EXAPT

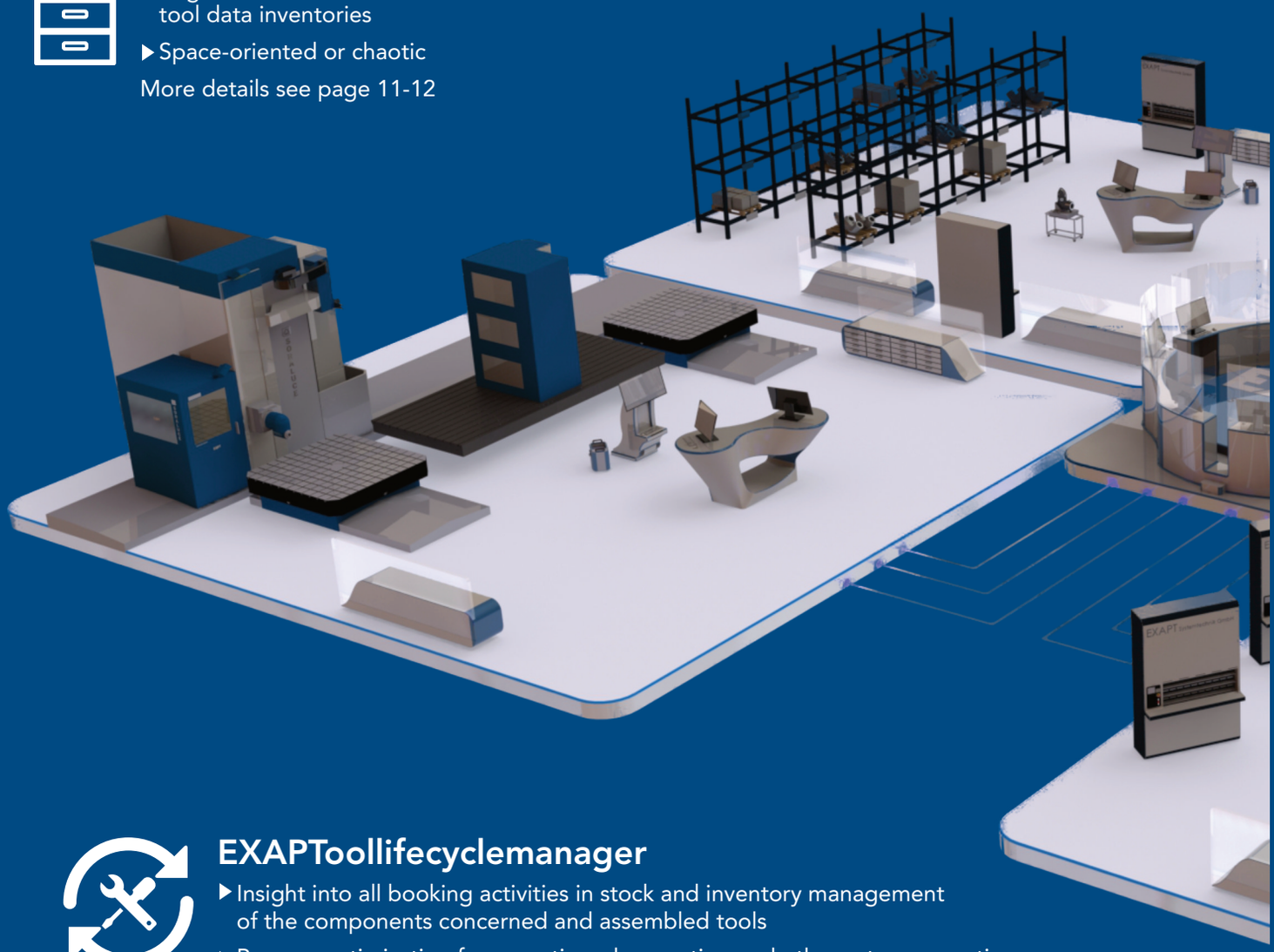
TOOLMANAGEMENT

EXAPTSMARTFACTORY - THE FUTURE OF FACTORY

EXAPTstock&logistic

- Organization of stock locations and tool data inventories
- Space-oriented or chaotic

More details see page 11-12



EXAPToollifecyclemanager

- Insight into all booking activities in stock and inventory management of the components concerned and assembled tools
- Process optimization for mounting, demounting and other set-up operations
- Overview of production sequences and tools in use
- Information concerning applications planning and monitoring

More details see page 9-10

EXAPTproductionplanning

- Generation and modification of tool plans
- Transfer of postprocessor results
- Graphic display of all manufacturing resources
- Automated triggering of requisitions
- Inventory check

