiries in the food manufacturing sector. As we started to explore the available solutions, it became apparent that ProcessForce was, and still is, the only solution in the market that offers the detailed industry required functionality whilst being both a solution that is native to SAP Business One and easy to implement and use says **Lindsay Pointon, Managing Director of Signum Solutions Ltd.**

Our client had initially implemented SAP Business One, and for the next phase of their project where looking at business optimization especially within the areas of production and ingredient management. ProcessForce provided the extra solutions our client required to move their business forward to another level says **Roger Bastiaens, Managing Director, InnoBalance.**



# Solution Map

The combined SAP Business One and ProcessForce solution map provides a visualization of the application components, vertical extensions and tool utilization.

Financials	General Ledger	Ingredient Declaration	Banking	Cost Accounting	Product Costing			
Customer Relationship Management	Activities Management	Opportunity Management	Service Management	Calendar				
Logistics	Sales	Procurement	Data Collection	Warehouse Management	Inventory Management			
Product Management	Product Master Data	Batch & Serial Data	Bills of Materials	Routings				
Production	Production Control	Product Traceability	Material Requirement Planning	Scheduling	Time Reporting	Calendars	Costing	
Compliance	Ingredient Declaration	Quality Control	Compliant Management	Batch Recall	Dashboards			
Human Resources	Employee Data Management							
Implementation	Getting Started	Financial Initialization	General Settings	Alert & Workflow Management	Application Integration			
Customization	Extension & Personalization	User Defined Object	Formatted Search	Analysis Tools	Support Tools	Migration	Crystal Report Integration	ProcessForce SDK
Software Development Kit	User Interface API	Data Interface API	Data Interface Server	ProcessForce API				

Blue – Added new processes, functions and reports

Red – Use existing SAP Business One processes, functions and reports, but extended the functionality

Yellow – Use existing SAP Business One tools to implement and customise ProcessForce Forms



# Product Data Management

Product Data Management solution, enables the enterprise to define all the information and data that is required to describe a product. Examples include:

- Revisions with valid to and from dates
- Phrases – to define for example EU phrases as part of MSDS
- Text – to define for example hazard instructions, and safety text
- Classifications – to categorise products for example toxic and non-toxic
- Groups – to group similar products together for example acids and chemicals
- Properties – to define for example physical, chemical definitions or ingredient details
- Attachments – to reference for example MSDS, work instructions, safety sheets, production videos
- Define default Batch and Quality Control status
- FIFO, FEFO and FMFO batch consumption control
- Define Shelf life and Inspection date periods
- Batch and Serial number generation templates
- Define Expiry warning and Expiry date calculation methods
- Define and record a country of origin for an Item

**Item Details**
– □ ×

Item Code

Item Name

UoM

Yield

Accept Lower Qty

Ignore Yield

#	Property Code	Property Name	Expression	Range Value From	Range Value To	UoM	Reference Code
1	01	Vapour Density	Equal	3.380	0.000	Air=10	
2	02	Specific Gravity @20DegC	Equal	1.840	0.000		
3	03	Solubility in Water	Equal	0.000	0.000		04
4	04	Vapour Pressure	Less than	0.001	0.000	mm Hg @20DegC	
5	05	Odor	Equal	0.000	0.000		07
6	06	Appearance	Equal	0.000	0.000		06
7	07	Colour	Equal	0.000	0.000		03
8	08	Melting Point	Equal	10.000	0.000	DegC	
9	09	Boiling Point	Equal	290.000	0.000	DegC	
10	10	pH	Equal	0.300	0.000	pH	
11			Between		0.000		

Remarks

OK
Cancel

# Ingredient Declaration

An extension to product master data, ProcessForce provides the necessary functions to define nutrient and ingredient information. Combined with allergen, percentage daily intake values and pack versus serving size, ProcessForce provides the necessary data to produce ingredient listings and declaration statements to support the process of creating product labels.

