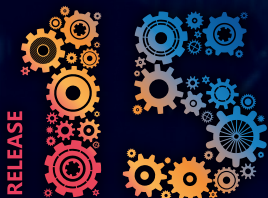




TimeLine Foundry HIGH-END INDUSTRIAL ERP

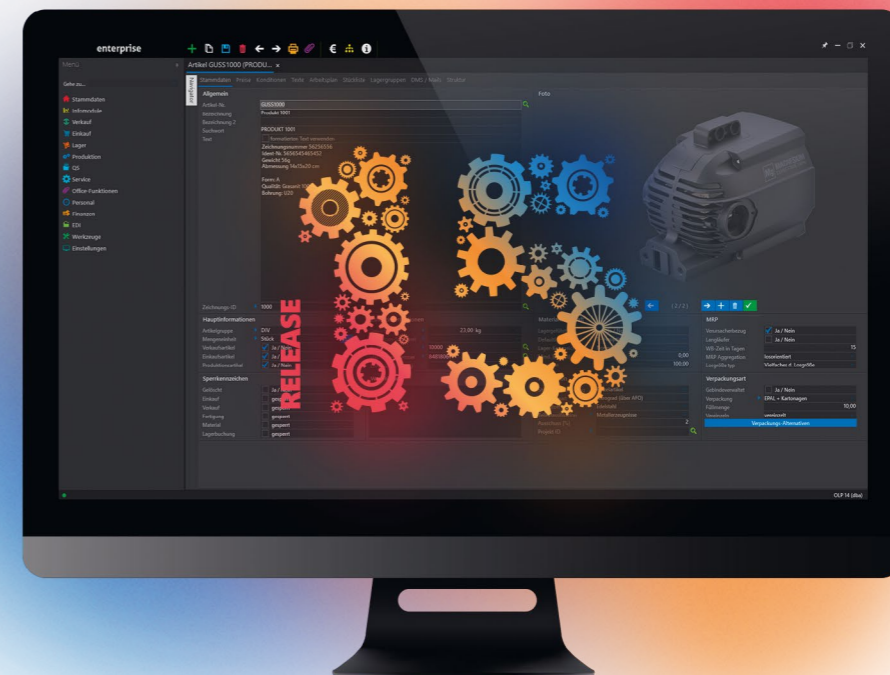
THE SPECIALIST FOR FOUNDRIES FOR OVER 30 YEARS



MISSION STATEMENT

PROVIDING ACCESSIBLE HIGH-END TECHNOLOGIES AND FEATURES FOR EVERYONE.

The TimeLine Group is an independent software and consulting company, with more than 30 years of experience as a competent and reliable partner for manufacturing companies. Our goal is to significantly accelerate and streamline the processes throughout departments within one cohesive solution. With its broad functional range, TimeLine ERP is the most comprehensive ERP ecosystem for industrial manufacturing companies.



TIMELINE FOUNDRY

TimeLine ERP offers foundries a unique foundation with a vast variety of standard modules combined with industry-specific functionalities. Complemented by an unprecedented customizability to individual requirements it forms a tailored solution for any scenario.

The new TimeLine platform combines ERP and PPS components with revision-proof document management, its own development application as well as the central TimeLine communication server into a highly integrated and highly versatile solution.

SERVING THE FOUNDRY INDUSTRY SINCE 1992

Our system was co-designed by an initiation group, consisting of seven foundries and is still being further developed today in close cooperation with our users. This results in functional packages shaped by the very specific requirements of the industry

ALLOY SURCHARGE MANAGEMENT

The alloy surcharge and energy surcharge management offers, individually selectable calculation times in conjunction with limits as well as a changeover module for changing the respective listing.

PRODUCTION

Management of production orders, entry of production feedback either manually or via BDE terminal input, management of technical drawings, production monitor as a central control center for the manufacturing process, simultaneous post-calculation within production orders as well as coupled production orders.

PLANNING

Graphically displayed automatic- and fine planning, separation into planning groups, various planning levels to divide simulation levels for different capacity variants, automated planning via the integrated APS run, as well as ATP determination (available to promise).

CALCULATION

Pre-calculation of virtual and existing items, volume-based calculations, contribution margin and profit calculation, surcharge calculations, and the transformation of pre-calculations into sales offers without item numbers.

TOOL MANAGEMENT

Management of single and multiple tools including tool life, blocking status and documents. Incoming and outgoing delivery notes for external toolmaking as well as toolmaking orders with cost collection.

QUALITY MANAGEMENT

Inspection plans, production-related and incoming goods inspections, management and capability analysis of test equipment, integration of test equipment, creation of control charts and certificates, inspection monitor, as well as manual or BDE terminal input of measured values.



TIMELINE SIMPLY OFFERS MORE

Thanks to its wide array of features, TimeLine ERP is probably the best integrated ERP solution for medium-sized companies. TimeLine ERP is the counter design to the best of breed idea, which is not only difficult to manage, but also immensely cost intensive. One coherent ERP ecosystem instead of a variety of isolated stand-alone solutions.



ENTERPRISE RESOURCE PLANNING

TimeLine ERP offers a fully integrated and coherent ERP ecosystem, covering all requirements of manufacturing companies, tailored to specific needs of the customers.