More details see page 8

EXAPTncprogramming

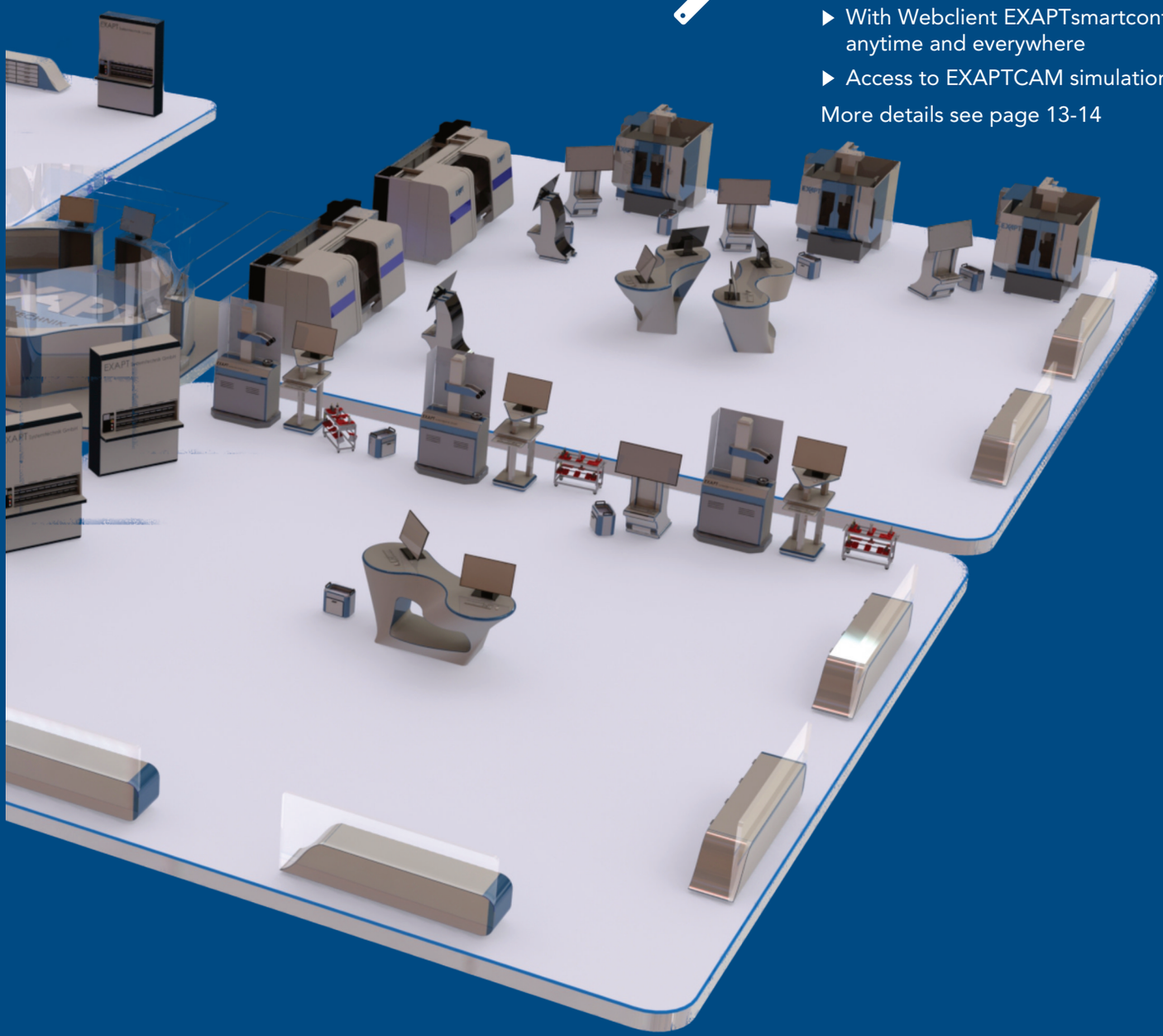
- Management of NC programs with appurtenant basic data
- Faster and optimal results in programming
- Optimum handling of tool plans
- Transfer of postprocessor results

More details see page 8

EXAPTshopfloor&DNC

- Complete overview of NC programs and production-relevant information
- With Webclient EXAPTsmartcontrol access anytime and everywhere
- Access to EXAPTCAM simulations

More details see page 13-14



EXAPTequipmentdesign

- Organization of self-configured manufacturing resources
- Organization of component-based and cutting tools
- Organization of measuring tools, testing means and jigs with actual data & history management
- Access to all manufacturing resources

More details see page 5

EXAPTcontrol

The wellness program for your production

Optimal production processes due to valid and reliable data

EXAPTcontrol manages all production-relevant data of the cutting production and various types of tools in a central database The range of services reaches from administration via planning up to communication between stock systems, presetting devices and machines.

EXAPTcontrol not only offers high transparency of the availabilities but also process reliability because of intelligent release mechanisms. Furthermore the software supports the access to current data sets and all from one consistent data source.

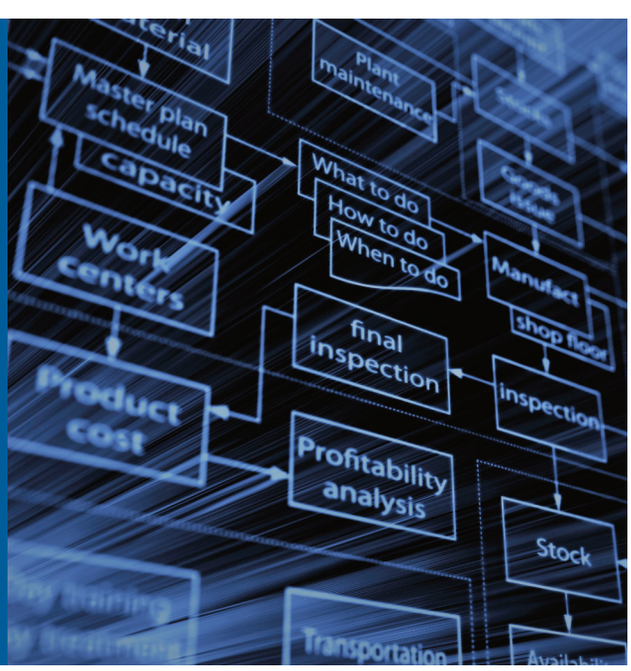
Analyse and evaluate all relevant production data – fast, simple and comfortable. Beside the work and operation planning you can control your complete stock and inventory management.