- Template – define a list of nutrients or ingredients that are copied into the product master data to allow for quick data entry
- Business Partner – record the business partner that supplies the ingredient
- Specification reference – record the vendors or industry specification for an ingredient
- Specification date – record the date of the specification
- Classification – record details such as Halal, Kosher, GM, Bio, OGM and corresponding certificates
- Category – define a category to group like ingredients e.g. sugars, fats, vegetables, oils
- Allergens – define a list of allergens and record which ingredients contain such allergens
- Pack and Serving sizes – define a list of pack sizes, alternative unit of measures and corresponding serving size
- %Daily Value – define a list of nutrient and ingredient percentage daily intake values
- Alternative code – define common, scientific or Codex Alimentarius INS or E AU numbers
- Reports – Ingredient listing, declaration statement, and percentage daily value by pack and serving size

#	Ingredient Code	Alternative Code	Description	Category	Condition	Value	UoM	Remarks
1	→ 01		Almonds		Equal	0.000		
2	→ 02		Peanuts		Equal	0.000		
3	→ 03		Milk		Equal	0.000		
4	→ 04		Coco		Equal	0.000		
5	→ 05		Sugar		Equal	0.000		
6	→ 06		Raisins		Equal	0.000		
7	→				Equal	0.000		



# Bill of Materials/Formulations

ProcessForce provides a simple but flexible solution for creating process orientated bill of materials.

- Items – define materials within the product structure
- CoProducts – define a product that is usually manufactured together with another product
- ByProducts – define material of value produced as a residual of the production process
- Wipltems – define work in progress materials for reporting and visibility purposes
- Scrap – define the scrap that is produced during production
- Simple or Product Formulas – define simple or formula based relationships between materials and parent products
- Scrap, Yield and Factors – define value and percentage uplifts for materials
- Revision – define revision specific product structures
- Phantoms – define phantom product structures
- Multi-level – define multi-level product structures
- Attachments – to define and link to detailed instructions, procedures, videos and other such media files
- Warehouse – define the warehouse where the product is produced
- Backflush Location – define the warehouse where material is backflushed
- Project – define the project associated with this product for reporting purposes
- Distribution Rule – define the distribution rule for financial transactions
- Cost Dimensions – define the dimensions for reporting purposes
- Issue Type – modify the picking method of inventory transaction per product
- Mass Replace – replace selected materials and bill of materials within another material
- Instruction tab – record specific instructions concerning Bill of Materials in a text area

**Bill of Materials**

Item Code: Recipe-02    Type: Internal

Description: Recipe-02

Revision: default

Quantity: 1.000    Total: 1.000    UoM: KG

Factor: 1.000    Yield: 100.00    Formula: ...

Warehouse: 01

Distribution Rules:

Project:

MRP Def.

Batch Size: 1.000

Items		Coproducts		Scrap		WIP Items		Attachments			
#	Sequence	Item Code	Description	Revision	Revision Description	Warehouse	Factor	Factor Description	Quantity	Scrap %	Yield
1	10	Active-Item-03	Active-Item-03	code00	default	01	1.000		0.250	0.00	100.00
2	20	Active-Item-04	Active-Item-04	code00	default	01	1.000		0.250	0.00	100.00
3	30	Non-Active-03	Non-Active-03	code00	default	01	1.000		0.400	0.00	100.00
4	40	Non-Active-04	Non-Active-04	code00	default	01	1.000		0.100	0.00	100.00
5	0						0.000		0.000	0.00	100.00

Remarks:

OK    Cancel    You Can Also

# Product Routings

Product Routings enables user to define the information required to document and define the production process.

Machine control setting and properties such as machine speed, temperature and pressure may also be defined within the routing data, allowing for data integration to MES applications and PLC's devices.

- Resources – define machines, labour and tooling and other such resources that are used in production
- Operations – definition of the production activity
- Routing – the combination of operations and resources to define the total production process
- Properties – define additional information e.g. tooling settings, machine setting such as temperature, pressure, fill rate
- Constraints – define cycle quantity throughput, number of similar machines, and operation to operation overlap with percentages
- Production time – define queue, set-up, run time, and stock time, each with a different rate of measure e.g. fixed hours, minutes per unit, units per second
- Attachments – to define and link to detailed instructions, procedures, videos and other such media files
- Calendar – define production and resource calendars
- Resource Accounting – define account codes for resource, fixed and variable overhead financial postings
- Alternative Routings – define for a product alternative routings
- Material Operation – link the consumption and production of materials to process operations

The image shows two overlapping software windows. The 'Resource' window is in the background, and the 'Resource Calendar' window is in the foreground.

