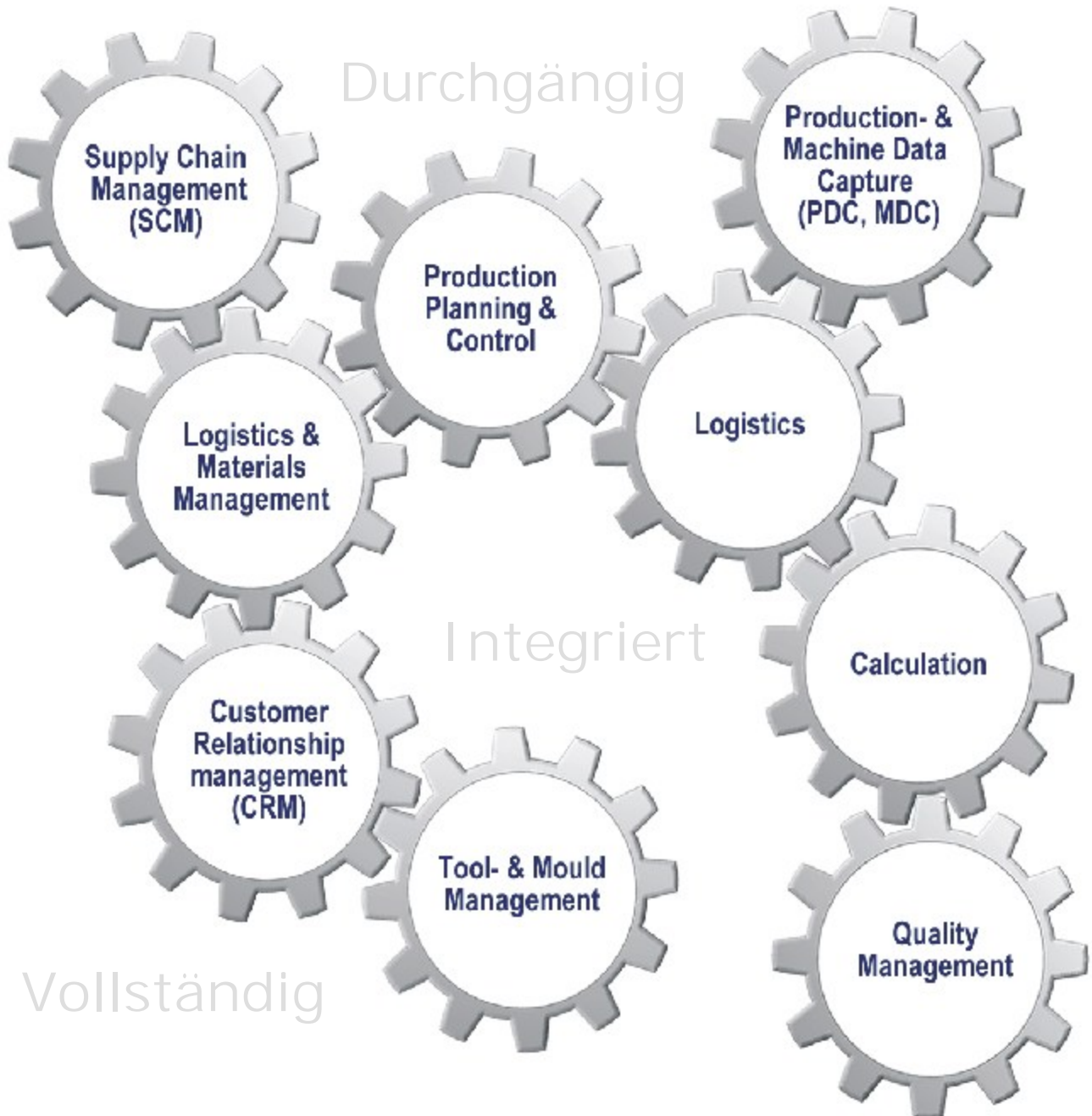


TimeLine Gebauer GmbH,
German Head Office in Solingen

TimeLine Financials GmbH & Co. KG,
located near Dresden

TimeLine® Business Systems

40 years of history - more than 350
customers - one goal: to become the
market-leading ERP system for foundries
and die-casting companies



