Maximum Efficiency for your processes
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Maximum efficiency for manufacturing processes requires a technology partner with a comprehensive portfolio: The partner applies its knowledge and tools to realign your value creation chain, systematically automate it and actively follows it.

Welcome to the world of Tebis, the global leading provider of future-oriented software technology and high-efficiency process solutions – for die, mold and model manufacturing, mechanical engineering and industrial design.

**Tebis: The Process:**
Networking expertise, automating processes, maximizing efficiency.

**The Tebis Concept**
- **Add-ons** Specific to your application
- **Application Packages** Specific to your industry and for your use in the process chain
- **Interfaces** For exchanging geometry data with other CAD systems
- **Process Libraries** For simulating your machines, tools, controls and NC templates

**Customer**
Customers submit design data and receive deliveries within the required deadline and budget requirements.

**Managing director**
As a corporate manager, you bear responsibility for manufacturing projects. With professional project management, Tebis and Proleis software, you plan and control resource allocation, quality, on-time delivery and costs.

**Tebis**
We advise you on strategies and processes. We elaborate benefit-oriented concepts with you. We implement Tebis and Proleis software with customer-specific process libraries. We train your personnel and ensure reliable operation with individual support services.

**Production manager**
As a production manager, you ensure efficient manufacturing with your machinery – by using Tebis software that knows your manufacturing environment and your manufacturing knowledge.

Find out about all of the Tebis software and service products. We are there every day to assist you and your team with consulting, software, implementation and support to optimize your quality, increase your productivity and secure your competitive advantage.
Successfully introduce processes.
With Tebis software and services.

Tebis is your competence partner, with whom you can completely and successfully introduce innovative processes and technologies. With our unique expertise in consulting, software and implementation, we effectively synthesize all levels: strategy, goals, standardization, process reliability, setup, automation, personnel, planning, information flow and machine and tool technologies. Worldwide, only Tebis can offer you such maximized customer benefits.

The overall effect of our process approach is to decrease your throughput times and better utilize your cost-intensive production resources. As a responsible partner, we simplify your processes and increase your competitiveness. Our unmatched expertise in software development is fully complemented by our ability to understand complex business strategies, processes and systems.

Tebis Consulting works with you to develop strategies and benefit-oriented concepts, analyzes your existing manufacturing process and centrally controls all jointly decided optimization measures throughout their completion.

Software …

The basis for automation, reliability and accuracy
// Application Packages
// Add-ons
// Process Libraries
// Interfaces

Optimizing processes, exploiting potential
// CAD Process Structuring
// CAM Process Structuring
// Postprocessors
// Virtual Machines
// Training

The most extensive part of our product spectrum comprises software and process libraries for design, manufacturing, data management and manufacturing planning and control.

Implementation models the details of your machines, tools and controls in Tebis. NC templates contain your manufacturing knowledge and enable standardized work as well as automation in the NC programming. We increase the productivity of your daily work through training programs.

Consulting and Support

Our hotline team quickly and reliably answers your users’ questions. The Tebis service contract keeps your software versions, releases and service packs up to date, and you can license new modules.
Tebis Consulting is the Tebis AG department for manufacturing-related consulting. We develop value creation strategies and optimize technical process chains in manufacturing. No other consultancy has the benefit of our methods and in-depth practical industry-specific knowledge, combined with our consulting expertise and experience from more than 300 successful projects. All of our consultants have many years of professional experience in model, mold and die manufacturing and mechanical engineering.
Consulting

We support you with traditional management consulting for business strategies and processes, and provide consulting services for the optimization of your manufacturing processes. We create market, product and competitive analyses, and create market and competitive strategies.

And we won’t leave you after our analysis and consultation – we will implement and take responsibility for our recommendations with process-related project management and change management. Last but not least – we take responsibility for the implementation of our projects.

