



# **PRODUMEX**

## **SUPPLY CHAIN SOLUTIONS**

### FOR SAP BUSINESS ONE

# ABOUT PRODUMEX



Produmex is a global SAP Business One Software Solution Partner that provides certified Add-on solutions for SAP Business One in the area of logistics and manufacturing. Our in-depth experience with regulated industries, discrete manufacturers, wholesale distributors, and third-party logistics providers means that you get world-class expertise working for you. Produmex solutions are seamlessly integrated with SAP Business One, providing a consistent user environment and straightforward navigation. Our solutions are powerful, yet easy to customize and implement, allowing us to deliver a highly tailored solution to our customers in less time at a lower cost.

## QUICK FACTS

- Founded in 2004
- Headquartered in Perk near Brussels (Belgium)
- Own Produmex operations in Hungary, USA & Canada
- Worldwide collaboration with more than 40 SAP Business One VARs
- +300 Produmex installations in +30 countries worldwide
- Produmex is part of Movilitas, headquartered in Mannheim, Germany and Columbia, MD, USA. Movilitas delivers premier SAP Supply Chain, Track & Trace and Mobility Solutions to customers on an international basis.
- Movilitas have a global presence with operations in 11 countries and employ over 200 highly specialized professionals.
- Movilitas is a sister company of Peak-Ryzex, a supplier of technology for supply chain and mobility solutions, with over 550 employees across North America and the UK.

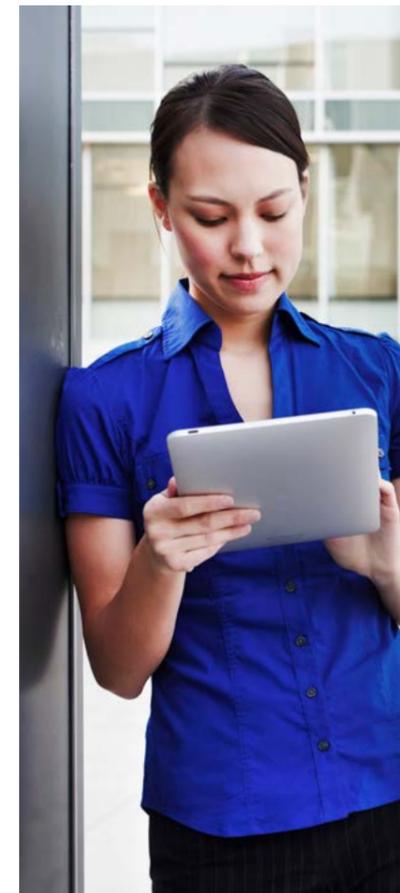
## SAP AWARDS

- Regional partner of the year 2008
- Best SAP Business One Partner in Belgium & Luxembourg 2013
- Best SAP Business Software Solution Partner in EMEA 2015

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# STREAMLINE AND OPTIMIZE YOUR LOGISTICS AND MANUFACTURING PROCESSES



The integration of your company's administration with your manufacturing and logistics operations is key to your success. The ability to automate and streamline your administrative and operational processes, will deliver benefits in many areas:

- You can manage inbound logistics more efficiently, without paper-based actions
- You will have a real-time accurate view on your stock and its locations
- You can commit to customer requirements with respect to production and delivery of goods
- You can optimize production planning and execution
- You will be able to fulfil customer orders faster and accurately
- Your order-to-cash cycle will be reduced through the alignment and integration of your administrative and operational processes
- You will have traceability of products from goods-in through production to goods-out at your fingertips

To help you achieve this, Produmex has developed its PDMX and BX software suites. The PDMX and BX suites consist of SAP certified add-on solutions for SAP Business One, SAP's ERP solution for small and midsize companies. The PDMX and BX suites for SAP Business One cover the functional areas of logistics and manufacturing management and address both simple as well as advanced requirements in both areas.

# WAREHOUSE MANAGEMENT

Logistics management is a key element of a company's business and operations management. The logistics function plans, implements, and controls the efficient, effective forward, and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements. In order to ensure an optimal logistics management it is necessary to align the administrative processes in the office environment with the operational processes in the warehouse. Produmex offers SAP certified add-on software solutions that streamline the operations in the warehouse and integrate these transparently with SAP Business One at the ERP level.



## BX MOBILE WAREHOUSE

**BX Mobile Warehouse is an easy-to-implement, fully functional, mobile bar code scanning solution for warehouse operators to manage inventory transactions in real-time. The architecture of the solution supports several warehouse operators to perform a large number of inventory transactions concurrently against a SAP Business One company database. All major SAP Business One 9.x inventory transactions are supported including pick-lists, stock counting, bin locations, serial/batch numbers as well as deliveries and goods receipts. The client component is a native Windows CE/Mobile application for ultimate speed, while the server component is a scalable, robust, high performing business logic transaction engine.**

### APPLICATION AREA

Users of BX Mobile Warehouse are seeking a very easy to implement solution without the complexity of advanced logistics systems, but with a defined scope of functions. BX Mobile Warehouse's strength lies in simplicity versus complexity. Nonetheless a large number of transactions at the same time are not a problem. Straightforward business processes are readily available straight from the box, while extensive customizability makes possible to fine-tune these processes for ultimate convenience.