Durchgängig

**Supply Chain
Management
(SCM)**

**Production
Planning &
Control**

**Production- &
Machine Data
Capture
(PDC, MDC)**

**Logistics &
Materials
Management**

Logistics

Integriert

**Customer
Relationship
management
(CRM)**

**Tool- & Mould
Management**

Calculation

**Quality
Management**

Vollständig



>TimeLine. The Market-Leading/
>All-In-One ERP-System For Foundries//

>Functional Overview//

TimeLine-ERP covers all business-processes for the administration of foundries and casting-companies. This includes not only production related modules like production-planning, production-data-capture and logistics but also the areas of CRM, calculation, purchasing, tool-management and more.

Furthermore TimeLine includes functionality for quality-management and -

control which becomes increasingly important for companies not only in the automotive sector.

As a whole, TimeLine-ERP is probably one of the most functional All-In-One-ERP-System for foundries throughout the world.

Historically, TimeLine-ERP has been created in close cooperation with a group of foundries and die-casting-companies and still

continues to be improved with a strong focus on user-requirements.

User-friendliness, fast accessibility of data, intuitive ergonomics and transparent menu-structures are some of the most distinctive attributes of TimeLine-ERP.

Best-Of-Breed user-interfaces include:

- ➔ Direct access to crosslinked data and modules in all screens
- ➔ Consistent keyboard-operability
- ➔ Seamless integration into Microsoft-Office-Products (Word, Excel, Access, Outlook, ...)
- ➔ Accelerated full-text search options in all modules
- ➔ ...and more!



Die TimeLine Hauptmaske



Word-Export for all relevant modules



Blue Arrows will crosslink directly to related master data

>Item-, Mould- And Tool-Master-Data//

Consistent management of moulds and tools for

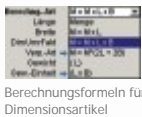
- Single- and multi-cavity-moulds
- Multi-item-multi-cavity-moulds
- Composite moulds
- Tool-component-management
- Separate management of items and moulds allows flexible assignment of multi-item-multi-cavity moulds within the production-planning-system



Multi-stage part IS



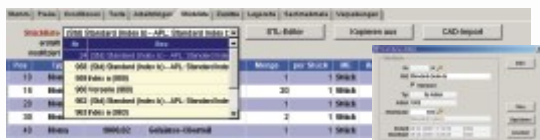
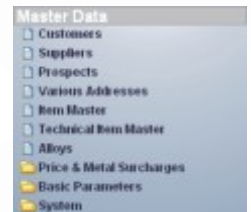
Item-Master-Data



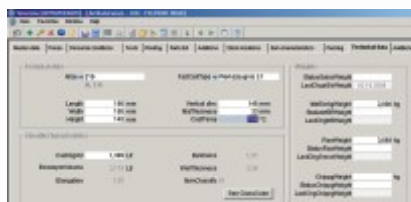
Berechnungsformeln für Dimensionsartikel



Several routingplans per item



Several material bills per item



Item master technical data

>Customer Relationship Management (CRM) //

Integrated CRM-cycle:

- Inquiries, order-calculation, quotations, call- and contact-management, follow-up - all business processes are fully integrated

Customer- and prospect-management:

- Multiple-addresses, multiple contacts per customer; extensive management of communications-data (fax- and phone-numbers, mail-addresses, etc.) per contact

Activity-management:

- Management of calls and contacts, workflow-support for follow-ups of calls and quotations, prospect-management

Integrated communications:

- ✉ Integrated mail-client and mail-archive: send your mails directly from TimeLine-ERP
- ✉ Integrated PDF-Generation of all sales- and purchase-documents for direct-email-transmission or archiving-purposes
- ✉ Mail-archive per customer, supplier and prospect
- ✉ Serial-emails, email-campaigns

Integration into MS-Office:

- ☑ Generation of quotations and other documents into MS-Word-documents via customizable templates
- ☑ Excel export-option for all reports
- ☑ Access TimeLine-data from Access or any other ODBC-database, OLAP- or reporting-tool. TimeLine's open-repository-database is freely accessible for any user with sufficient rights

Computer-aided-telephony (CAT, TAPI):