Process Consulting

Improving throughput – ensuring cost-effectiveness

The more your individual manufacturing steps work together, the shorter your throughput times will be. We therefore analyze your entire processes from design calculation to the finished product. We work together with you to develop future-oriented concepts for increased efficiency and we ensure implementation of the measures. All suggestions for improvement are based on the data individually obtained at your facility in combination with our own internally developed benchmarking database. As an external project manager, we implement the jointly agreed concept, focusing on deadlines and objectives. We work together with you and your personnel to evaluate planned investments and support you in making the right decisions.

Strategy Consulting

Organizing companies – ensuring viability

A key to a company’s success is the consistent alignment of its own efforts to the needs of its market and customers. We take an impartial look at your organization and can match your services with the needs of the market.

Our experts analyze and evaluate your individual situation and develop strategies and measures together with you to correctly align your organization for future success.

Tebis Consulting has the industry-specific expertise and knows the current technology and market developments.

Project Implementation

Implementing process concepts – engaging personnel

Only 10 percent of all operational transformations are successful. Changes are often inconsistently implemented because they are overshadowed by day-to-day business. Plus: We are creatures of habit. We quickly perceive process changes as risky. Successful change involves an employee-centered approach which includes all those affected, ensures their participation in the change and establishes transparency.

We actively integrate your personnel in the project. We take responsibility for the jointly developed optimization and ensure that the new processes and procedures have a permanent effect. We are compensated based on success in the implementation and completion phase.

Good project management – increased capacity

Companies are faced with dynamic markets, shorter innovation cycles and greater customer demands. Project management is therefore a competitive factor. Tebis Consulting has the methodology and the industry-specific project experience to implement professional project management in small and medium-sized companies in the manufacturing industry. The focus here is not limited to resource planning and deadline scheduling. Defined procedures, company-wide standards, effective controlling and monitoring of project progress and early detection of project risks increase the chances for successful projects and satisfied customers. We work with you to develop the project management for your company.

Utilizing potentials and increasing productivity

The Tebis management seminars are primarily intended for corporate, manufacturing, and logistics managers who want to use new strategies and practical solutions to optimize process efficiency and resource utilization in their organization. One of our seminars also targets foremen and persons responsible for personnel in die manufacturing.

The seminars are focused on practical requirements; they are highly informative and system-independent. All trainers are consultants with Tebis Consulting, have many years of manufacturing-related experience in model, mold, and die manufacturing and mechanical engineering, and can respond individually to your questions and needs.
Companies use Tebis Version 4.0 to organize their CAD/CAM process chains in manufacturing-intensive areas. Tebis systems are used from design and engineering to equipment and parts manufacturing in the most diverse industrial branches, such as automotive, aerospace, machinery and equipment, household appliances and medical technology.
Tebis software products

Application packages, performance levels, add-ons, process libraries and interfaces

Select one of the Tebis industry or special packages that we offer at various performance levels. We have exactly the industry or special package that optimally suits your requirements – and which you can individually and precisely expand for your tasks at any time.

We offer multiple add-ons from a total of 9 categories for this purpose. You can supplement your installation with interfaces and process libraries to connect to the CAD world and to model your manufacturing environment and methods.

INDUSTRY PACKAGES

- Mold and Die
- Mechanical Engineering
- Industrial Design

SPECIAL PACKAGES

- Design
- Manufacturing
- Trimming
- Laser Cutting
- Lathe
- Wire EDM
- Viewer

ADD-ONS

- Design
- Manufacturing
- Manufacturing Preparation
- NC Automation
- NC Safety
- NC Efficiency
- Quality Assurance
- Data management
- Planning and Control

PROCESS LIBRARIES

- Virtual Machines Technology Packages
- Postprocessors
- Clamping Devices
- NC Documentation Templates