### BENEFITS

- Optimized for SAP HANA and Microsoft SQL Server;
- All SAP Business One inventory transactions supported; no need to learn new concepts and processes;
- Extensive mobile customization with familiar user-defined fields and user queries (unique in its class);
- Very short implementation and learning period.

### FUNCTIONS

Warehouse operations are made easier and more efficient. Operators get a simple and mobile-optimized program which is an interface to SAP data entry and data query. Only simple mobile transaction processes are exposed.

- Serial/batch number support;
- Incoming and outgoing inventory transactions (goods receipt, purchase order, sales order, deliveries, packaging);
- Electronic picklists;
- Stock counting, sales returns, A/R credit memos;
- Incoming and replenishment recommendations;
- Stock transfers & requests;
- Reporting and querying stocks;
- All production transactions;
- Printing fully customizable labels;
- Managing unit of measurement Groups;
- Mobile client customization with user queries;
- GS1-128 (UCC/EAN-128) barcodes (with select AIM codes).

# WAREHOUSE MANAGEMENT

## PDMX ADVANCED WAREHOUSE MANAGEMENT SYSTEM

The PDMX Advanced Warehouse Management System for SAP Business One supports all relevant inbound, internal and outbound logistics functions. Apart from that it offers advanced functions including cross-docking, various cycle counting options, automatic replenishment, route planning, warehouse transfers, 3PL invoicing, container management, catch weight management, batch attributes, etc. In the field of picking strategies, the PDMX WMS supports various options including zone picking, multi-picking and wave picking.

### APPLICATION AREA

The PDMX Advanced WMS is intended for small and midsize companies that have more complex logistic requirements, often associated with the industry micro-vertical they operate in, like e.g. food, agricultural produce, life sciences, third

party logistics (3PL), ... It is possible to start small with the system, but it is also suited for larger installations with dozens of users, both at the administrative as well as at the warehouse level.

### FUNCTIONS

Warehouse operations are made easier and more efficient. Operators get a simple and mobile-optimized program which is an interface to SAP data entry and data query. Only simple mobile transaction processes are exposed.

- Definition of detailed warehouse structure, including various warehouses, zones, receiving and shipping docks, RF and production terminals, bin locations, packing and production lines, silos, tanks, picking carts;
- Support of combined serial and batch numbers for items, including batch and serial number location tracking;
- Support of a large number of item characteristics including best before dates, shelf life, storage zone type, storage location suggestions, ...;
- Comprehensive support of inbound, internal and outbound logistics operations;
- Possibility to manage catch weight management items (dual units of measure);
- Possibility to manage batch attributes;
- Comprehensive support of GS1 barcode standards and license plates (SSCCs)
- Multiple electronic picking strategies;
- Delivery route planning and execution;
- Cross-docking;
- Supervisor- or system-initiated cycle counting;
- Automatic replenishment;
- Stock transfers & requests;
- Detailed inventory reporting;
- Quality status management;
- Traceability-on-Demand;
- Production & packaging management;
- Fully customizable label and report printing;
- Integration capabilities with automated warehouses (miniloads);
- Integration with weighing scales;
- Time registration;
- 3PL Invoicing capabilities for third party logistics providers;
- EDI integration.



### BENEFITS

- Configurable solution requiring little or no customization;
- Optimized for SAP HANA and Microsoft SQL Server;
- Improved inventory and delivery accuracy;
- Increased warehouse operators productivity;
- Regulatory compliance and full traceability;
- Integration of production/packaging and logistics operations

# WAREHOUSE MANAGEMENT

## PDMX ePOD (ELECTRONIC PROOF-OF-DELIVERY)

According to recent research, insufficient or incorrect technology is the number one barrier to realising savings in the cost of deliveries. The PDMX ePOD is a solution to help improve customer service, enhance efficiencies and reduce the operational costs for a courier business or fulfilment department. Integrating the latest technology PDMX ePOD provides real time visibility of the parcel and driver to both the business and the customer for unrivalled customer service and process efficiency.

### APPLICATION AREA

PDMX ePOD can function as an extension to the PDMX Advanced WMS. Where the control of the PDMX WMS ends at the shipping dock of a company, PDMX ePOD can take control further up to the delivery of the goods at the

end-customer. Maximising the efficiency of collection and delivery processes is a highly complex process that must allow for many variables and contingencies whilst delivering confidence to managers, drivers and customers.