DATA CAPTURING

TimeLine ERP combines labor time recording as well as production and machine data capturing in one single solution without any interfaces.

FINANCIAL ACCOUNTING

TimeLine ERP integrates a certified financial accounting. Export options for Lexware or DATEV are also available on request. Local foreign third party solutions can be connected individually.

QUALITY MANAGEMENT

TimeLine ERP is one of the few ERP systems that integrates all relevant quality management aspects. This includes the management of testing equipment, inspection plans, complaints management as well as defect collection sheets and blocking cards.

CUSTOMER RELATIONSHIP MANAGEMENT

TimeLine ERP offers a comprehensive CRM system. Always keep track of business partners and the associated documents and activities.

DOCUMENTS, E-MAILS AND CALENDARS

TimeLine ERP combines all essential office tasks in one place. Appointments, documents and tasks are where they are needed - in the ERP system.

BUSINESS INTELLIGENCE

With the build in scorecard designer, all relevant key performance indicators can be monitored at all times. Pivots, spreadsheets, lists and evaluations can be individualized and displayed as needed.

BRANCHE SPECIFIC FEATURES

The dedicated TimeLine ERP branche packages serve the core requirements of highly specialized industry branches for over 30 years.

TAILORED TO YOUR NEEDS

With TimeLine ERP, customizing becomes your decisive competitive advantage! The unique combination of ERP platform and integrated development system creates the possibility to close functional gaps with minimal effort. The build in migration tool secures the release capability for future versions.

OUR TIMELINE ERP PROMISE

Personal support

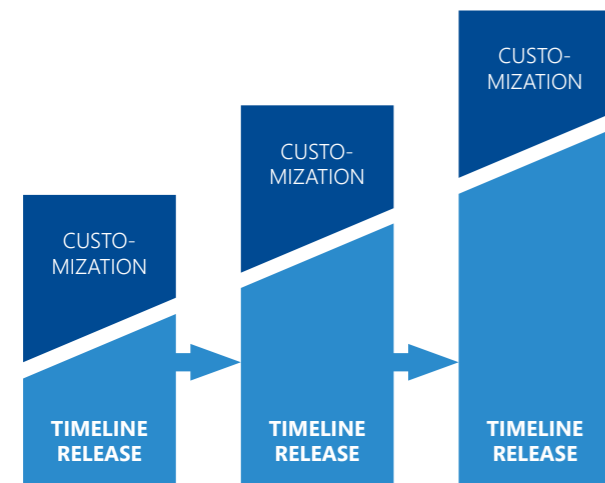
Fixed contact persons and consultants who accompany you for years and a service hotline consisting of experienced project managers ensure optimal personal support.

Modular and flexible

The modular structure of TimeLine ERP gives you the freedom to add features at any time as your requirements grow.

Individual

Customizations to the ERP system can be handled much faster than with comparable systems thanks to our own development platform and the integrated migration tools. In addition, adjustments are always made while maintaining release capability.

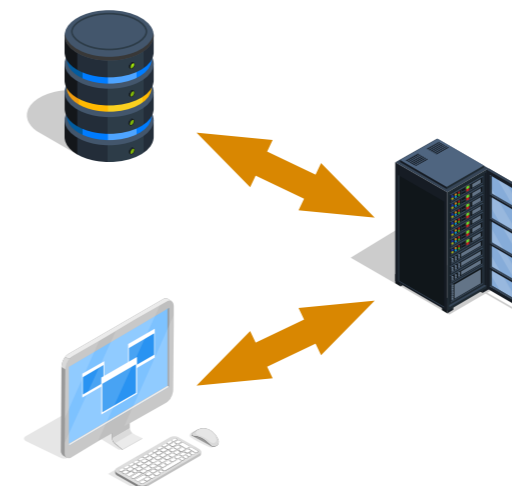


Independent

Whether you are working from home, in the office or on site at client/supplier premises: The three-tier architecture with the TimeLine server as an intelligent middleware ensures that you can work securely and encrypted on your TimeLine database from anywhere - without the need for additional tools such as a VPN tunnel or a terminal server. In addition, the TimeLine server manages your external access, Multi-Tenants, as well as your licenses and server-side services. You remain flexible and location-independent in the long term.

IN THE CLOUD OR ON-PREMISE

For us, data sovereignty starts with the question of location. You can host TimeLine ERP either on-premise or in the cloud. You determine your IT infrastructure.