**Resource Window:**

- Code: 07
- Description: Tool-01
- Group: Mixing
- Number Of Resources: 1
- Has Cycles:
- Cycle Capacity: 1.000
- Queue Time: 0.000 Fixed minutes
- Setup Time: 0.000 Fixed minutes
- Run Time: 0.000 Fixed minutes
- Stock Time: 0.000 Fixed minutes
- Resource Calendar: 07

**Resource Calendar Window:**

- Code: 07
- Name: Tool-01
- Total Working Time: 45:00

#	Day	From Time	To Time	Total Time
1	Monday	08:00	17:00	09:00
2	Tuesday	08:00	17:00	09:00
3	Wednesday	08:00	17:00	09:00
4	Thursday	08:00	17:00	09:00
5	Friday	08:00	17:00	09:00
6				00:00

The 'Resource' window also contains a 'Properties' table:

#	Property Code	Property Name
1	01	Pressure
2	02	Temperature
3	03	Machine Speed
4		

# Product Costing

ProcessForce Product Costing has been built to take advantage of all the costing methods provided by SAP Business One. Thus providing a solution which supports the costing, analysis and finance controlling operations.

- Methods – Standard, Moving Average, FIFO
- Revision – calculate the cost of a product on a revision basis
- Flexibility – cost products based upon a combination of costing methods
- Costing Calculation – based on manual, price list, and calculation
- Factors – include scrap, yield and factors within costing roll-ups
- Cost Categories – define cost category for valuation, what-if simulation and analysis
- Types – define material, resource and labour costs
- Time – define different costs for the elements of production time, queue, setup, runtime and stock
- Overhead – define fixed and variable overheads as a value or a percentage
- Cost allocation – proportion production costs across products, coproducts and byproducts
- Product analysis – calculate and review costed bill of materials and routings
- Visibility – pre, during and post calculation of manufacturing order costs
- Variances – calculate and manage costing variances
- General Ledger – define additional costing accounts by product group and warehouse
- SAP Business One advanced G/L Account determination functionality supported



**Item Costing**

Item Code → Top-02      Revision Code → code00      Valuation Method → Standard  
 Item Name → Top-02      Cost Category Code → 002      UoM → EA  
    MRP Type → Buy      Batch Size → 0.000

Costing Details		Coproducts		Scrap		Rolled Cost					
#	Warehouse	Type	Price List	When 0	Item Cost	Fixed O/H	Fixed O/H %	Fixed O/H % Cost	Fixed O/H Other	Fixed O/H Sub-Total	Varia...
1	01	Manual		0.00	0.00	0.00	0.00	0.00	0.00	0.00	

**Resource Costing**

Resource Code → 01      Cost Category Code → 001  
 Resource Name → Mix/Pack

#	Cost Type	Hourly Rate	Fixed O/H	Fixed O/H %	Fixed O/H % Cost	Fixed O/H Other	Fixed O/H Sub-Total	V...
1	Queue Time	0.00		0.00	0.00	0.00	0.00	
2	Setup Time	10.00		0.00	10.00	1.00	0.00	1.00
3	Run Time	6.00		0.00	10.00	0.60	0.00	0.60
4	Stock Time	0.00		0.00	0.00	0.00	0.00	0.00



# Manufacturing Orders

ProcessForce manufacturing orders are used to plan, execute and record production activities.

- Order dependent recipe / formulation and routings – allows for the modification of the product structure and production process to manage every day changes that may occur within production rather than changing company standards
- Method of creation – manually, via Sales Order, Forecast, MRP and Sales Order back-to-back
- Record – manage material issues, Product, CoProduct and Scrap receipts
- Revision – create manufacturing orders that are revision specific
- Demand Allocation – link a single or multiple Sales Orders to production supply orders
- Dates – enter the required, planned start and planned end dates and time
- Schedule – forward or backwards to calculate the planned start or planned end date and time
- Warehouse – the default warehouse where production will occur
- Bin Locations – picking and receipt of inventory based on bin allocation rules
- Planned vs Actual Quantity – monitor the order and item quantity status
- Quality – conduct quality control processes
- Material Shortage – check available and shortages of stock within planned warehouse and across all warehouses
- Traceability – review all the documents associated with picking and receiving inventory
- Issue Type – alter inventory issues methods from manual to back flush and vice versa
- Operation Times – review operation times and overlaps
- Reporting – report on the status change of operations and record actual production time
- Analysis – review actual vs planned materials, time, costs and variances
- Document Status Change Wizard – change a number of documents status within few seconds
- Instruction tab – record specific instructions concerning Manufacturing Order in a text area