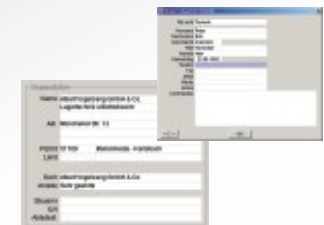
- Incoming calls: TimeLine pops up the customer-info-screen automatically on any identified incoming phone-call
- Outgoing calls: call your business contacts by simply clicking on the phone-number in the customer-info

Customer-Information-Module - comprehensive information at a glance:

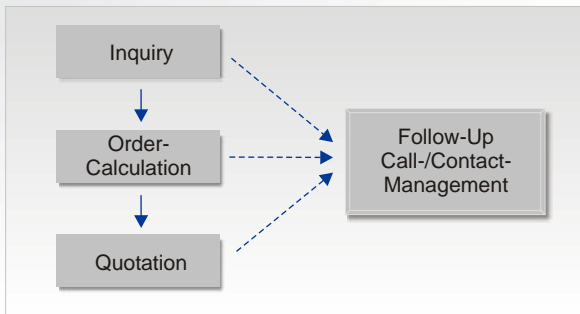
- Correspondence, outgoing email, contacts, notes, follow-ups, internal and external documents, addresses, pricing, historical data and statistics, accounts receivable, order-backlog, turnover and more...



Inquiries



Customer Correspondence at a glance



>Document Management (DMS) //

Assign any file to almost any object in the ERP-system:

Supported file-formats:

- Excel, Word, Access, fotos (tif, jpg, etc.), drawings - any file-type that is supported by the software installed on your system can be linked to an object in the ERP-system

Supported objects in

- TimeLine: customer, supplier, prospect, item, tool/mould, sales- and purchase-documents (quotation, inquiry, order-confirmation, ...), production-documents, etc.



Document management of all common filetypeps

>Metal Surcharges And Alloy Contracts//

- Ultra-flexible metal-surcharge-management system reduces time and efforts for maintenance of alloy surcharges and their adjustment:

Flexible assignment:

- Define metal-surcharges based on alloys or on alloy-groups and assign them to customers or customer-groups. Thus you reduce the effort of maintaining volatile metal-prices to a minimum

Variable modes of calculation:

- Current rate - calculated base
- EUR/100 kgs (or any other currency)
- EUR/piece (or any other currency)

Variable quotations on the invoice:

- EUR/100 kgs (or any other currency)
- EUR/piece (or any other currency)
- In total
- Added into item price

Alloy contracts are comprehensive and universal:

- Available for sales- and purchase-documents
- Can be limited to a period of time or a limited tonnage
- Automated adjustment on a daily, weekly, monthly, quarterly or custom-period basis



Alloy Contracts: All parameters for surcharges in a single screen

Easy adjustment of metal surcharge rates:

- Select alloy contracts and documents to adjust, enter new metal quotation, start automatic adjustment of alloy contracts, start automatic adjustment of open orders, ...done!
- Comprehensive journal of metal-quotations before and after
- History of quotations
- Optional auto-adjustment of metal quotations at time of delivery (upon delivery-note-creation)

>Supply-Chain-Management / Purchasing//

Flexible disposition with variable purchase-order-types:

- Purchase-contract

Material: 1018.2008

- Purchase-order
- Purchase-order-call
- Material-requirement-requests for production accessories, auxiliary material and spares

Doc	Material	Plant	Quantity	Unit	Material
10	500395	Plant	1200	111	1138
20	500395	Plant	2100	0	2100
30	500395	Plant	2500	0	2500
40	500395	Warehouse	1000	0	1000
50	500395	Warehouse	4000	0	4000
60	500395	Warehouse	8750	0	8750

Integration of various demand-types in a single supply-chain-management-system:

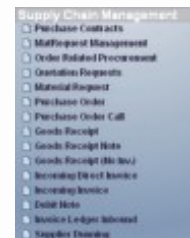
- Material-requirement-request
- Direct demands from customer- or production-orders
- Demands for external contract-manufacturing
- Automated purchase proposals (MRP-run)
- Longterm product-range demand-planning

Efficient Ergonomics:

- Direct crosslinks to master-data modules from order-processing- and other forms
- Easy cancellation or modification of orders and transactions at any time
- Any business-transaction can be processed from within a single form without the necessity to branch into other modules

Flexible Price-Management:

- Procurement-directory
- Supplier-related prices, quantity- and rebate-scales, variable additional price-components and -surcharges (i.e. setup-cost-surcharge, minimum quantity surcharges, etc.) on a percentage-, per piece- or per kg-basis, flexible rebate-system
- Automated price-adjustment procedures



Procurement directory

Automated purchase-procedures:

- Workflow based compliance check of delivery dates
- Dunning procedures for unreturned price-inquiries, unconfirmed purchase-orders and delivery-arrears.