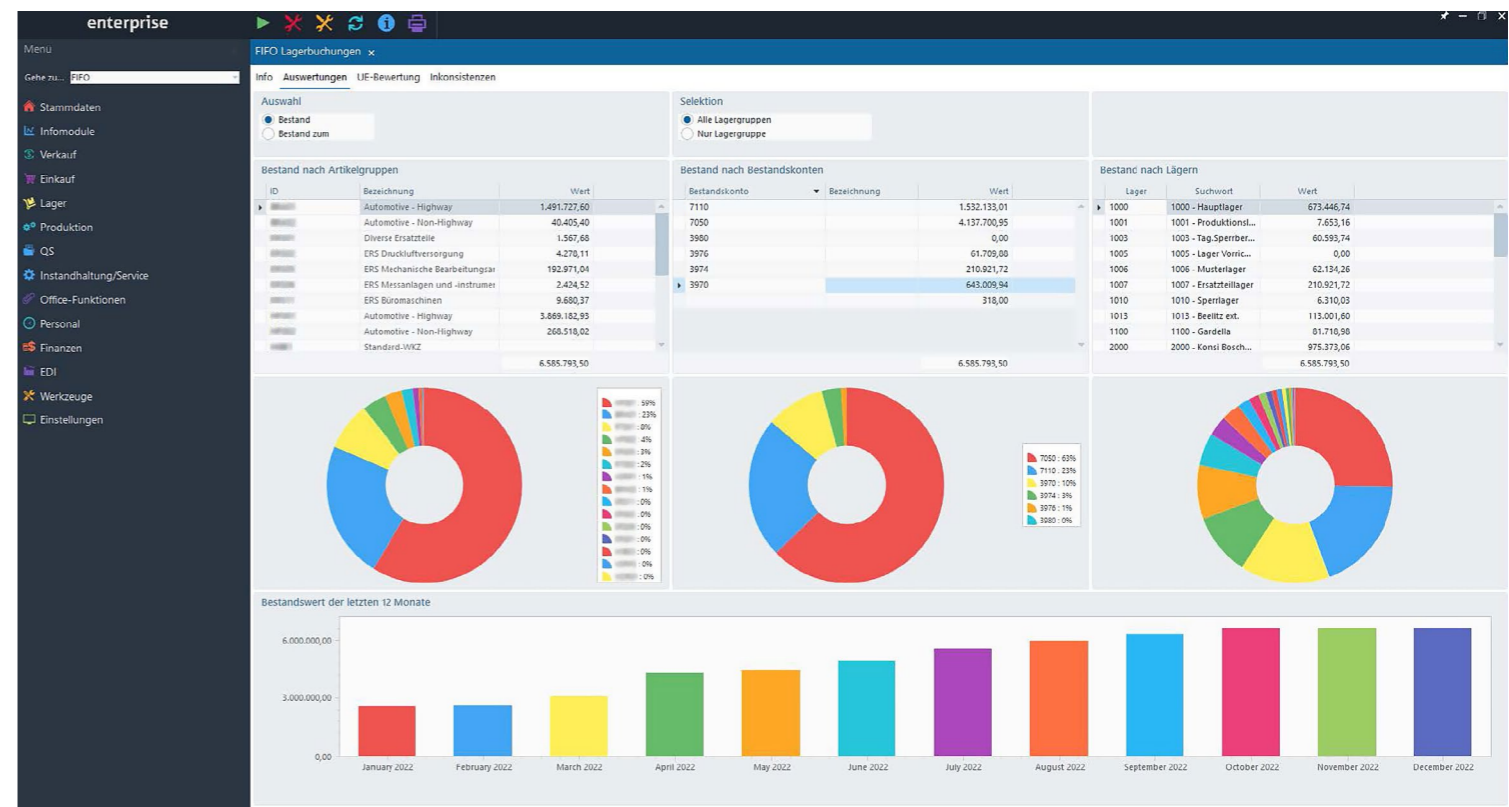




ENTERPRISE RESOURCE PLANNING

KEEP TRACK OF EVERY STOCK MOVEMENTS

With TimeLine ERP, you control all processes relating to your stock movements in your warehouses. From procurement and reservations to production and delivery, you always have a comprehensive overview. Batch and serial number-managed items such as raw materials and supplies, finished goods and merchandise can be easily managed.



Determination of requirements including order and production proposals

MATERIAL REQUIREMENTS PLANNING (MRP)

MRP run generates production and order proposals that are accurate in terms of quantities and deadlines on the basis of inventories, lead times and scrap quantities, taking into account existing demands. Cause references enable spontaneous quantity or date deviations to be taken into account across all levels.

Production proposals generated by the MRP run can be directly transferred into planning production orders by the automatic planning run, which are then scheduled according to priority and delivery date.

Inventory management

MULTI-WAREHOUSE AND CHAOTIC WAREHOUSE

Keeping track of all raw materials, semi-finished products and finished parts is not always easy. TimeLine ERP helps you to manage any number of internal and external warehouses, with or without fixed storage locations. The administration of consignment warehouses, blocked stock storage and external warehouses is one of the core features of our warehouse management feature.

Highlights

- location-specific warehouses to administrate various locations
- information on external inventories
- key date and permanent inventory
- Stock evaluation according to FIFO concept
- Picking suggestions according to FIFO
- Platform independent booking masks for mobile scanners

Traceability

BATCH AND SERIAL NUMBERS

In order to identify individual products or production lots at any time, serial or batch numbers can be used. For each serial or batch number, additional information can be added, such as best-before dates, status, or life cycle. This also includes the possibility of storing documents such as drawings, factory certificates or test reports.

The combination of life cycle and warehouse records as well as the usage list ensures complete traceability that even meets the highest requirements in the automotive, medical or aerospace sectors.

Container management

CONTAINER MANAGEMENT

TimeLine ERP provides the functionality to manage warehouse containers as well as dispatch containers. These containers will be identifiable by a distinct identification number which will also simplify the booking routine. In addition to that container-specific bookings can be configured. Bookings can be done on mobile scanners or touch terminals.