**Manufacturing Order**
— □ ×

Item Code → Product-B    Type Internal

Item Name → Product-B

Revision → default

Warehouse → 01

Planned Quantity 554.000    UoM EA

Actual Quantity 0.000

Series Primary    4

Status Released

Routing → 03

Required Date 27.03.15

Planned Start Date 20.02.15 13:00

Planned End Date 21.02.15 15:14

Items										Coproducts	Scrap	WIP Items	Operations	Others	Documents	Sales Orders	Attachments
#	Sequence	Item Number	Origin	Description	Warehouse	Revision	Revision Description	Factor	Factor Description	Q...							
1	10	→ Bottle-02	BOM	Bottle-02	→ 01	→ code00	default	1.000									
2	20	→ Label-02	BOM	Label-02	→ 01	→ code00	default	1.000									
3	30	→ Top-02	BOM	Top-02	→ 01	→ code00	default	1.000									
4	40	→ Recipe-02	BOM	Recipe-02	→ 01	→ code00	default	1.000									
5	0		BOM					0.000									

Remarks

Journal Remarks     Close Date

OK
Cancel

# Backflushing

ProcessForce provides flexible back-flush methods to meet the diverse needs of manufactures. This flexibility is based on the Bill of Material and Routing which allows for product by product configuration of what and where is back flushed. While at a Manufacturing Order level can cater for temporary changes in inventory picking processes. Methods include:

- Materials
- CoProducts
- ByProducts
- Scrap
- Warehouse and Bin location
- Batch trace materials - based on a FIFO basis
- Resources - machine and labour time



**Bill of Materials**

Item Code: Recipe-02    Type: Internal    Distribution Rules: Project, MRP Def. (checked), Batch Size: 1.000

Description: Recipe-02

Revision: default

Quantity: 1.000    Total: 1.000    UoM: KG

Factor: 1.000    Yield: 100.00    Formula: ...

Warehouse: 01

#	Sequence	Item Code	Description	Revision	Revision Description	Warehouse	Factor	Factor Description	Quantity	Scrap %	Yield	I
1	10	Active-Item-03	Active-Item-03	code00	default	01	1.000		0.250	0.00	100.00	
2	20	Active-Item-04	Active-Item-04	code00	default	01	1.000		1.000	0.00	100.00	
3	30	Non-Active-03	Non-Active-03	code00	default	01	1.000		0.400	0.00	100.00	
4	40	Non-Active-04	Non-Active-04	code00	default	01	1.000		0.100	0.00	100.00	
5	0						0.000		0.000	0.00	100.00	

**Item Master Data**

Item No.: Manual    Active-Item-04     Inventory Item

Description: Active-Item-04     Sales Item

Foreign Name:     Purchase Item

Item Type: Items     Fixed Asset Indicator

Item Group: Items

UoM Group: Manual    Bar Code:    Unit Price: Primary Curr    GBP 1.00

Price List: Price List 01

General    Purchasing Data    Sales Data    Inventory Data    Planning Data    Production Data    Properties    Remarks    Attachments