MRP run

>Logistics//

Empties-Management (pallets, lattice-boxes, etc.)

- Flexible empties-management with automated stockbookings on creation of delivery-notes
- Customer-specific packing-instructions (typical for the automotive industry)



- Multi-stage-packing-materials (pallets with plastic-boxes, etc.)
- Empties requirements planning

Verpackungen im Lieferschein

Commissioning

- Commissioning-proposals (with FIFO-option for batches) based on order-priorities and delivery dates
- Automated delivery note generation from commissioning-proposals
- One-step generation of delivery-note, empties-bookings, electronic transport declaration and logistics-documents
- Creation of package labels, consignment notes and related documents

EDI-Modules:

- EDI/DFÜ-modules for Ansi X12-, Odette-, VDA- and Edifact-formats



- All common message types are preconfigured without necessity for customization (format mappings have to be individually created using the format-converter)

Available message-types:

- Inbound delivery-forecast, order-call, fine-order-call (delfor, deljit, VDA4905, VDA4915)
- Outbound delivery-note (delnote, VDA 4913)
- Outbound invoice (invoic, VDA 4906)
- Inbound credit-advice (creadv, VDA 4909)
- Pick-up sheet (DELJITPUS) etc.

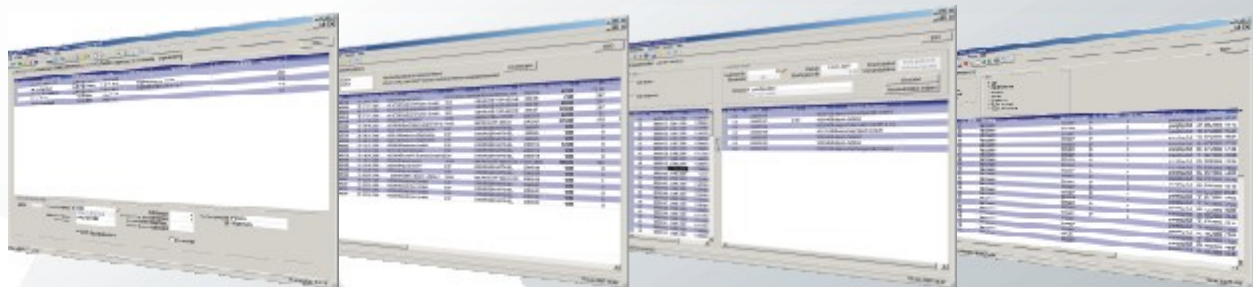
Customs-documents:

- Creation of EUR.1, ATR and export-declarations (certain documents may vary for non-EU-countries and may need customization)

VDA consignment bill

VDA package label

EDI-Document of accompanying goods



>Production-Orders And/ >Planned-Production-Orders//

The Production-Order is the central document within the production-module of TimeLine-ERP. Its main elements are routing-plan and parts-list.

Creation of Production orders:

- Production orders can be created manually, via transfer from a customer order or via release of a production-proposal

Planned production orders. More freedom to plan:

- Planned production orders allow the reservation of capacity and material without actually releasing a production-order for production. At this stage alterations like split, deferral, re-schedule and merge are possible without significant restrictions



Production order

Release for production:

- Planned production orders can be converted to released production orders at the push of a button

Production documents:

- Easy and efficient printing of routing plans, production orders, part-lists. Report design is free and can be done using PowerBuilder, Crystal Reports or any other ODBC-enabled reporting-tool

Circulation of items in production:

- Items in production are managed like stocks. Each production-data feedback carries forward the production-quantities within the routing-plan. A distinction is drawn between good parts, blocked parts and rejects

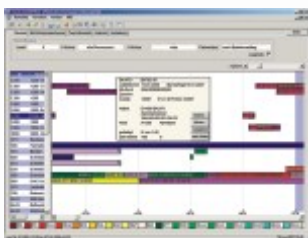


Circulation quantities overview

>Planning and Scheduling//

TimeLine features four graphical planning boards which integrate fully into the materials management and sales modules. Thus, TimeLine represents one of the most comprehensive planning tools for foundries in the market.