METAL SURCHARGE AND ENERGY SURCHARGE MANAGEMENT

Variable assignment

Whether item-related, customer-related or generally valid, you can minimize the maintenance effort involved in the metal surcharge conversion by specifically assigning the alloy contract.

Every common metal/energy surcharge calculation variants

- Listing – base
- EUR/100 kg
- EUR/pc.

Variable metal/energy surcharge display on reports

- EUR/100 kg
- EUR/pc.
- Total
- Included/hidden within the base price

Variable and universal

- For purchase and sales department
- limited via time period or tonnage
- definition

Metal surcharge adjustment

TimeLine ERP can adjust customer-specific terms, outstanding orders and order calls. Price adjustments are logged within the adjustment protocol.

A COMPREHENSIVE PPS SYSTEM FOR EFFICIENT MANUFACTURING

Planning is the heart of any industrial manufacturing company - and the weak spot of most ERP systems. Where other systems exhaust themselves, the functional diversity of TimeLine ERP's production module starts to shine.

Material Requirements Planning

ADVANCED PLANNING AND SCHEDULING

With TimeLine ERP you can ensure optimal material availability and procurement. Future material requirements are determined and covered according to quantities and deadlines. This will help you optimize inventory levels, keep track of material movements and meet delivery deadlines.

The automatic planning run is the central tool for production planning. Daily changing requirements regularly pose a problem for planning. Thanks to the APS run, even short-term changes are taken into account and scheduled overnight

AVAILABLE TO PROMISE

Statements about the ability to deliver are often difficult to make in turbulent times. An upstream determination of deadlines on the basis of the current planning capacity is suitable for this purpose.

Replenishment times of raw materials, lead times of suppliers and customers as well as the current capacity utilization are taken into account.

APS-RUN

Step 1: Import through EDI interface

Import of updated order call quantities and order call dates via EDI-Interface

Step 2: deleting planning production orders

Cancellation of every planning production order, which hasn't been fixated yet.

Step 3: MRP Run

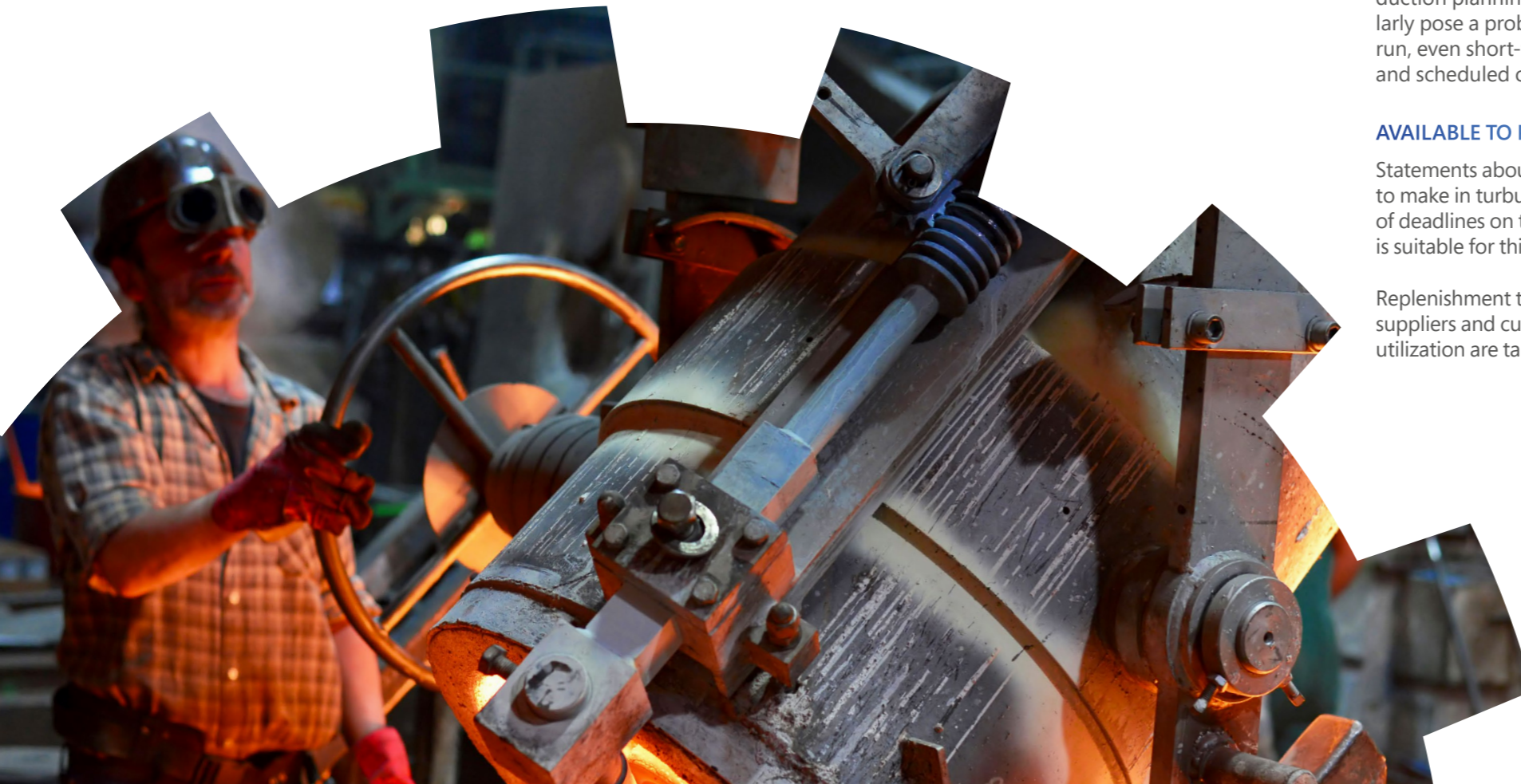
Recalculation of all primary and secondary requirements based on the new call-offs and generation of production proposals with target dates.