Due to the numerous interfaces to CAM, ERP and MES systems you work comprehensive with EXAPTcontrol in your entire production. Manage all kinds of tools and production data – no matter if NC programs, operation plans, tools, fixtures etc., the EXAPTsystem is ready for anything.

EXAPTcontrol is constructed modularly. Due to this structure you get an absolutely digital consistency of all production-relevant information. The whole paperless and without media breaks. So the necessary transparency and traceability in your production sequences is created for you. EXAPTcontrol is futureproof, because it is one hundred percent scalable, expandable and linkable.

The highlights

- Your are always a step ahead of your production because of work and organization planning.
- Transparent administration of your tool inventory offers you a high tool availability.
- Consistency in your system because of interfaces to your CAM, ERP and MES system.
- Central data storage from one source for absolute security, traceability and reproducibility.
- Analyse and evaluate your production data, to achieve conclusions concerning an optimum capacity utilization and to make your future processes even more efficient.

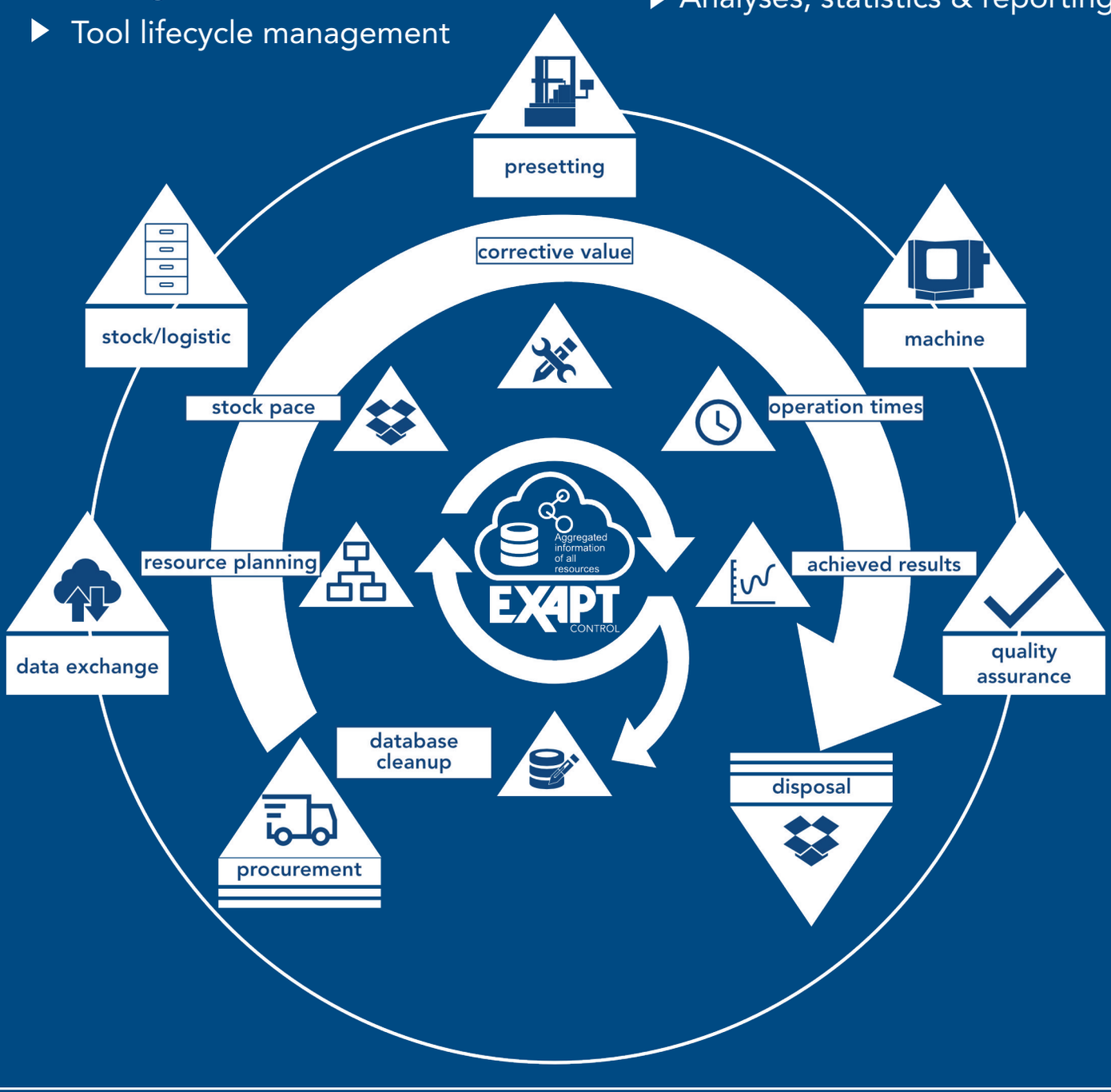


EXAPT makes industry 4.0 tangible!

The integrated EXAPTdatabase provides CAM systems with tool and technology data and merges the results of the CAM planning in an integrated data inventory, that provides them for production. So processes can be accelerated verifiably, all production-relevant information digitised, versioned and permanently archived.

Overview

- Tool data management
- Production data management
- Generation of optimum operation plans
- Detailed tool administration
- Measuring and testing machine management
- Tool lifecycle management
- Stock management and organization
- Automated requisitions
- Integration of presetting
- Integration of machinery
- Integration of the shopfloor
- Analyses, statistics & reporting



EXAPTequipment

Always ready for use

Beside machine tools and employees manufacturing resources have the highest cost blocks in manufacturing companies. Therefore it is necessary to pay high attention to these consumables. With EXAPTequipment-management you always keep an eye on status and values of all components. So you easily manage all kinds of manufacturing resources and ensure optimization of your process sequences and the respective cost centers.