Do Not Apply Discount Groups

Manufacturer: - No Manufacturer -

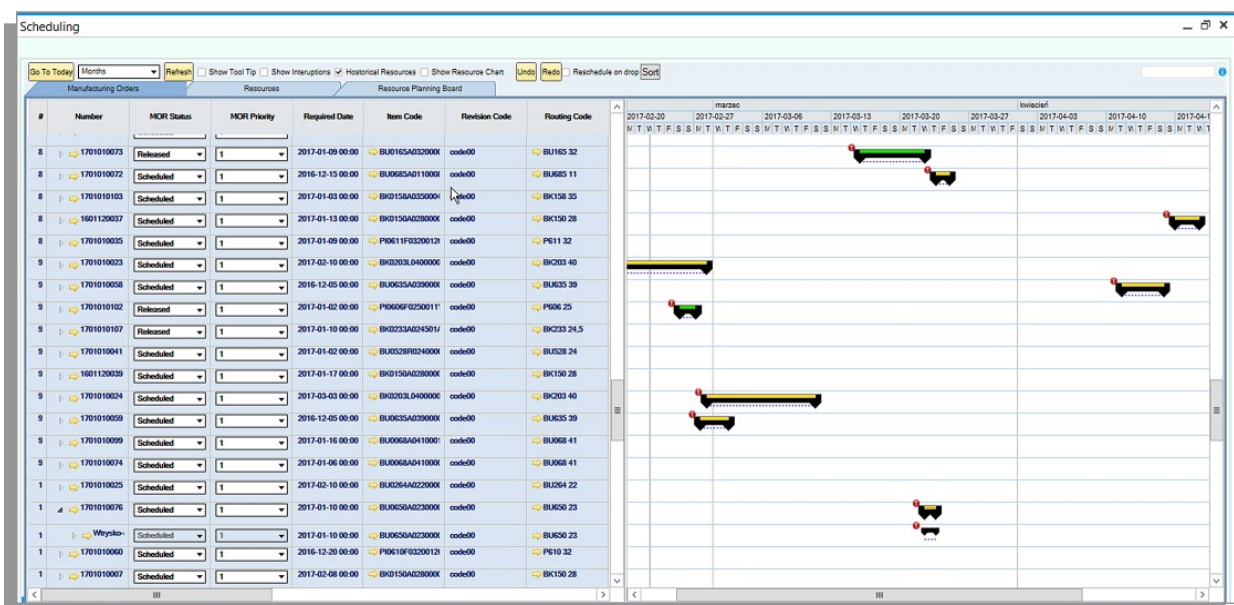
Additional Identifier:   

Remarks:    Update    Cancel

# Production Scheduling

Based upon a number of resources and time constraints, ProcessForce provides a simple but powerful scheduling solution to manage the manufacturing orders within the plant and to manually reschedule via "drag and drop" means. The solution also automatically backward schedules sales orders that are converted to manufacturing orders on a back-to-back basis to determine the start and end date and time, based on the sales order delivery date. Manufacturing orders generated from MRP are also automatically scheduled when created.

- Direction – Forward and Backward scheduling methods
- Overlapping processes – define overlapping quantity between operations
- Colour status bar – to identify manufacturing orders by Scheduled, Released and Started status
- Display time types – colour coded setup and production run times
- Drag and Drop – move manufacturing orders forwards and backwards and move or split across alternative resources and view the impact of available capacity
- Tooling – review relationship between machine and tooling
- Alternative resources – define and select alternative resources, and view the time impact
- Variable rates of time – define for setup and runtime fixed time, units per time and time per unit
- Stock and Queue times – define stock and queue time between operations, for example cooling down time
- Resource units – define the number of similar resources
- Capacity view – view detailed capacity profile for a selected resource
- Cycle production – manage material throughput via fixed batch sizes to reflect quantity based constraints for example ovens, mixing vessels, kilns and freezers
- Calendars – define and manage capacity calendars for each resource, with shift patterns, exceptions such as downtime and company holidays
- Dual resource scheduling – schedule machines and multiple tools availability constraints at the same time
- Scheduling Advanced relations – a possibility to create advanced, non-linear relations between operations in a Manufacturing Order
- Resource Planning Board - control Resources used in production process from a Gantt chart level
- PDC Statures – statuses of Operations recorded in CompuTec PDC (work time registration application) available from a Gantt Chart level
- Clarity – possibility to mark all operations from specific Manufacturing Order on Gantt Chart





# Batch Control and Traceability

ProcessForce Batch Control and Traceability functions provide the necessary process and controls to trace the genealogy of a product. While control functions manage the day to day operations of working with traceable products.