Step 4: Generate planned production orders

Conversion of the production proposals into new planned production orders.

Step 5: Redesign

Planned production orders are scheduled backwards starting from the delivery date. Alternative resources are taken into account during the automated planning.



EXTERNAL PRODUCTION

The integration of the extended workbench into the planning system, costing calculations, logistics and production feedback is easily managed in TimeLine ERP. All essential processes of external production are administered by an accompanying document or forecasts.

Extended workbench

ROUTING PLAN

External manufacturers can be linked as external resources in any routing plan. That is all you need to distinguish an internal from an external routing operation.

PLANNING

Lead times for external manufacturers can be specified in days so that external operations are included in forward and backward scheduling.

CALCULATION

Since TimeLine ERP also manages each external manufacturer as a supplier, individual prices can be stored for each operation. These prices will also find use within the calculation.

LOGISTICS AND WAREHOUSING

Since TimeLine ERP also manages each external manufacturer both as a supplier and as an independent warehouse. The outgoing goods are sent to the external manufacturer with an accompanying document, which means that the external manufacturer's stocks can be tracked at any time.

Through the barcode-supported feedback the external manufacturer's warehouse is being balanced. Evaluations of the external manufacturer's adherence to delivery dates are included in the supplier evaluation.



The screenshot displays the TimeLine ERP software interface. At the top, there's a window title 'BA 113' and a menu bar with 'Beleg Explorer', 'Objekte', 'Aufgaben', and 'DMS'. Below the menu bar, there are several control panels: 'Anzeige' with radio buttons for 'Direkt', 'Alle', and 'Position', and a checked checkbox for 'nach Direktsprung schließen'; 'Themeneditor' with radio buttons for 'Klein', 'Mittel', and 'Groß', and radio buttons for 'Weiß' and 'Schwarz'; and 'Suchtiefe' with input fields for 'Gesamtanzahl' (25) and 'Min. Elemente/Gruppe' (10). The main area shows a flow diagram with nodes: 'Lieferauftrag 23080000' (blue), 'Betriebsauftrag 113' (orange), 'Warenbegleitschein 23140000' (blue), 'Prüfauftrag 246' (green), and 'Wareneingangslieferschein' (purple). To the right, there's a 'Warenbegleitschein' details panel with fields for 'Nummer' (23140000), 'Suchwort' (SOLINGEN), 'Status' (teil), 'Datum' (05.12.2022), 'ProjektID', 'Belegart', 'Netto' (0,00), and 'Brutto' (0,00). Below this is a 'Positionen' table:

PosNi	Artikel	Bezeichnung	Menge	Offen	Endpreis
1	1002-058-0...	Sockelgehä...	250,00	150,00	0,00
2	1002-058-0...	Externe Fer...	250,00	150,00	0,00

QUALITY MANAGEMENT

A core requirement for automotive suppliers is compliance with the new IATF 16949 standard, which requires the use of a quality management system. TimeLine ERP offers fully integrated quality management in the sense of a holistic solution concept.

Quality management system

PRODUCTION MONITOR

In the production monitor, the routing plan, the inspection plan and the bill of materials are captured all together in one module including all of the technical documentation.

In the event of an index change, for example, the production monitor is then being copied to the new index. The index is traceable down to the batch.

PRODUCTION-SYNCHRONOUS INSPECTION

TimeLine ERP fully integrates quality management up to the SPC (statistical process control) and therefore generates a so-called inspection order with every production order.

Since the introduction of the IATF standards, production-synchronous inspection has been mandatory for serial manufacturers with SPC-guided parts in the automotive sector. In TimeLine ERP, individual inspection cycles can be stored with reference to the number of pieces, production time or packaging unit.

This means that the inspection cycle also starts with the PDC stamping and leads to measurements at defined intervals.

Highlights

- Management of testing equipment
- capability analysis of testing equipment
- Inspection of Incoming goods
- Inspection order monitor
- Quality data capturing (QDC)
- Control chart/process capability
- Complaints management incl. 8D-Report
- Defect collection cards
- Process batches





DATA CAPTURING

Labor time recording (LTR), production data capturing (PDC), machine data capturing (MDC) and quality data capturing (QDC) are combined in an integrated overall system.

PDC and MDC

PDC-TERMINAL

TimeLine ERP provides an intuitive terminal interface that can be adapted to all individual requirements. Production data capturing is the backbone of production planning and simultaneous post-calculation.

ARBURG CONTROL PANEL INTERFACE

Data such as production orders or machine data can be exchanged via a standardized interface to the Arburg system. This enables smooth communication between the two systems.