Tools
Manage all kinds of tools flexible: Individual components, assembled tools, hand tools or fixtures. Wide-range information contents as technology data and 3D tool models needed for the simulation in your CAM system ensure the provision of your CAM system. All parameters, affiliations and even stock data are stored for you in the central EXAPTdatabase and provided for the entire production process.

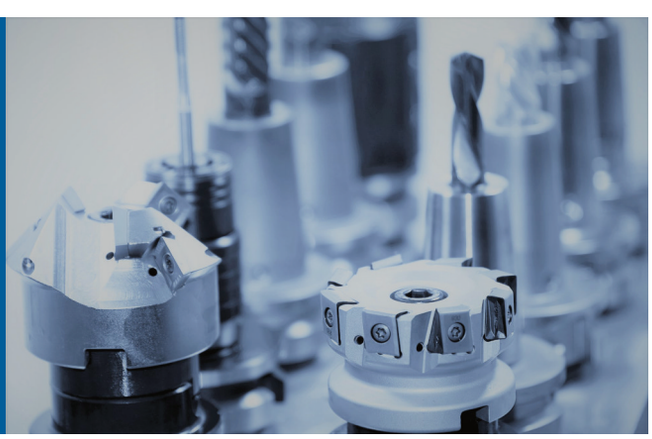
The intelligent EXAPTechnology provides in the background for smooth and interlinking work steps and processes e. g. for order management, provision, stock etc. The standardized interfaces to tool data and suppliers support you actively, not only for the first fill of your database but also during the running production process.

Measuring & testing equipment
Daily absolute precision is required from you. To meet this challenge a professional quality management of the measuring and testing equipment is essential. To achieve exact and error-free results of measurements also these special manufacturing resources must be exact and error-free. With its measuring and testing machine management EXAPTcontrol offers a system that informs about stock, status and inventory location of these components simply and clearly. Beside the management of measuring machines the required inspection plans can also be generated in EXAPTcontrol. Simply prepare an inspection plan using stored modules or according to your individual requirements. EXAPTcontrol always informs you in time about the current state of single measuring and testing machines. This way you digitize your quality management and are well prepared for each kind of certification.

EXAPTequipmentdesign

Manufacturing resources anytime under control!

In modern production the provision of resource data is an important and growing process. Because only valid data lead to high-precision production results. The module EXAPTequipmentdesign supports you to generate these data. State-of-the-art algorithms ensure a fast and intuitive tool assembly and automatic generation of precise 3D tool models.



EXAPT

up to
-10 %
costs

up to
-20 %
variety

up to
-30 %
stock

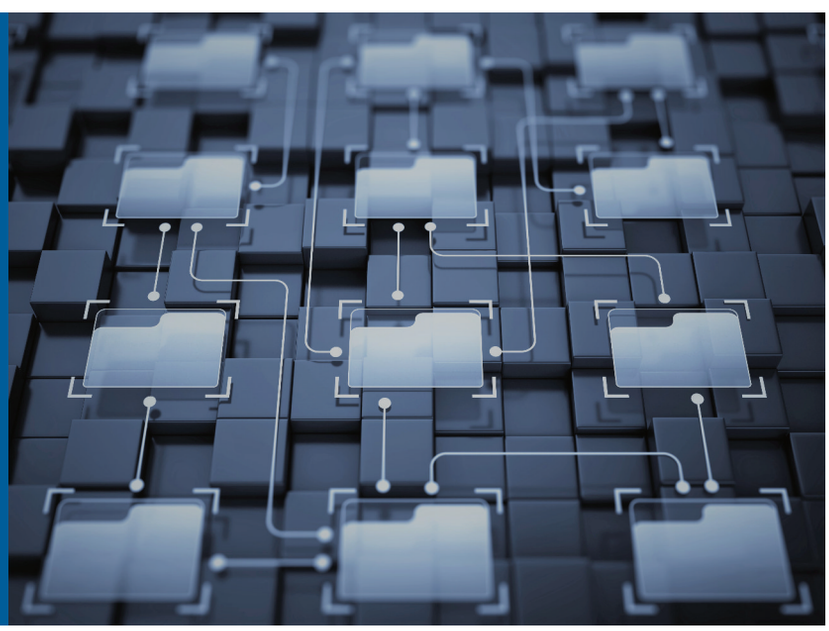
- Absolute Transparency
- Traceability
- Standardized processes
- Quick reaction to modifications
- Error reduction
- Paperless
- No media breaks

EXAPTproductionplanning

Nothing is more important than transparency and traceability in production planning. Present the EXAPTproductionplaning module to your production planning team. With fewer clicks your employees get a complete overview of existing NC records, tools and processes from now on. Additionally the EXAPTsystem provides you with all necessary evaluations for analysis and optimization of the single sequences. This high transparency makes your production more flexible and is able to react expressly to necessary improvements. Of course all in full compliance with latest standards.

EXAPTncprogramming

Time-consuming printing, sorting and transporting of production information are not welcome in Industry 4.0. Manage your NC programs digital, rapid and uncomplicated with affiliated basic data. Combined with optimum handling of electronic tool plans, set-up sketches incl. transfer of postprocessor results you achieve much faster optimal programming results. Paperless and without media breaks.

