

Injection Moulding

Vertical solution

Navertica Injection Moulding Vertical solution is intended for companies where the major processes are producing and supplying plastic parts to various types of industries.

Key processes within such companies:

- EDI communication with customers
- Production and requisition management by use of call-offs
- Fast production and requisition plan modification based on actual demand
- Mould management and Regrinding management
- Production batch tracking
- Advanced logistics and production planning
- Quality management and reject analysis
- Paperless production and delivery notification
- Unambiguous identification of material and finished goods
- Providing of sequential deliveries
- Dispatch management
- Machine, tools and Mould maintenance

The most important process within such companies is the production of various plastic products, underlined by constantly fluctuating demand/delivery times.

Grow Your Business with Microsoft Dynamics NAV

In order to be efficient and therefore, successful and competitive, suppliers and producers of plastic components to various industries such as automotive or pharmaceuticals require not only specialized production



Key process overview

- Flexible planning and controlling of replenishment and production based on received call-offs
- Mould management
- Regrinding
- Automatic registration of all logistic and production operations
- Electronic identification of inventory and shop floor locations, material and finished goods
- Bi-directional tracking between customer requirements and production orders including stock replenishment
- On-line evaluation of differences between actual and expected (planned) results
- Flexible modification of routings based on capacities of machines, availability of manpower and material due to constant changes based on required by customers
- Automation of shop floor control
- Material, work-in-process and finished goods specification by use of batches
- Machine maintenance
- On-line posting of every transaction to general ledger

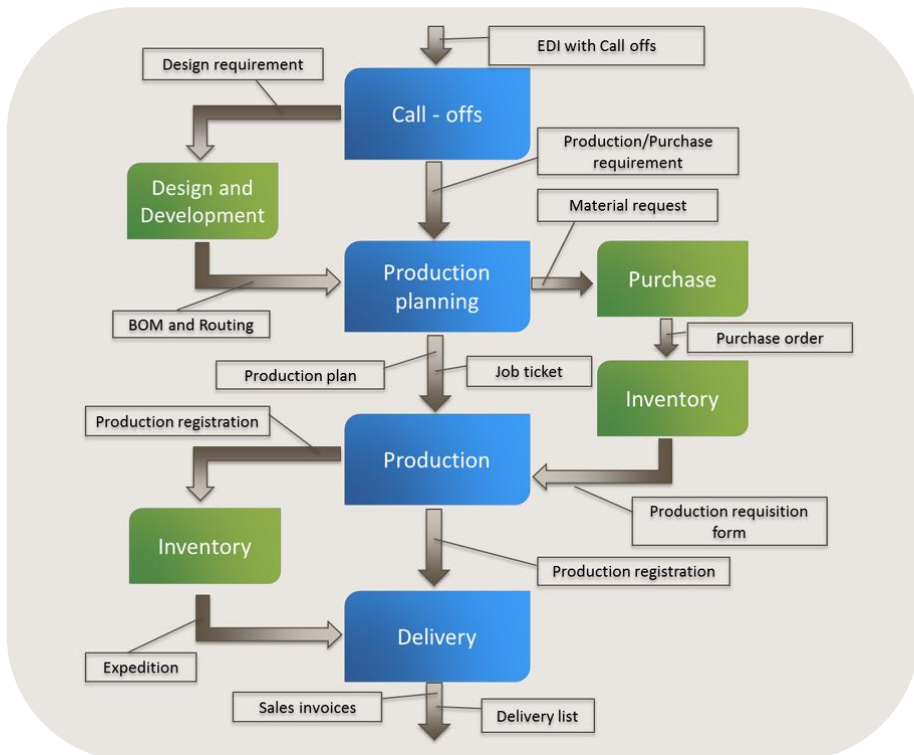
machinery but also software technology, which may be leveraged to support all imaginable agile business processes. Microsoft Dynamics NAV with the Vertical Solution Navertica Injection Moulding forms the cornerstone of such a strategy.

Microsoft Dynamics NAV is an integrated system used for the complex management of companies. With the application of the correct methodology, such a system can be implemented quickly and effectively. Microsoft Dynamics NAV is simple and intuitive, users can easily learn all its necessary principles.

Microsoft Dynamics NAV gives your business an attractively priced way to adapt and respond to customer requirements and changes. Microsoft Dynamics NAV connects all employees, information and processes across your organization.

Key functionalities of the Vertical Solution Navertica Injection Moulding

Use of the vertical solution Navertica Injection Moulding extends the scope of standard MS Dynamics NAV production functions. The main extension lies in purchase and production planning based on received call-offs, which are continuously created from EDI requirements. Use of EDI tools significantly decrease the complexity and error rates related to the processing of customer requirements. Call – offs allow the operative replenishment of required products and related components that company can dispatch required quantities in expected times. Decrease of production lead times and high flexibility within production and purchase change management is supported by tools for the analysis of resource capacities and current statuses of moulds (strokes, mould maintenance planning) and fast setup (bulges, multiplicity). A high degree of quality is ensured by the analysis of internal and external rejects including material consumption, used machine times and tracking of hours, where results are represented in numeric as well as graphical mode.