Highlights

- access to DMS-files
- access to PDM-files
- access to MDC-data
- native 3D-visualization of STEP/IGES neutral formats
- QM-data capturing
- Defect collection card

TOOL MANAGEMENT AND TOOLMAKING

TimeLine ERP provides tool management and toolmaking features for foundries, as those are core areas of the industry. Tool life cycle, production cycles and ownership terms are displayed transparently.

MULTIPLE TOOLS

TimeLine ERP enables you to configure tool sets. Any constellation of master molds and inserts can be used to manage single as well as multiple tools.

TOOLS AS A RESOURCE

TimeLine ERP enables the configuration of tool sets. Any constellation of master molds and inserts can be used to map single as well as multiple tools.

SERVICE CYCLE AND MAINTENANCE INTERVALS

A production feedback of a routing operation containing a tool will automatically create a booking within the tool life cycle.

TOOL LIFE CYCLE

In addition to the automatic entries in the life cycle, you can also supplement these with manual entries, such as the delivery or shipment of the tool.

TOOLMAKING

The quick entry of toolmaking orders (repairs, conversions, etc.) as well as the recording of production feedback times are made possible by TimeLine ERP. The booking of repair costs is displayed within the tool life cycle.

AMORTIZATION

The effective amortization of your tool costs is ensured by tool amortization accounts.

Highlights

- Blockage of tools with descriptive texts
- Storage of technical master data
- Storage of external documents such as drawings or photos
- Cost and revenue information

Coupled production

TOOL-BASED PRODUCTION ORDERS

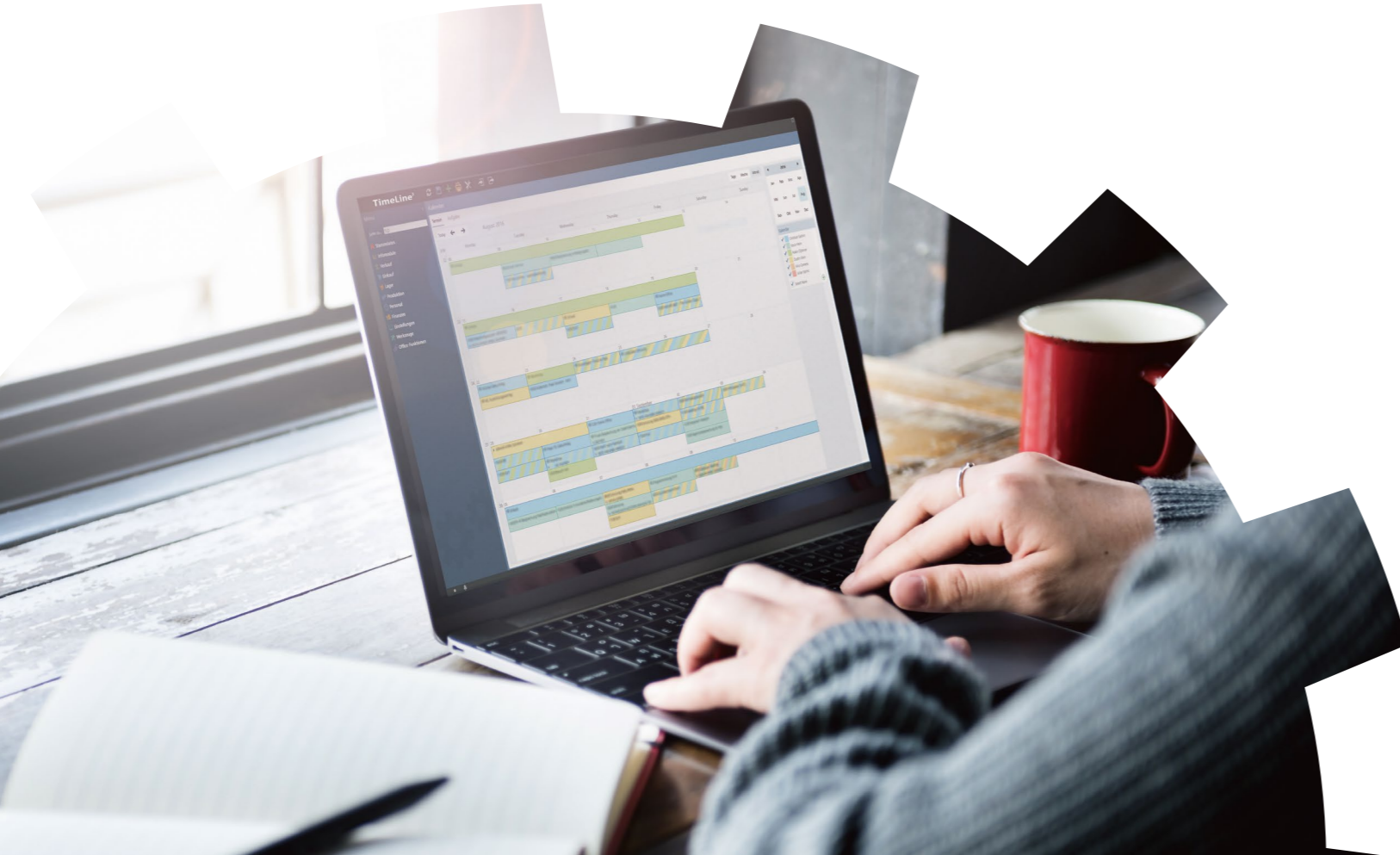
In coupled production, also called joint or composite production, additional products are created through the use of multiple tools. Access the master data records stored in the mold master and the associated co-products. By specifying cavities, you can specify the distribution key for your article production.