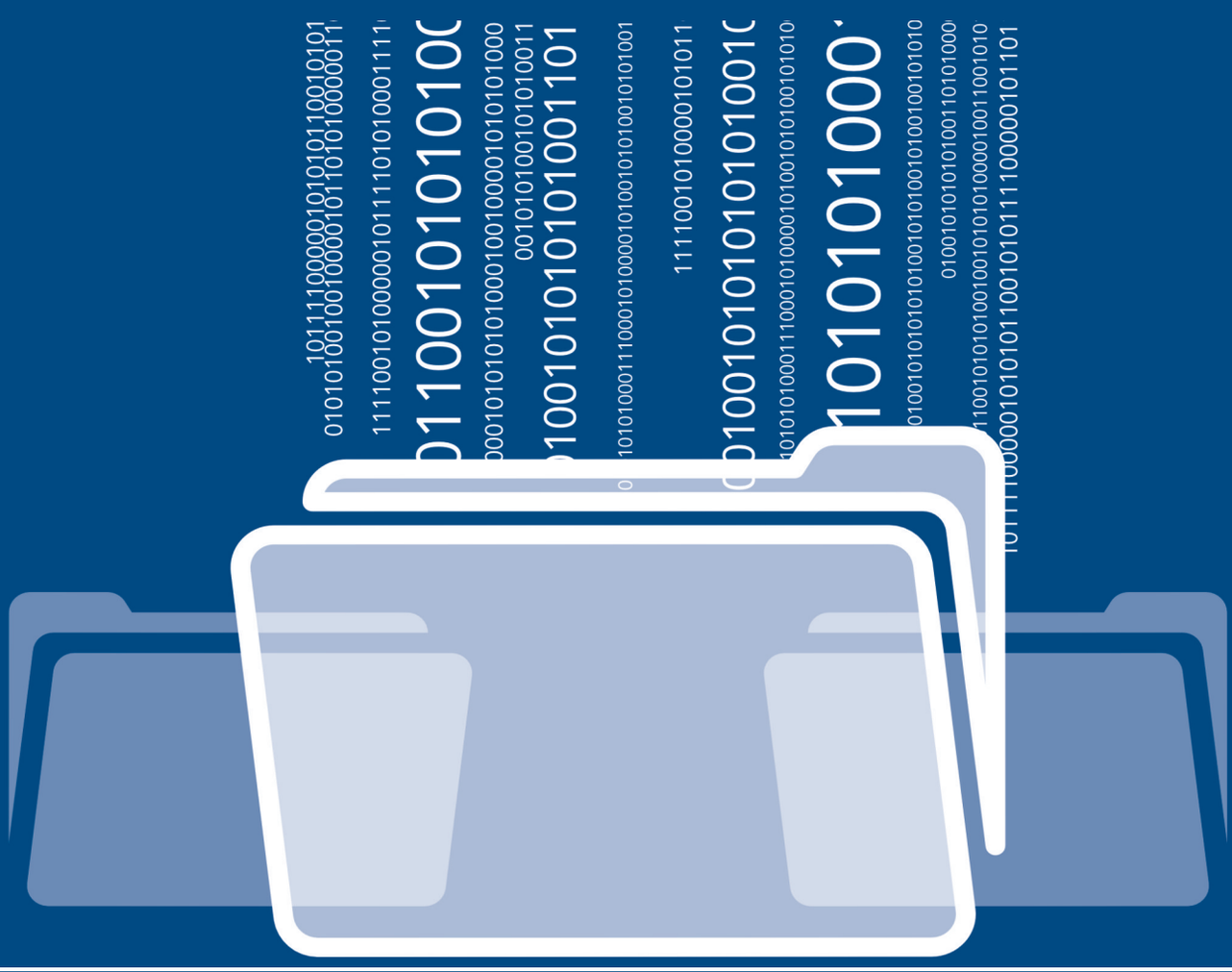


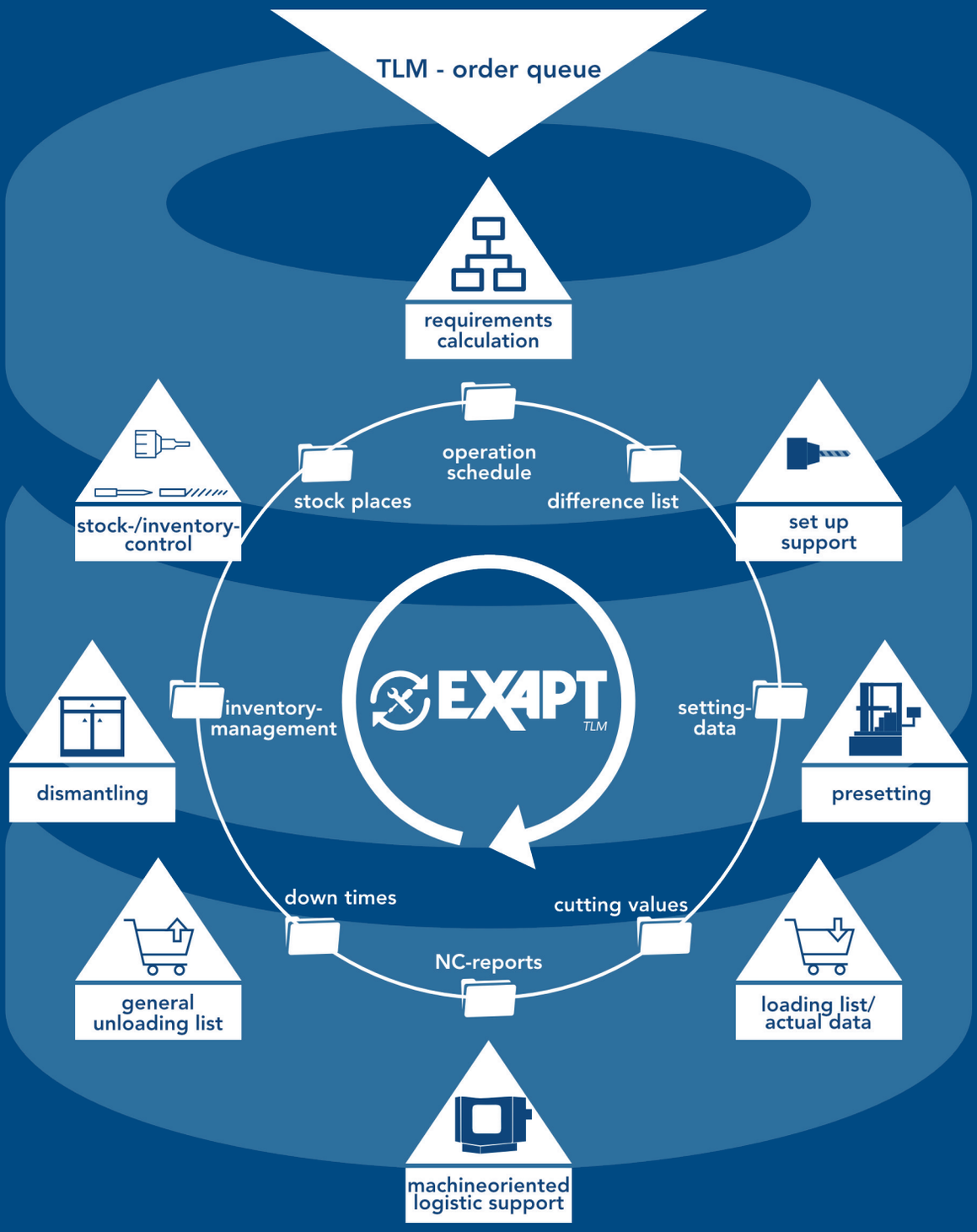
EXAPToollifecyclemanager

TLM in perfection

EXAPToollifecyclemanager (short EXAPTLM) is one of the most powerful EXAPT software modules. With this tool you control, organize, monitor and plan your entire production orders and the whole tool cycle. This solution closes the digitalization gap between ERP system and machine tool. So you enhance the economy in your tool organization and are able to optimize production according to your requirements anytime. The improved tool provision measurably reduces provision efforts and tool investments Simultaneously you achieve an appreciable increase of your machine utilization. Single machines, production islands or productions across different locations – integration and linkage of EXAPTLM into your production is flexible and scalable. After successful implementation you work based on your production orders, overtaken from your ERP or MES system or inserted manually into the TLM system. All tools and components are recorded and managed in the central EXAPTdatabase.

This way EXAPTLM offers you absolute transparency and traceability for all employees involved in the process and consequently an enormous time saving. As soon as your machines, presetting devices, storages and small part storages are integrated into the system they are digitally provided with your production orders. The planning horizon can be seen and adapted from the authorized users anytime. Stored tool lists to the respective orders form the according gross requirements for your manufacturing resources. Depending from the system sequence optimization of the machines or machine groups can be executed now. EXAPTLM checks automatically which tools are where and which of the required tools are already on the machine. They are considered when preparing the set-up list. This saves enormous set-up costs. EXAPTLM can also check the availability of clamping elements and material to be machined and specifies automatically an optimal set-up sequence.