- Batch and Serial Number – define number formats and counters
- Supplier Batch Number – record suppliers batch number details
- Shelf Life – define the life period of a product in days and hours
- Expiry or Consume control – define batch management policy
- Expiry/Consume by Date – manual or calculated date based on shelf life period
- Inspection date period – define the period between inspections
- Inspection dates – manual or calculated dates for future inspection dates
- Warning inspection and expiry date – define the warning period for batch review
- Product Revision – revision code recorded within the batch data
- Batch properties and values – properties inherited from Product Master Data
- Quality control results – actual test result values stored against batch properties
- Batch genealogy tree – forward and backward historical view
- Recall and Audit Report – list of customers and batch recall reconciliation
- Drill down – transaction and document traceability navigation
- Inventory and Batch reports
- Complaints – check the Batch related Complaint documents
- Inventory – Batch Items distribution through Warehouses and Bin Locations, broke down into: Existing Quantity, Allocated Quantity, Available Quantity
- Attachments – browse through and add attachments to the specific Batch. Attachments can be assign to a specific Business Partner
- Returns – check Returns connected to a specific Batch from Additional Batch Details level
- Best Before Date - record a usability period of Batch Items

**360°** #CompuTec  
**Traceability**



**Batch Trace Visualization**

**Active-Item-01**

Description: Active-Item-01

Quantity: -5.556

UoM: KG

Type: Buy

Manufacturing Date: 2012-04-18-4

Expiry Date: 2012-04-18-4

Batch: 2012-04-18-4

**Product-A**

Description: Product-A

Quantity: 1

UoM: KG

Type: Make

Manufacturing Date: 18-04-2012

Expiry Date: 2012-04-18-8

Batch: 2012-04-18-8

**ByProduct-01**

Description: ByProduct-01

Quantity: 1.2

UoM: KG

Type: Make

Manufacturing Date: 18-04-2012

Expiry Date: 2012-04-18-10

Batch: 2012-04-18-10

[Back](#)

**Batch Transactions Details**

Transaction details for:

Item Code: Active-Item-01

Batch: 2012-04-18-4

#	Document Type	Document Date	Document Entry	Document No.	Document Row No.	Warehouse	Business Par...
1	Goods Receipt PO	18.04.12	→ 1	1	3	→ 01	→ 00001
2	Goods Issue	18.04.12	→ 1	1		→ 01	

[OK](#)

# Quality Control

ProcessForce Quality Control solution provides the tools and processes to manage the quality process from purchase goods receipt to customer delivery.



- Test Protocol – define standard templates to be used within the quality control process
- QC Test – record the activity and results of the tested properties
- Status and Date – manage the QC test cycle
- Non Conforming Materials Report – record specific actions and generate report
- Inspectors – define individuals performing QC activities
- Reason/Defect Codes – define analysis codes and groups to provide structured data for analysis and reporting purposes
- Resources – define the resources to perform the testing e.g. microscope, x-ray machine, weight scales
- Items – define the materials that are required to perform the test e.g. gloves, safety glasses
- Frequency – define the frequency and method of testing
- Transactions – define the process point where the QC test will be performed
- Alerts – business alerts to communicate to inspectors when tests are required to be performed
- Instructions – define instruction steps for performing the test or recording additional notes
- Attachments – to define and link to detailed instructions, procedures, videos and other such media files
- Warehouse – define tests for specific warehouse
- Project – define tests as part of a project
- Analysis – dashboard and reporting
- Quality Control Tests Statuses – Pass/Fail/Not Applicable
- Record Multiple Test Results option – Passed/Failed status on Quality Control Test, Test Results tab can be determined by Passed/Failed ratio of multiple test records

### Quality Control Test

Test Protocol No. → 02

Description → Standard

Item Code → Product-A

Item Name → Product-A

Item UoM → EA

Revision Code → code00

Warehouse → 01

Complaint No. →

Project →

Used Count → 0

Series → Primary 2

Inspector → Mark Jones

Electronic Signature →

Status → Started

Created Date →

Started Date → 23.04.12

On-Hold Date →

Waiting NCMR Date →

Closed Date →

Test Status → Passed

Pass/Fail Date →

Test Results									
#	Test Property Code	Test Property Name	Expression	Value from	Value to	UoM	Reference Code	Reference Name	Tested Value
1	01	Metal Test	Equals	0.000	0.000		05	No	0.0
2	02	Particle Size	Between	4.000	5.000	mm			6.0
3				0.000	0.000				0.0

#	Item Property Code	Item Property Name	Valid from	Valid to	Expression	Value from	Value to	UoM	Reference Code	R.
1	05	Odor			Equals	0.000	0.000		07	Od
2	06	Appearance			Equals	0.000	0.000		06	Oily
3	07	Colour			Equals	0.000	0.000		02	Rec
4						0.000	0.000			

OK
Cancel
You Can Also

# Complaint Management

Normally a function of the Quality Control department, ProcessForce Complaint Management solution is an end-to-end business solution, which provides a structured method in capturing and managing the life cycle of a complaint regardless if the origin is from a customer, vendor or an internal department.