INTERFACES

- STEP
- G02
- CYCL DEF
- STEP or JT
- CATIA
- Nastran

Advantages

- High precision: High-quality surface design, interactive manufacturing preparation and associative reverse engineering enable you to quickly generate the exact geometries you need for all subsequent processes.
- High degree of automation in NC programming: The templates and methods stored in the process libraries enable increasingly automatic creation of NC programs with Tebis Automill®. You use the knowledge stored by your users and our consultants.
- High process reliability: Checking routines are especially important where processes run automatically. The virtual machines, tools and clamping devices stored in the process libraries and the Tebis technologies for collision detection and avoidance ensure reliable NC programs.
- High quality: Manual reworking is reduced when NC machines generate high-precision results. This vastly reduces processing time, especially in die and mold manufacturing.
- High manufacturing organization: Data management and manufacturing planning and control are integrated in the process. This enables interaction of everyone involved in the process and optimal use of resource capacity.

Implementation

- Import CAD model files from other CAD systems
- Display and analyze CAD files
- Freely design with emphasis on free-form surface geometry
- Technically prepare geometry for subsequent manufacturing operations
- NC programming for milling, drilling, turning, wire EDM, laser cutting and trimming methods
- Manual and NC-supported quality control
- Manage manufacturing data
- Plan and control manufacturing projects
Tebis industry packages

The best solution for every industry. Tebis industry packages are ideally configured – for the process chains in model, mold and die manufacturing, in mechanical engineering and in industrial design. Each package provides specialized functionality in up to three performance levels. You get exactly what you need and achieve maximum efficiency for your processes. You can start small and grow with your customers’ requirements.

Tebis special packages

The best solution for every task. Do you have specialized design or manufacturing stations in your process chain? We can equip these with just the right software package. Our portfolio also includes cost-effective supplemental CAD or CAM workstations and viewer stations for paperless manufacturing, such as special packages for trimming, laser cutting, turning and wire EDM as well as DNC stations. Each package provides specialized functionality in up to three performance levels. You can start small and grow with your customers’ requirements.
Industry packages

Mold and Die

Proven in practice

Whether you manufacture high-quality molds and individual parts or complete draw dies, dies or models, the Die and Mold manufacturing industry package provides the best solution for every application. The design functions provide a variety of methods from the modification of existing CAD models to reverse engineering.

You can quickly analyze and structure complex parts and prepare them for automated NC programming. CAD and CAM functions are exactly matched in Tebis. Measurement functions help document the quality achieved.

Advantages

- No size limitations
- High productivity with standardized and automated NC programming
- Extensive machining possibilities for surface, mesh and hybrid models
- Broad application spectrum with comprehensive NC strategies for prismatic and 3D surface machining
- High part surface quality with NC programs generated directly on CAD surfaces
- Reliable processes with programming and simulation in a realistic manufacturing environment

Specifications

- CAD functions for design
- Comprehensive analysis functions for geometry
- Repair and preparation functions for NC programming
- Wide range of NC functions for 3D surface machining as well as for prismatic milling and drilling
- Collision detection
- Extensive automation possibilities including feature processing
- Manage real machines and tools in virtual libraries
- Manage all machining steps in a central Job Manager
- Check quality on the machine

Mold and Die // Standard

The entrance to the Tebis CAD/CAM world. Ideally suited for machining prismatic parts like mold plates and three-dimensional parts with less complex free-form surfaces. You can use analysis and preparation functions for wire-frame models and surface geometries and generate collision-checked NC programs for first-class surfaces. Tebis lets you operate in a process-oriented way right from the very start. The "Mold and Die Standard" package already gives you access to the stored manufacturing knowledge and virtual manufacturing environment. You can simulate and analyze calculated toolpaths for potential collisions of the tool assembly with the component.

Ideal for complete processing of dies, molds, models and gauges. You can even prepare more challenging curve and surface models for NC programming with additional functions. You can standardize your programming work for up to 5 axes with tested tools and protect your machines and tools with simulated collision checks. You can run calculations in the background and prepare additional parts in the foreground. Material removal simulation shows you machining results in advance, especially in critical areas.

Includes the scope of services of Mold and Die Standard.