With the coupling production order you thus have a possibility to run this production process integrated in TimeLine ERP.



THE SMART OFFICE IN TIMELINE ERP

TimeLine ERP offers a complete integration of documents, e-mails, appointments, and tasks. Necessary administrative tasks, which usually have to be gathered from different software sources, can be combined within TimeLine ERP.



Groupware

E-MAIL CLIENT

TimeLine ERP has an integrated e-mail client that coordinates the retrieval and sending of e-mails.

Smart functions for daily operations like automated imports and selective archiving of incoming and outgoing e-mails, including attachments: Incoming e-mails are automatically identified through the e-mail address, imported, keyworded and linked to the business partner in the ERP system.

TAGGING AND LINKING

E-mails can be tagged and will then be linked automatically to a complaint, a project or further objects. Furthermore, TimeLine ERP is capable of a full text search by indexing every stored document.

AUTOMATED DOCUMENT IDENTIFICATION AND PROCESSING WITH THE TIMELINE TOKENIZER

Incoming purchase orders, incoming invoices and other documents can be processed directly from the integrated e-mail client. Items, quantities, prices, discounts, etc. within the documents are analyzed and converted directly into TimeLine document positions.

The Tokenizer also comes with an OCR recognition tool which can process not only structured files (PDF, xls, docx, etc.) but also scanned documents. Higher recognition rates can be achieved through specific profiles.

Improved identification due to specific profiles

Specific business partner profiles can be created to improve the rate of recognition of recurring import patterns.

TAPI INTERFACE

To maintain an unbroken communication, TimeLine ERP provides the possibility of connecting an existing telephone system. Via a bidirectional exchange, calls can thus be initiated directly by the contact person within TimeLine ERP. Incoming calls can then be automatically recorded with a quick info in terms of call logs and resubmissions.

CALENDAR

A two-way synchronization with all calendar applications on smartphones or pcs is achieved via a standard interface.

In addition to that, reminders, maintenance appointments and billing cycles can be automatically generated from the calendar and transferred to subsequent processes, such as an outgoing invoice.

Revision-safe document management

The TimeLine ERP document management system is certified for revision-safe archiving and offers advantages in almost all processes within the ERP system.

AUTOMATIC DOCUMENT IMPORT

With the use of Managed Directories, documents in specific directories are automatically imported into the DMS.

EXPLORER INTEGRATION


Any files can be placed directly into the DMS system via drag-and-drop from the Windows Explorer.

INDEXING

Transferred documents are automatically indexed and assigned to the respective business partners or projects.

MANAGE ALL DOCUMENTS THROUGHOUT ALL PROCESSES

The document explorer graphically displays the entire document references bound to a transaction and presents an overview of all DMS documents linked to each and every object within the entire process.


Audit – TimeLine ERP, V14


5 Ergebnis der Prüfung

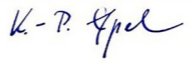
Auf Basis aller Ergebnisse (Prüfung der Dokumentation, Telefoninterviews, Vor-Ort-Audits) wird folgende Stellungnahme abgegeben:¹¹