Microsoft Dynamics NAV and Vertical Solution Navertica Injection Moulding

- Financial Management
- Purchase and Sales
- Inventory Management
- Mould Management
- Manufacturing
- Maintenance Management
- Quality Management
- Despatch management
- Loads and Sub-loads
- Call-Offs and EDI
- Costing
- Batch tracking
- Packaging
- Pallet management
- Working Teams
- Graphical order representation
- Batch reservation
- Automation of Shop floor
- Sub-supplier Management
- Alternate machine centres
- Task buffers-reserves
- Machine centres queues
- Work-In-Process
- Reject Analysis
- Margin Analysis
- Revenue Analysis
- Cost Analysis
- Work-flow
- Production Dispatching
- JIT
- ISO 9001
- ISO TS 16949
- OHSAS 18001
- ISO 14001
- ISO 27001

Apart from resource planning it is possible to take into consideration planned downtimes for maintenance of machines. With use of the Finite Capacity Planning (FCS) application a graphical representation of chosen orders and related routing operations may be defined and by use of drag-and-drop, operations can be moved among alternate working centers if an overload is detected. The FCS application procures adjustment of production lead times based on delivery dates or simulated plan operation adjustments which can be archived for later use.

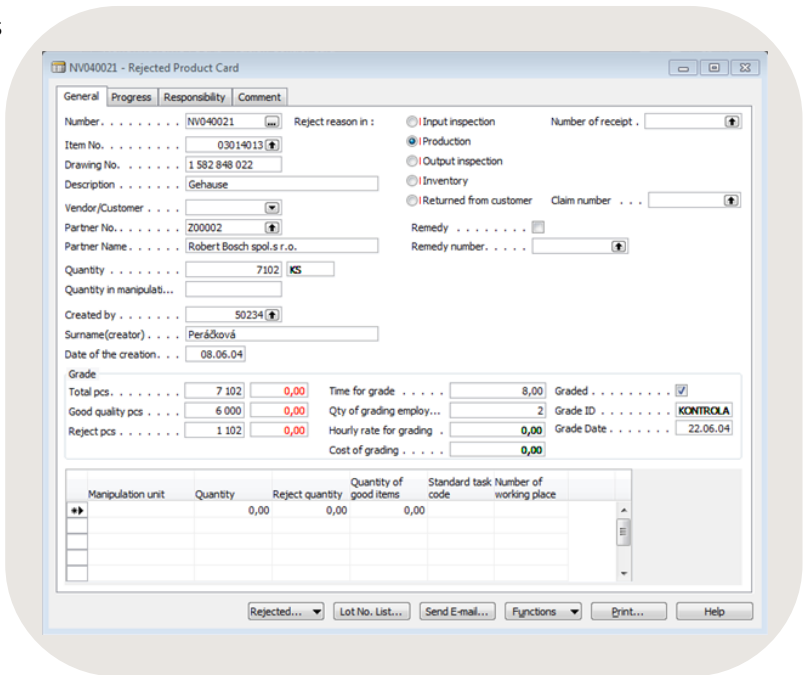
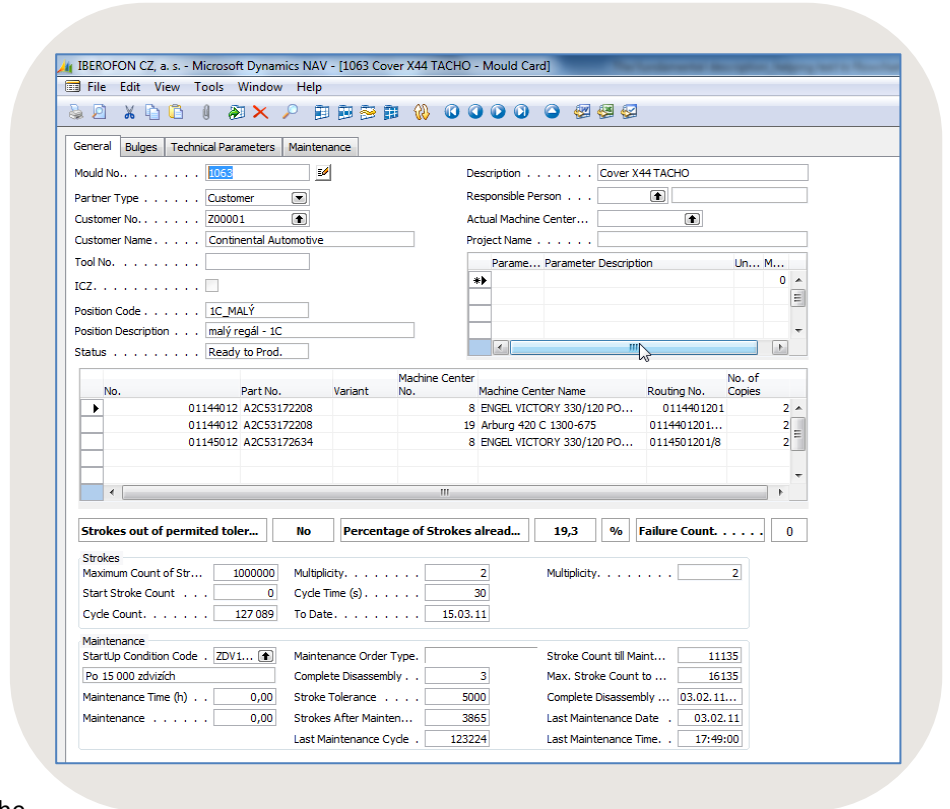
We are able considerably decrease error rates that result from the manual creation of paper production documents and subsequent manual entry of this data to the ERP system. The correct data related to logistics and production processes is ensured by use of touch screen technology as well as BAR code readers connected directly to the system.