### FUNCTIONS

- Upload delivery routes from PDMX to ePOD
- Perform proof of delivery with ePOD
  - Capture signature, pictures, time stamps
- Save captured data as attachments to the SAP deliveries
- Transfer captured data to SAP Business One

### BENEFITS

- Optimized loading and routing
- Full traceability and identification of recipients
- Safety of high value (serialized) goods and controlled goods (pharmaceuticals)
- 100% delivery accuracy
- Improved customer service



# MANUFACTURING MANAGEMENT

Manufacturing management involves the planning, coordination and control of manufacturing activities. It ensures that goods and services are produced efficiently and that the correct amount is produced on time, at the right cost and level of quality. The objective of manufacturing management is to maximize customer value and use of resources while minimizing waste. In order to ensure an optimal manufacturing management it is necessary to align the administrative processes in the office environment with the planning and execution of the operational processes in production. Produmex offers SAP certified add-on software solutions that streamline the manufacturing operations and integrate these transparently with SAP Business One at the ERP level.

## BX MANUFACTURING

**BX Manufacturing is a fully automated manufacturing resource management (MRP2) solution for small and mid-size companies. The add-on extends SAP Business One with a single concept: manufacturing resource implemented from capacity calendars, homogenous resource management, to automated scheduling, MRP, delay management and rescheduling.**

**The core functionality of BX Manufacturing has been kept to a manageable size and overcomplicated features have been avoided. From the very first moment, following SAP Business One concepts and paradigm, it was devised in a modular way and extensible with the SAP Business One extensibility tools: user tables, user defined fields, SAP UI forms, user queries, and SAP DI API.**

## APPLICATION AREA

BX Manufacturing is intended for companies looking for an easy to use manufacturing solution where the add-on provides automated, MRP2 resource management and scheduling, mobile shop floor data capturing as well as number of other functions, with SAP Business One as the robust ERP platform behind it.

The solution comes with a mobile Production Data Collection (PDC) application, which allows operators or engineers to enter arrivals to/leaving from work, work-hours (start-stop) on operations, actual material quantities used for work, job completions. All this is possible on terminals in the workshop,

on handheld devices at the machines or on desktops in the office. Along with the manufacturing processes quality control processes could be defined and mobile QC terminals are supported with an application similar to the mobile PDC as described above.

Manufacturing Cost Calculation is an integral highly flexible and integrated calculation engine, similar to a spread sheet. This module is fully integrated with production orders and bill of materials and can be used to calculate estimated (BoM-based) prices and actual production costs (production orders).



## FUNCTIONS

- MRP2 with customizable fully automated resource scheduling;
- Backward from due date scheduling which is typical for MRP;
- Forward scheduling, which is typical for delay management;
- Parallel, overlapping, breakable operations; allocation windows, setup, job, before, after times all integrated with SAP Business One standard production orders (operations are non-inventory items, actually);
- Homogenous resources, indirection when resources are defined for operations; one resource can be a member of multiple groups;
- Multi-dimensional resource scheduling: machines, skill matrix of labor, and tool availability;
- Cost calculation for BoMs and production orders; the results of all calculations have been automatically stored and ready for controlling analysis;
- Mobile shop floor data capture (PDC) and quality control terminals;
- Mobile coming and going terminals at the office/factory/workshop gates;
- Make-to-Order processes to generate and monitor dedicated chains of production orders;
- Graphical job scheduling control panel for monitoring and manually (drag-and-drop) rescheduling operations for different resources;
- Production management cockpit to release, close, reschedule arrays of production orders with a single click;
- Customizable job requirements report with barcodes to distribute workers (used for PDC, too).

## BENEFITS

- Optimized for SAP HANA and Microsoft SQL Server;
- The capacities of manufacturing resources (machines, labor, tools) can be scheduled for an optimal performance to maximize throughput;
- Optimized resource usage improves cost efficient manufacturing and production quality;
- Capturing shop floor production data enables monitoring bottlenecks and early detection of potential delays. Normative operation times can be adjusted and refined by analyzing PDC data. Quality control issues can be identified early in the production process and adjustments can be applied just in time;
- BX Manufacturing's main strength is its fully configurable automated production resource scheduling, still manual rescheduling is completely possible;
- When the due dates of production orders are calculated by the MRP2 logic of BX Manufacturing, the available capacities of resources are taken into consideration; unlimited capacity resources are supported, too;
- For long manufacturing processes the purchase orders are scheduled to the beginning of the operations not to the beginning of the entire production order.