Whether moulding shop, core production, die casting or machining - TimeLine offers unparalleled ease-of-use, effectiveness and precision of production-planning:



Planning board II offers efficient automated computation of delivery dates for open customer orders based on finite capacity, parallel resource usage (mould & machine) and material availability. Short-term capacity adjustments, change of order-priorities, resource breakdowns and consideration of recent production data feedback will keep planning up-to-date and in sync with factory floor reality.

It is strongly recommended to use Planning board II in combination with TimeLine-production-data-acquisition-modules to keep information up-to-date on realtime basis.

Reliable delivery-date ascertainment:

- Finite capacity planning considers current capacity load and material-availability when computing new delivery dates
- Production data automatically feeds back into planning
- "Update"-function allows to recalculate all completion dates based on fresh data

Fully integrated:

- Transfer customer orders directly into the inbox of the planning board
- Drag & drop customer orders directly onto the machine at the desired date
- Automated feedback of planned dates to the sales department

Quickly implemented:

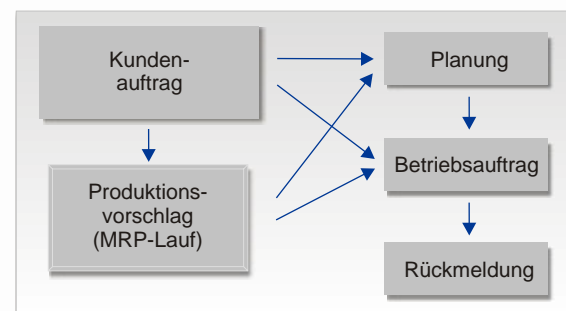
- Define resources,
- Create routing-plans for your items,
- Enter your customer orders
- ...and start to plan!



Planning board III allows for quick and efficient fine-planning of the order sequence on individual machines and production resources. Planning is as easy as dropping an order onto a machine at the desired production date. PB3 has been designed for quick implementation and maximum ease-of-use. PB3 should be your first choice when planning your moulding-, casting-, core production- and machining-department.

Powerful, comprehensive and efficient planning-tools:

- Split, merge, defer, move (backward/forward), set order-priorities, adjust capacity, assign to external contractor, swap resources/machines, simulate on a separate planning-level - there is virtually no limit as to what you can do in the planning-modules.
- Forward and backward planning, lead time and manual scheduling
- Machine order-sequence planning via drag & drop
- Comparison before-after, pending delays, delivery date diagram, capacity load diagram



Customer orders can be directly transferred to a production order. Alternatively, customer orders can be transferred to planning first to be subsequently released as a production order. For serial and mass production, order calls and production orders can first be run through the mrp run for batch size optimization and then transferred to planning.

>Contract Manufacturing, /

>External Manufacturing//

Integrated workflow within purchasing and production:

- Comprehensive business flow from inquiry to dunning and invoicing of contract manufacturers
- Define external operations simply by specifying an external resource in the routing item
- Create external routing bills directly from the production order module or combine several items from different production orders onto a single external routing bill
- Quick and efficient feedback process for goods returning from external manufacturing

Securing deliveries and schedules:

- Automated creation of production previews allows more precise planning on the side of your contract manufacturers
- Planning modules will automatically compute dispatch- and return-dates for external routing bills
- Automated dunning system for delayed returns from external manufacturing

• Pricing effectively managed:

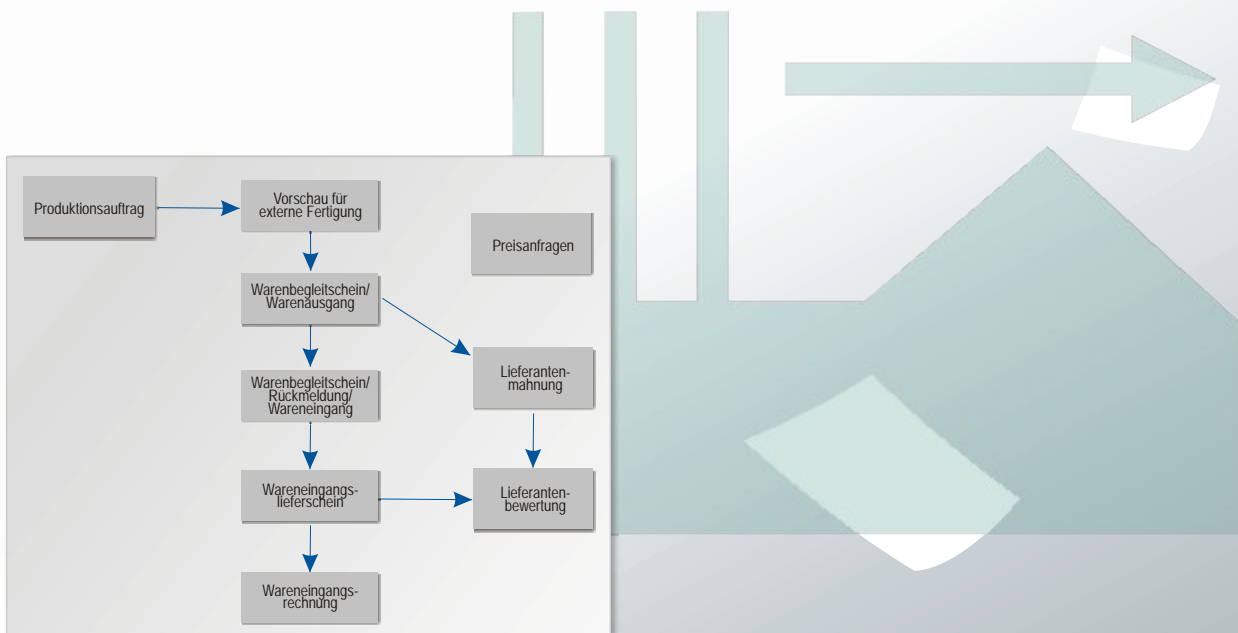
Item	Material	Quantity	Unit of Measure	Plant	Storage Location	Batch	Material Group	Material Type	Material Status
1	123456789	100	EA	1000	0000				
2	123456789	100	EA	1000	0000				
3	123456789	100	EA	1000	0000				

- Supplier- and item-related prices and quantity scales for every external operation
- Separate management for setup costs or other surcharges (freight, etc.)
- Prices on per-piece, per-kg or per-hour-basis

Warenbegleitschein			
Material	Plant	Quantity	Unit of Measure
123456789	1000	100	EA
123456789	1000	100	EA
123456789	1000	100	EA

Item	Material	Quantity	Unit of Measure	Plant	Storage Location	Batch	Material Group	Material Type	Material Status
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Item	Material	Quantity	Unit of Measure	Plant	Storage Location	Batch	Material Group	Material Type	Material Status
1	123456789	100	EA	1000	0000				
2	123456789	100	EA	1000	0000				
3	123456789	100	EA	1000	0000				



>Project-Management For Mould/ >Design And Construction//

Information at a glance:
TimeLine project-explorer:

Internal documents:

- All documents are shown in a tree-view structure

External documents:

- Assign all kinds of files and documents to your project



Milestones:

- Budgets, deadlines, estimated hours of production: everything you need to manage the lifecycle of a new mould

Invoice processing:

- Advance payment invoices, closing invoice/account settlement

>Production Data Feedback: / >Simple And Efficient//

PDF-types:

- Single- or collective bookings; operations- and material-consumption bookings; bookings can be entered via PC or via TimeLine-production- or machine-data-capture-systems

Product costing analysis:

- Feedback data on factory operations can be used for product costing analysis based on actual costs

Production statistics:

- Various statistics on quantities and tonnage; defective part statistics, etc.