Your advantages

- Early bottleneck recognition
- Reduction of the provision effort
- Reduction of the set-up costs
- Reduction of the target stock
- Enhancement of machine utilization
- Automated order requirements
- Avoidance of bottlenecks
- Integration with output systems
- Integration with presetting systems
- Maximum Transparency
- Increased on-time delivery performance

EXAPTstock&logistic

All at stock

Target

- Linkage of the output systems
- Enhancement of the machine utilization
- Avoidance of bottlenecks in the tool presetting
- Automated order requirements
- Reduction of the provision effort
- Reduction of the set-up costs
- High transparency concerning availability

EXAPTstock&logistic manages different kinds of manufacturing resources in a three-step location description (stock group, stock, stock location). The implementation of stocks can be configured flexibly and individually. In this context manufacturing resources are all via object numbers recorded components (elements), assembly components (partially assembled tools) and assembled tools. EXAPTstock&logistic supports furthermore the chaotic stock location determination based on filling level and stock space.

Performance feature

- Classification according to stock groups
- Inventory management & monitoring (current, minimum and target inventory)
- Single components, partially assembled and assembled tools
- Fix and/or chaotic stock location determination
- Interactive booking functions
- Statistic analysis and evaluations (motions, consumptions, etc.)
- Reservation of manufacturing resources
- Support for processing procedures
- Representation of the tool cycle
- Automated and standardized order requirements to the ERP

EXAPT

STOCKSYSTEM

- Direct communication interfaces
- Activation from the stock and inventory management
- Customized shopfloor-oriented user interface
- Flexible connection options

- Generation of automatic order requests
- Configurable order request functions
- Comparison of minimum and target inventory
- Active inventory research