- Complaint number – reference number for tracking activity
- Complaint type – record the source of the complaint: Customer, Supplier or Internal
- Complaint codes – define reason codes and groups to provide structured data for analysis and reporting purposes
- Status and date – manage the complaint cycle
- Sample tracking – track the progress of customer and supplier sample returns
- Transactions – record the transaction type and number provided by the complaint
- Batch number – search and record the batch numbers
- Serial numbers – search and record the serial numbers
- Batch Traceability – perform batch trace visualization
- Notes and attachments – record extensive notes and link attachments
- Quality control – create and link a quality control test to the complaint
- Product Recall – flag the complaint as a basis for a product recall
- Dashboard and reporting



### Complaint

Series

Complaint Type

Business Partner Code

Business Partner Name

Contact Person

Warehouse Code

Project Code

Status

Created Date

Started Date

On-Hold Date

Closed Date

Originator

Owner

Transactions    Action    Notes    Attachments

**Item Details**

Item Code

Item Name

Revision Code

Transaction Type

Document No.

**Batch / Serial No. Details**

#	Batch	#	Manufacturing Serial No.
1	<input type="text" value="2012-04-18-5"/>	1	<input type="text"/>
2	<input type="text"/>		

**Complaint Details**

#	Reason Code	Reason Name
1	<input type="text" value="01"/>	Covered in Oil
2	<input type="text" value="02"/>	Broken
3	<input type="text" value="03"/>	Wet

**Remarks**



# Data Collection

To improve the accuracy of data and to streamline production and inventory process flows ProcessForce provides a fully integrated data collection and label printing solution. The solution also covers SAP Business One functions\*. Thanks to it you can collect data directly in a warehouse:

- Goods receipt from purchase order\* – record goods inwards inventory based on a purchase order
- Goods receipt\* – record goods inwards inventory not based on a purchase order
- Stock transfer\* – inter-warehouse inventory transfers
- Pick order – pick inventory for manufacturing orders
- Pick receipt – record products, coproducts, byproducts and scrap inventory produced during the production process
- Delivery\* – manage items going out of the warehouse to an external destination
- Storage Units – a number of functions that allows to easily manage different types of storage units, e.g. creation of multilevel storage units (e.g. managing a number of boxes of items within a pallet), bulk storage unit creation, split or disassemble storage unit
- Stock Counting\* – perform stock counting directly from a warehouse
- Pick & Pack\* – Pick & Pack process based on SAP B1
- Document Drafts\* – create a draft document on a device to be added from an SAP B1 level by supervisor or just to finish it later
- Informational features – an instant access to information about warehouses, bins, batch and serial numbers, storage units
- Barcodes – an integration with barcode scanning devices
- Labels – define label layouts and required data, integrated with Crystal, Zebra and Bixenon label printing software.

Three overlapping screenshots of the CompuTec WMS application interface. The top screen is titled 'Warehouse Selection' and shows a 'Receive date' field with '2015-03-18', a 'Filter' field, and a list of warehouse options: 01 General Warehouse, 02 Returns, 03 QC, External, and Internal. The bottom-left screen is titled 'Quantity (1)' and shows 'Active-Item-01' with a quantity input field containing '10,000' and plus/minus buttons. The bottom-right screen is titled 'Batch (2/3)' and shows 'Active-Item-01' with a 'Classification' field and an 'Enter Batch' field containing '2015-03-18-01'. Each screen has a red 'X' button and a blue arrow button.

# Customisation

The ProcessForce solution has been developed utilizing the SAP Business One SDK, thus taking advantage of the User Defined Objects methodology. Based on this development technique ProcessForce forms and transactions behave in the same manner as forms developed by SAP. Therefore partners and customers can create additional value added enhancements to solve implementation specific requirements using standard SAP Business One customisation tools.