Casting batch management:

- Assignment of casting batch number to customer-/production order on entering moulding-department feedback data



Incentive wages:

- Piece rate- and premium-wage-management; wage-related data can be entered together with operations feedback in a single step

>Quality Management //

Gauges and test equipment:

- Gauge-status, serial-number, storage location and other information
- Monitoring, calibration and maintenance
- Blocking and release
- Gauge history
- Gauge-issues, trackings and returns

Control plans: integrated quality control:

- Definition of quality attributes
- Control plan management with definition of item- and attribute-specific tolerance limits
- Automated generation of quality- and inspection orders

Data logging of quality and measurement data:

- Data logging of SPC-measurement data
- Creation of measurement reports (Version 11)

Supplier assessment:

- Rating for delivery reliability, customer care, product quality, pricing, etc.
- ABC-rating for suppliers

Inspection orders for:

- Inbound deliveries (Version 11)
- Factory operations
- Factory turnout
- Definition of item-specific control plans
- Automated generation of inspection orders

Management of rejects and rework:

- Stock management of rejects and reworks
- Rejects statistics
- Failure cost statistics

Claims management:

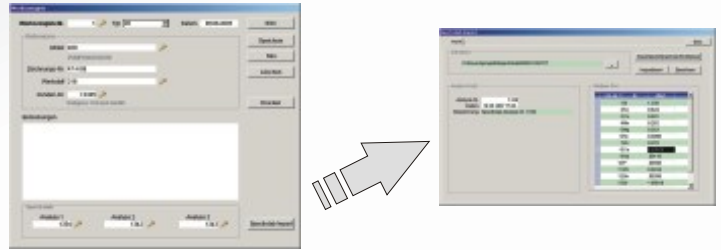
- Activity monitoring
- 8D-reports
- Failure cost ascertainment
- Workflow-support
- Dunning system for delayed recovery activities



8D-Report

>Factory Certificates, Spectro-Analysis//

- Import of Spectrolab-data
- Creation of factory certificates
- Assignment of factory certificates to production orders or delivery notes for traceability



>Rework, Quarantine Storage And Rejects//

Rejects and rework:

- Rejects and rework can be separately booked alongside with approved parts/quantities

Statistics on cause of defects:

- Management of cause of defects and statistics on defective parts

Rework orders:

- Rework production orders allow for comprehensive management and data-capture of costs for rework operations; additional textfields in feedback bookings allow for statements and comments on rework.



Rework order

>Production- And Machine Data Capture//

Intelligent terminals - flexible software:

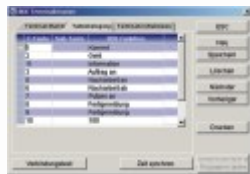
- TimeLine-BDE is based on industrial PC-technology with IP65-Standard or standard commercial PC-hardware
- Online bookings for maximum up-to-dateness of data



Configurable booking types

Flexibility of configuration:

- User-configurable booking types: Using the Booking-configurations editor you can define which data shall be captured during PDC-bookings
- Any custom booking type can be assigned to any function key on the terminal screen



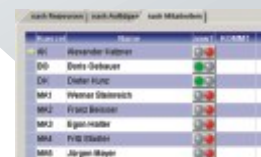
Configurable IPC function keys

Pre-configured booking types for a wide variety of business cases:

- Clocking on/off
- Come, go
- Order-complete-booking
- Info
- Material consumption booking
- Rework
- Project feedback (no production order required; you can book directly onto the project)
- Overhead-cost booking
- Collective booking
- Service-booking
- Breakdown/disturbance/interruption
- Change of order
- Quantity report

Integrated machine data capture:

- Direct interface for quantity-data capture and production-operations turnout
- Ressource monitor shows number of casting/production-cycles, remaining production time, disturbances and downtime



Attendance overview

>Tool- And Mould-Management , >Toolshop Management //

For die-casts, moulds, trimming-tools, lores and others: TimeLine tool management modules makes tool management a fast and efficient process:

Tools as a production resource:

- Tools can be assigned to production operations just like machines or personnel

Durability, maintenance and lifecycle-management:

- With every production operation, counters for durability and maintenance are automatically updated

Tool types:

- Separate management for die-casts, moulds, models, core boxes, lores, gauges and other tools

Additional features:

- Blocking/release and suspension, tool-amortization, management of technical data for moulds, assignment of external documents like drawings, fotos, etc. ; management of tool-components, tool-related costs and revenues, maintenance history

Internal toolshop:

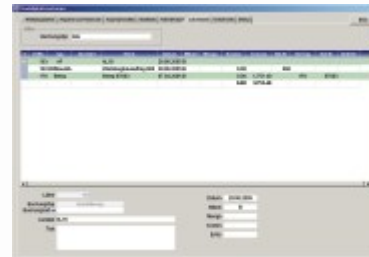
- Accelerated toolshop-order-generation for repairs, conversion and retrofitting. ; automated recording of toolshop costs

External toolshops:

- Inbound and outbound delivery notes for transportation and relocation of tools and moulds. ; cost recording of external toolshop costs

Amortization:

- Amortization accounts to log tool-related revenues during the tool-lifecycle



Vollkosten 278	
Formenlage FORMC-Rohlinge_1	
Formenlage FORMB-Rohlinge_2	
Subtotal: Material	1.500.000
Arbeitslohn	1.500.000
Material	1.500.000
Handwerk	8.000,00
REPARATUR	12.000,00
- Sperrung Material	- 5.000,00
- Material	- 12.000,00
= Formenlage	- 28.000,00
Rest Post. Formen	0
Auftraggeber	34.000,00
Standardpre. Std.	60,00
Arbeitslohn	1.500,00
Werkstoffgewicht	21.000,00 kg
Erzeugnisgewicht	20.000,00 kg
Standardlohn	8,00



>Smelter //

- Management of melting resources
- Alloy compositions, alternate alloy compositions
- Import of spectrometric analysis data to create factory certifications
- Creation of logical interconnection between smelter-batch and cast item on entering cast production data feedback



>Unparalleled Flexibility Of Customization/ >For Individual Business Processes//

Reporting:

- Create your own reports using any OLAP- or ODBC-tool. Standard reports are delivered in source code for easy modification.

Database:

- Fast, reliable and maintenance-free SQL-database with 100 % ODBC/OleDB-compliance

- TimeLine ERP can be customized without losing release-capability!

Screens:

- Screen editor to disable, relabel or add fields

Business objects framework:

- TimeLine ERP is based on a comprehensive and powerful framework of business-objects that can be individually modified using OO-technology

>System-Checklists//

CRM and materials-management modules:

- Order-calls (automotive), CRM, MS-Word-interface, random storage management, batch management, electronic data interchange (EDI), financial-accounting-interface, document management, inventory, empties management, multi-warehouse management, open items management, item classification, serial number management, dispatch and transport-logistics, sales agents management, sales forecast, customs documents management

Quality management modules:

- Supplier rating / assessment, control plan management, gauge management, claims management

System modules:

- Foreign language interface, MIS-toolkit, TimeLine-to-TimeLine-link, archiving interface (ELO, Easy)

User rights management

- Flexible definition of access rights and restrictions based on screen, tab or modules; separate access rights for visualization of purchase- and sales prices, etc.

Menus

- Menu-Editor for custom configuration of menus, user defined menus, custom menu items/modules

Application-Server

- Application server for batch processes and night-operations like recomputation of planning data, MRP-run, generation of workflows, follow-ups, etc.

multi client/ multi works

- Management of several companies, locations or works in either one database or separate databases; inter-company-clearing (Version 11)

Production modules:

- External manufacturing, project management, production planning and scheduling, tool management

Data capture modules:

- Mobile data capture (PDA), production data capture, machine data capture

Utilities and tools

- Search and elimination of duplicate customers, items, etc., SQL-makro-editor, im- and export of data, subsequent modification of primary keys for items, customers, etc.

multi-language reporting

- All sales- and purchase documents are multilingual

>Interfaces and operating systems//

Operating systems (server)

- Linux, MS-Windows

System interfaces

- MAPI, TAPI
- ODBC, SQL

Financial accounting interfaces

- Interfaces to virtually any financial accounting system can be customized with an effort of approximately 5 programming days

Integration to MS-Office

- Word, Excel, Access, Outlook

Archiving interfaces

- ELO, Easy-Archive

Interfaces for quality management systems

- Böhme & Weihs, BABTEC

EDI

Formats:

- UN-EDIFACT, ANSI X12, Odette, VDA

Document types:

- Order call, fine order call, delivery note, invoice, credit advice

Features:

- Integrated format-converter; direct storage of EDI-data inside the ERP-database

Terminal-Server

- Citrix- and Windows-Terminalserver-enabled