ORDER REQUEST ERP

EXAPTshopfloor&DNC

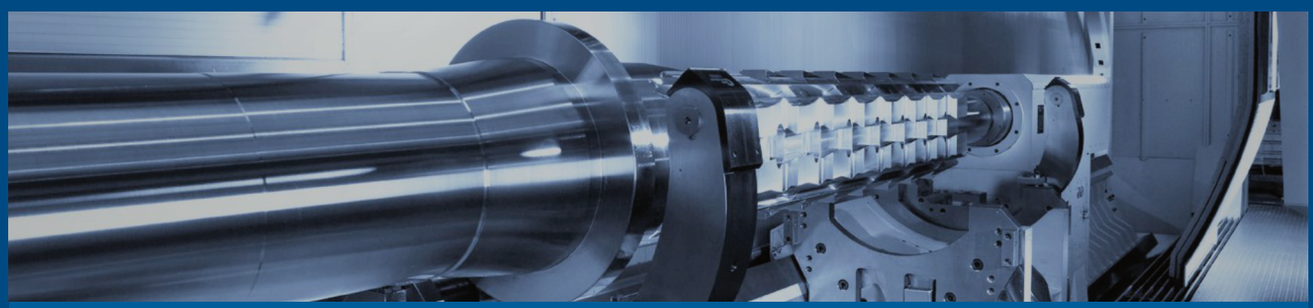
Do not forget the shopfloor

The basic system EXAPTshopfloor&DNC gives you an overview of all relevant information of your mechanical production on shopfloor level. This module offers much more than the data exchange from and to your machine tools. With the optionally available web client EXAPTsmartcontrol you additionally profit across different sites and anytime from the absolute insight and transparency concerning your production-relevant data. This gives you the necessary flexibility and security.

EXAPTDNC
is the base for the linkage of the EXAPTsystem with your machine tools. Thereby all necessary information as e. g. NC programs, tool loading lists, tool physical data, etc. are transmitted to the respective machine tools in real time. Additionally you profit from automated feedback of practice-relevant data and important knowledges developed in the shopfloor. EXAPTDNC also covers the integration of your tool presetting devices completely.

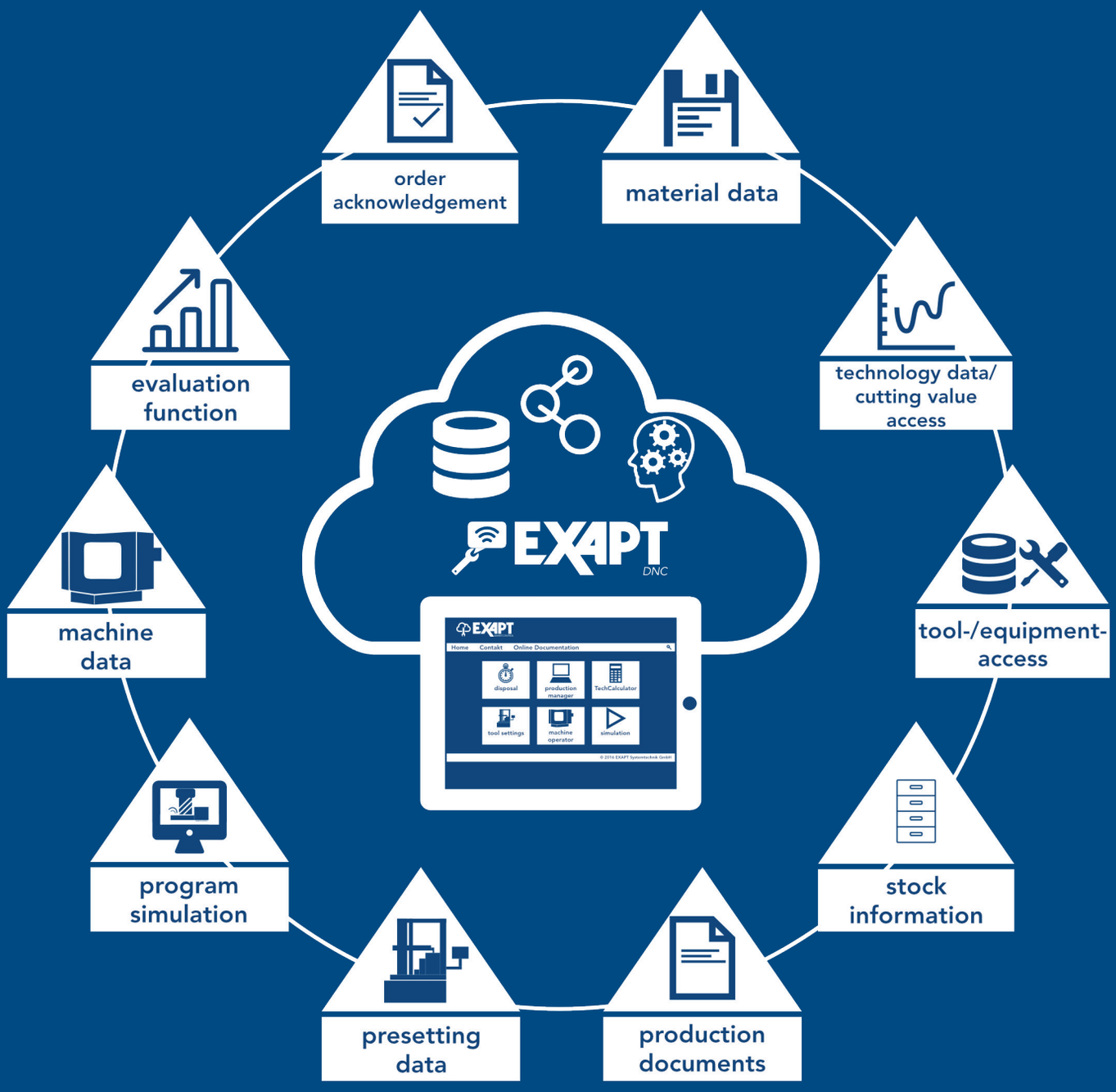
EXAPTsmartcontrol
Is a browser-based web client especially designed for the use in a shopfloor environment and adapted to the requirements there. The system has an intuitive handling and so easily achieves the necessary transparency of your data. EXAPTsmartcontrol is touch-capable and can be used without additional local installation on desktop or mobile end devices with Windows operating system.