- Behavior & Navigation
- Use existing features & functions
- Extend vertically
- Minimal application footprint
- UDO developed
- User defined fields
- Formatted searches
- Document numbering
- Permission model
- Licensing model
- Crystal Reports Print layouts
- Transaction notification
- Field label changes
- Solution SDK & API
- B1iF

As a customer and partner centric solution, ProcessForce was developed in the right way so implementation toolkit's from horizontal solution providers **Boyum**, **Coresystems** and **ThirdWave** operate right out of the box



# Additional Business Partner Related Data

**Vehicle Inspection Quality Check** an inspection check document connected to a specific Goods Receipt PO document. Record a state of a delivery lorry that delivered items to your company.

Summary	Month to Date	Weighted Value	Previous Month	Weighted Value	Year to Date	Weighted Value	Previous Year	Weighted Value
<b>Quality</b>								
No. of Complains	0		0		0		1	
No. of Failed QC Tests	0		0		0		0	
No. of Returns	0		0		0		4	3.38
<b>Deliveries</b>								
No. on Time	0		0		0		0	
No. Early	0		0		0		0	
No. Late	0		0		0		0	
<b>Quantity</b>								
No. Equal	0		0		0		0	
No. Over	0		0		0		0	
No. Under	0		0		0		0	

**Supplier Score Card** – a reporting function based on the concept of weighted supplier scorecard.

# Translation

Utilising CompuTec's SaaS based Translator tool, integrated with Google's Translate API, the ProcessForce User Interface (menus, forms, dropdown lists and system messages), are available in the same **all languages** that are supported by SAP Business One.

This simple but effective tool speeds up the activity of translating. From a partner perspective, with ease of change and testing directly on their local machine, and for CompuTec, immediate update into the application architecture within the development lab.

When functional enhancements are added to existing forms, the user can filter to view fields with no Translator. Therefore saving time in having to search through all the forms fields to locate empty translations.

The screenshot shows the ProcessForce Translator web interface. At the top, it says "#CompuTec ProcessForce TRANSLATOR". The user is logged in as "Martin Gore". The interface includes a "File" dropdown set to "forms.xml", a "Form" dropdown set to "Resource", a "Filter" dropdown set to "No filter", and a "Filter text" input field. A "Load" button is visible on the right. The main area is a table with columns for field ID, field name, and translation. A dropdown menu is open over the "Translation" column, showing a list of languages including Chinese, Czech, Danish, Dutch, English, English\_Cy, English\_Gb, English\_Sg, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese\_Jp, Korean\_Kr, Norwegian, Polish, and Portuguese. The table shows 24 rows of data, each with a field name and its corresponding Chinese translation. At the bottom right, it says "Showing 74 translations".

#	Translation: English	Translation: Chinese	
1	Resource	资源	
2	Code	守则	
3	Description	说明	
4	Group	集团	
5	Queue Time	排队时间	
6	Setup Time	建立时间	
7	Run Time	运行时间	
8	Stock Time	库存时间	
9	Queue Rate	队列速率	
10	Fixed seconds	固定秒	
11	Fixed minutes	固定分钟	
12	Fixed hours	固定的时间	
13	Seconds per piece	每件秒数	
14	Minutes per piece	分钟· 每片	
15	Hours per piece	每件时间	
16	Pieces per second	件每秒	
17	Pieces per minute	件· 每分钟	
18	Pieces per hour	件每小时	
19	Setup Rate	安装率	
20	Fixed seconds	固定秒	
21	Fixed minutes	固定分钟	
22	Fixed hours	固定的时间	
23	Seconds per piece	每件秒数	
24	Minutes per piece	分钟· 每片	





## Company Vision

The world we live in and the pace of innovation is constantly changing. To continue and succeed as a business through the next decade and beyond, we must have a clear vision of our strategic direction to shape our business for the future and stay ahead of the curve. Our vision is to become the recognized industry leader for providing software solutions for process manufacturing enterprises.

## Mission Statement

Our mission is to take advantage of the latest and future business platform innovations from SAP and deliver value based solutions for SME's and subsidiaries of Large Enterprises that are functional rich and easy to consume. Our solution is built utilizing the latest SDK, reporting and analytics tools from SAP. Thus providing a foundation which changes not only how software is developed, but more importantly how enterprises consume the solution to foster business change and enable growth for the future. We will strive to consistently deliver high quality solutions, set a bench mark in customer and partner satisfaction and be a catalyst for change in our ever changing world.

# CompuTec

#InnovationMatters

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