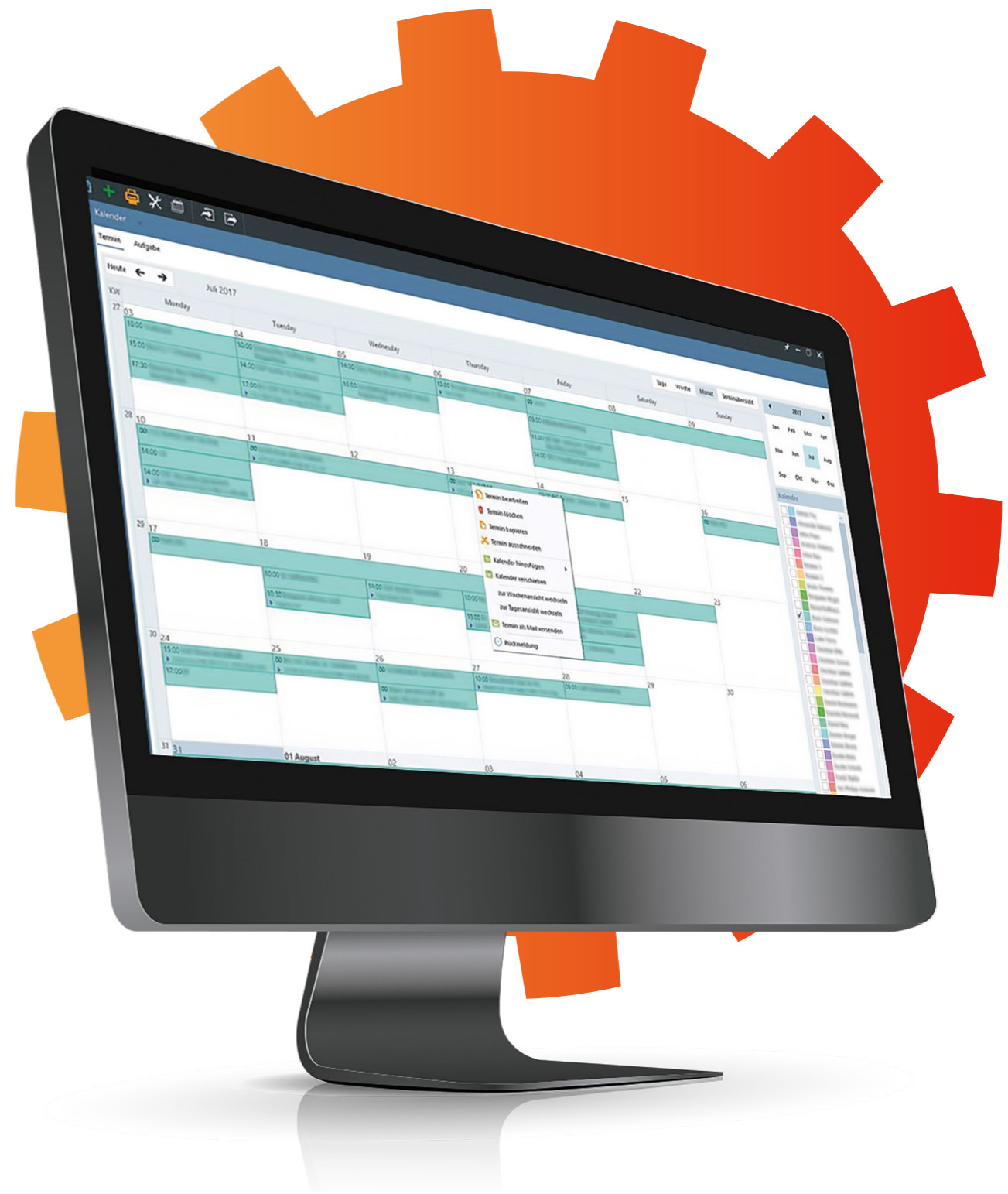
Mittels der Softwarelösung TimeLine ERP in Version 14 lassen sich die Anforderungen an die Einhaltung der Revisionsicherheit gemäß den Auditkriterien für digitale Dokumenten-Management-Prozesse und verbundene IT-Lösungen des „Verbandes Organisations- und Informationssysteme e.V.“ (VOI, Bonn) sowie der „TUV Informationstechnologie GmbH“ (TUVIT) (TUV NORD GROUP, Essen) erfüllen.

Die erfolgte Prüfung bezieht sich auf den Einsatz in Unternehmen und öffentlichen Einrichtungen im Sinne der in Kapitel 2 spezifizierten gesetzlichen Vorgaben in Deutschland, Österreich und der Schweiz.

Prüfungsgegenstand	Empfehlung zur Erteilung / Aufrechterhaltung des Zertifikats	Die Vorlage weiterer Nachweise ist erforderlich*	Die Durchführung eines Nach-Audits ist erforderlich*	Freigabe durch VOI CERT, Bonn in Zusammenarbeit mit der TÜV Informationstechnologie GmbH, Essen (TUV GROUP NORD)
Einhaltung der Revisionsicherheit von digitalen Dokumenten durch Einsatz der Softwarelösung TimeLine ERP, Version 14	<input checked="" type="checkbox"/>	Nein	Nein	

* Sofern ausgefüllt, siehe hierzu Einzelheiten und „Abweichungen/Feststellungen“ in Anlage 2 auf Seite 27ff.

Zertifizierter Auditor des VOI CERT, Bonn	Unternehmen	Unterschrift
Dr. Klaus-Peter Eipel Leitender Auditor Zertifikatsnummer Z2113003 k.p.eipel@voi.de	Consultec Dr. Ernst GmbH Oehleckerling 2 22419 Hamburg Tel. 040/533 242-0 www.consultec.de	



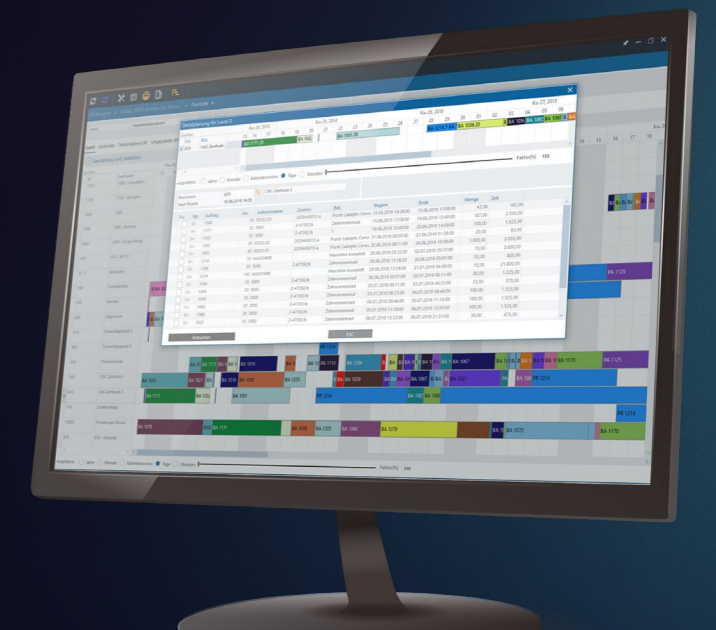
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