Production-relevant data as e.g. set-up plans, tool lists or simulations can be viewed at each point in your production. At the same time your employees can include important information as technological influences or images via EXAPTsmartcontrol into the database. This bidirectional know how exchange between shopfloor level and your operation planning makes the communication between the teams easier and optimizes at the same time and continuously your production process. The scalable assignment of rights on user level and the integration of 3rd party systems into the web surface standardize your production and ensure a smooth and uncomplicated introduction phase of the EXAPTsystem.



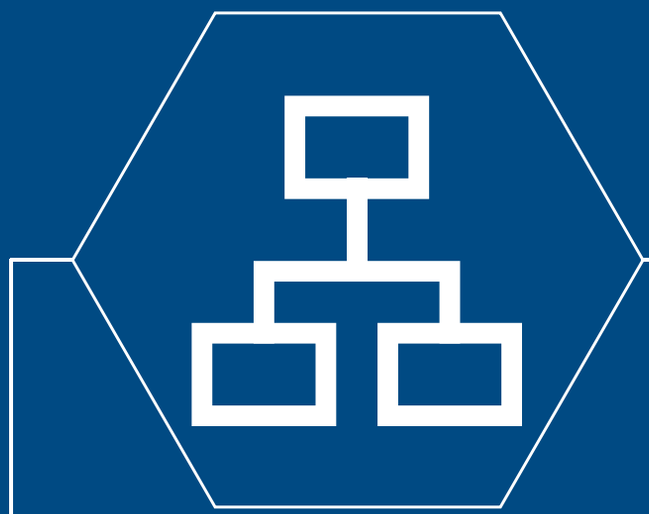
Performance feature

- Fast and uncomplicated machine selection
- Clearly-arranged NC program lists with transfer possibility
- Simple and fast tool data transfer
- Reliable tool plans
- Current overview of your basic tools and tool elements
- Photo function for additional security and traceability
- Continuous know-how exchange between production plan department and shopfloor
- Machine simulation of your finished NC programs

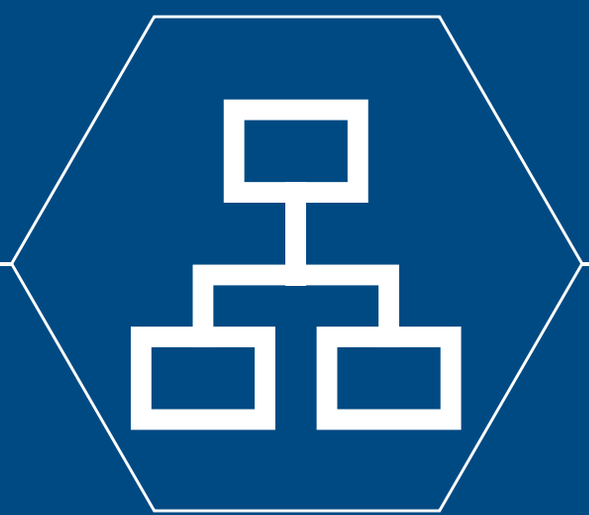


Your advantages

- Complete linkage of your production sites
- Perfect interaction of all teams
- Current information in real-time
- Fastest response times
- Paperless information exchange
- No more media breaks
- Enthusiastic employees



- Reduction of data maintenance
- Integrated process chain
- Cross-departmental communication
- Optimization of your production sequences
- No media breaks



EXAPTinterfaces*

The EXAPTsystem impresses with its targeted functionality on the one hand and on the other hand with its openness to other production systems. Numerous interface possibilities nearly cover each thinkable connection to your existing and in future used 3rd party systems.

ERP/MES	▶ SAP ▶ HYDRA ▶ Navision ▶ Wassermann ▶ Oxion ▶ Felios ▶ TeamCenter ▶ ProAlpha
CAD	▶ SolidWorks ▶ Solid Edge ▶ Inventor ▶ CREO ▶ Catia ▶ NX
CAM	▶ MasterCAM ▶ CrashGuard ▶ Hypermill ▶ ProfiCAM ▶ TopSolid ▶ Vericut ▶ NCFox ▶ NX
TMS	▶ ToolDirector ▶ ToolsUnited ▶ CoroPlus ▶ WinTool ▶ TDM
Shopfloor	▶ Zoller/Kelch ▶ Achterberg ▶ Megamat ▶ Hänel
DNC	▶ Siemens ▶ Heidenhain ▶ Fanuk ▶ Mazak ▶ Okuma ▶ Philips u.a.

*Requirements for interface-realisation: Individual customizing, Workshop to define depending data, document for target specifications and necessary 3rd Party licenses.

Your digital way 2 profit

EXAPTcontrol

EXAPTcam

EXAPshopfloor &DNC

EXAPTLM

EXAPTstock& logistic

EXAPTconsulting

The key to success

- Define targets
- Regard production strategy
- Identify cost positions
- Plan organizational requirements
- Set up material group management
- Plan transformation process
- Specify evaluation criteria

11 steps to the perfect project

- Workshop concerning state analysis and target definition
- Creation target proposal for process optimization
- Support for the creation of the specification sheet
- Requirement specification – creation and finalizing
- Project plan – creation, coordination and finalizing
- Determination of the respective project leaders
- KickOff Meeting with all participants
- Implementation according to project plan
- Regular status check
- Acceptance of the project
- Celebrate successes together

IMPRINT

Print for the
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