# MANUFACTURING MANAGEMENT

## BX MOBILE WORKER

**BX Mobile Worker is a simple but versatile mobile front-end for a variety of transactions related to the consumption of production resources (workhours, machines, tools, materials).**

**BX Mobile Worker has been designed as an mobile resource capture application from ground up exclusively for SAP Business One 9.x. It allows office, workshop and mobile workers to report back on their work hours and materials used during their jobs.**

### APPLICATION AREA

BX Mobile Worker is intended for small and mid-size project or manufacturing companies seeking a mobile, cloud-ready, resource capturing system for their shopfloor or workshop. BX Mobile Worker's backbone is the new flexible SAP Business One 9.1/9.2 production orders (work-in-progress). BX Mobile Worker is not only for manufacturing organizations; any organization applying work-in-progress kind of accounting is a candidate customer.

### BENEFITS

- Straightforward and easy reporting workhours and materials with flexible workflow scenarios;
- Reduced operational costs and less human errors;
- Available as a native app for Android, Windows and Apple mobile devices for utmost user experience;
- Specifically optimized for HANA and cloud. The server component can also be installed on-premise on the computers of the customer;
- All native SAP Business One 9.x production transactions are supported.
- Manufactured main products and by-products can be taken onto stock, including serial/batch numbers;
- Just install and configure server and ready to go, no add-on installation/running required;
- Very quick (in a couple of days) implementation because of its tight integration with SAP Business One 9.xa concepts.

### FUNCTIONS

- Can be used as a real-time stop-watch workshop terminal;
- Can be used as mobile phone time reporting application;
- Allows for mobile goods/resource issue for production as well as receipt of products / by-products from production transactions;
- On-the-fly (ad-hoc) material consumption;
- Time (workhours) as well as generic resources are supported in a simple and elegant way;
- Reporting job completions for SAP Business One (CRM) tasks assigned to production orders;
- Receipt from production transactions can be disabled for project organizations;
- Compatibility with any third-party manufacturing or project add-on that is based on the new advanced production order infrastructure of SAP Business One 9.x;
- Complete infrastructure for mobile user interface customizability with user defined fields and user queries.



# INDUSTRIES SERVED

The PDMX Operations Management Software suite for SAP Business One provides generic functions in the area of production and warehouse management, but offers specific additional functions that address the requirements of specific industries and industry micro-verticals, including:

## FOOD INDUSTRY & WHOLESALE

- Regulatory compliance: GS1 identification, tracking & tracing
- Expiry dates, FEFO, shelf life, two batch numbers
- Catch weight management
- Production & packaging

## LIFE SCIENCES & PHARMACEUTICALS

- Regulatory compliance: tracking & tracing, audit trail
- Quality management of inventory (batch, item, logistic unit)
- Sampling
- Weighing & dispensing
- Tracking & tracing on item level (serialization)
- Anti-counterfeiting

## WHOLESALE & DISTRIBUTION

- Paperless working with RF terminals
- Increased productivity
- Improved delivery accuracy
- GS1 identification, tracking & tracing

## THIRD PARTY LOGISTICS

- Multi-owner, multi-warehouse management
- Value added logistics (VAL)
- EDI: ASN, DESADV
- Tracking & tracing
- 3PL invoicing

## CONSUMER GOODS

- Paperless working with RF terminals
- Increased productivity
- Cost reduction
- Tracking & tracing at item level (serialization)
- Anti-counterfeiting

## DISCRETE MANUFACTURING

- Advanced production scheduling & optimization
- Real-time production data collection
- Manufacturing cost calculation

Complex logistic and production processes can only be managed efficiently if all required functionalities are integrated within one reliable system and if data is available in real time. PDMX Operations Management for SAP Business One answers these requirements and goes even further by helping you to meet the strict industry-specific regulatory requirements your company is facing.

# FULL INTEGRATION ACROSS ALL LEVELS OF YOUR ORGANIZATION

The PDMX Operations Management Solutions communicate with operators on the shop floor via handheld terminals or touch screens. From purchasing, goods receipt and storage, labeling, route planning, inventory management, production, and packaging to the eventual dispatch, this fully integrated system guarantees total traceability throughout the supply chain.

## AT THE SHOP FLOOR LEVEL

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On the shop floor, inbound and outbound logistics requires a streamlined and errorless approach.

- **Maximize efficiency** - Improve your receiving, production and picking functions and eliminate manual order checking with handheld devices.
- **Reduce errors** - Lower costs and improve customer satisfaction through automation.

## AT THE MANAGEMENT LEVEL

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Managers need a real-time view of logistics operations on the shop floor.

- **Improve visibility** - Increase productivity and operational efficiency to create a competitive advantage that drives ROI.
- **Tighten control** - Maintain better inventory accuracy and ensure compliance with customers' requirements.

## FULL INTEGRATION ACROSS ALL LEVELS

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A shared, real-time view is required to optimize purchasing activities and assess supplier performance.

- **Be fully transparent** - See, at a glance, what's in each section of every warehouse or production area.
- **Track details** - Instantly trace orders and access audit trail information.





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