All necessary data is available at any time, so the production manager can survey, by use of dash board control panel, statuses of all production orders and react on the fly to unexpected changes in production order priorities or unexpected rejections.

Production dispatching enables an overview of Work-In-Progress (WIP) not only to production managers but also the sales team and thus they can inform customers of their order statuses and possible changes. Users have a constant overview of dispatch requirements and actual dispatched quantities as well as planning of sub-loads and loads, pallets production and packaging.

High production quality rate and thus low cost related to external and internal reject management is ensured by use of corrective and precaution actions as well as 8D reports creations including reject statistics showing the causes of rejects and their characteristics.

Part of the vertical solution is cost calculation module, which enables production costing and calculation of COGS. This calculation module can be used also for simulation costing of existing or planned products.



Functionality - Benefits

Functionality – Process Area	Benefits
Increased purchase efficiency	Lower consumption and better yield of raw material and lower direct costs of material and related increase in profit up to 40 %.The value of inventory could be decreased by up to 50 %.
Call- offs	Ability to adjust production and replenishment plans due to permanent changes of customer requirements, the overload of resources is decreased and correct assignment of resource capacities is enabled. This results in the shortening of lead times by up to 70% and increase of probability to dispatch products at required delivery times up to 45 %. Throughput is increased and this results in higher turnover up to 60 %.
Support of sequential deliveries	Better overview of called- offs quantities and required dispatch dates results in absence of critical delays. Deliveries flow fluently and consequently related costs decrease and the market position of company improves.
Traceability of stock an replenishment controlled by Call-offs	Lower value of the stock and improved liquidity. Positive impact on quality and a decrease of rejected material up to 50 % and related costs up to 40%. Reduction of inventory area results in a reduction of manipulation and storing costs by up to 50 %.
Quality management	Non-conformity statistics, corrective and preventive measures and other integrated tools for quality management decreases costs connected with the resolution of quality incidents up to 50 %.
Customers access to its stock levels over the Internet	Quicker reaction time to requirements and due to this fact cost savings on orders could increase up to 50 %..
Mould management	Fast and efficient setup (bulges, multiplicity), maintenance planning due to registered stroke counts and improved overview of mould locations
Improved capacity planning	Shorter production lead times and lower operational costs. Better organization of staff capacities and their performance evaluation. The performance/cost ratio assigned to resources will improve up to 60 %.
Batch tracking system	Direct impact on quality management and claims management on both sides, meaning mills and customers. The final result is lower operational costs no less than 50 %.
Maintenance management	Less unexpected downtime due to machine failures and better handling of resources during planned maintenance contribute to lower costs, faster reaction time to customer requirements resulting in profit increase up to 50 %.

Solution Details:

Solution type: Software Offering, Training and Consulting Services Offering, Know-how Offering

Product: MS Dynamics NAV and related Navertica Vertical Solution for Injection Moulding (Plastic Industry)

Relevance to Microsoft technologies: Increases productivity for Microsoft solution users. Integrated vertical solution is represented by additional menus, forms and buttons on the toolbar of the standard Microsoft Application

Solution price: Contact Seller

Industry classification: Manufacturing, Injection Moulding (Plastic Industry), Automotive parts production

Size of customer organization: Mid-market Business - 50-1000 employees, Small Business - 1-49 employees

Languages supported: English, Czech

NAVERTICA a.s.

We are suppliers of integrated ERP systems using Microsoft Dynamics NAV, Microsoft CRM, company information portals, industrial computing systems and quality management systems (ISO 9001, 14001, 20000, 27001). Our goal is to help your organization achieve a better bottom line in terms of your overall financial standing. Vertical solutions from NAVERTICA have been implemented not only in the Czech Republic, but across the world for select organizations who are leaders in their respective industries.

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