Mold and Die // Pro

A truly premium application package. You can manufacture complex dies at high throughput and maximum quality. You place a high value on automation, standardization and efficiency. Time-saving CAD functions and powerful CAM functions for 2.5D, 3-axis and 5-axis machining complement each other in a coherent overall concept: For example, center curves and guide curves can be generated, greatly simplifying automated NC programming. You can combine this package with exactly the add-ons you need to solve every manufacturing task.

Includes the scope of services of Mold and Die Pro.
No matter whether you manufacture motors, gears, systems, power plant components, structural components or aircraft landing gear – the two Tebis Mechanical Engineering industry packages provide the best solution for any parts manufacturing needs. You can quickly and easily prepare your parts for NC programming. NC programs are no longer generated at the controller, but rather directly in a specialized CAM system. With Tebis, you benefit from a high degree of automation and can simulate all NC programs in a realistic manufacturing environment. Manufacturing becomes more reliable and more cost-effective.

Advantages

- No size limitations
- High productivity with standardized and automated NC programming
- Broad application spectrum with comprehensive NC strategies for prismatic and 3D surface machining
- High surface quality with NC programs generated directly on CAD surfaces
- Continuously improve your process quality with stored manufacturing knowledge in NC templates
- Reliable processes with programming and simulation in a realistic manufacturing environment
- Digital information flow throughout the process

Specifications

- Comprehensive analysis functions for geometry
- Repair and preparation functions for NC programming
- Wide range of NC functions for prismatic milling and drilling as well as for 3D surface machining
- Collision detection
- Extensive automation possibilities including feature processing
- Manage real machines and tools in virtual libraries
- Manage all machining steps in a central Job Manager
- Check quality on the machine

Mechanical Engineering // Standard

The cost-effective introduction to the CAD/CAM world of series and small-scale manufacturing on 3-axis machines. For drilling and milling of complex prismatic parts from 2D and 3D data. Several functions are also available for roughing and finishing in 3D surface machining. NC standards ensure uniform quality.

Mechanical Engineering // Pro

The optimal solution for manufacturing complex part geometries with slots and a large fraction of free-form surfaces on 3+2-axis machines. You can prepare 3D data for NC programming and structure it ready for manufacturing. This lets you make full use of the software’s high degree of automation and significantly simplifies manufacturing. The extensive CAM functions for drilling and milling prismatic parts and free-form geometries enable reliable, high-precision manufacturing of a wide range of parts.

Already includes the scope of services in Mechanical Engineering Standard.
We help smooth the way to good surface finishes. Wherever clay is used in styling, the Industrial Design industry packages help you achieve high CAD surface quality in record time. Accelerate your process throughput in this early phase of product creation and quickly develop forms from real models.

**Industry packages**

**Industrial Design**

**The fast track to high-quality surfaces**

Whether you’re reverse-engineering, starting from existing CAD models or you’re testing, repairing, modeling or generating constant-curvature class-A surfaces — we’ll support you with unique, proven methods and functions.

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**Specifications**

- Processing of digitized data
- Checking of surface quality with reflection lines
- Reverse engineering of design surfaces
- Modify surface distance and segmentation with tolerance levels
- Reverse engineer surfaces to theoretical edges
- Free-form design of curves and surfaces
- Switching between reverse engineering and free-form design
- Keep wire-frame and surface models automatically and exactly synchronized
- Automatically detect kinks in the wire-frame and surface model
- Check quality and repair surfaces
- Create class-A curves and surfaces
- No data loss between design and engineering/manufacturing systems

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**Advantages**

- Work with digitized and surface data in a single model file
- Smooth surfaces with tangent-continuous and constant curvature transitions
- Define shape deviation from reference data (e.g. digitized data)
- Surfaces meet CAD or CAS system quality requirements
- Direct interfaces with scanning and CAD systems

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**Duplication**: For classic reverse engineering of surfaces on a small budget. Best suited for quality engineers, measurement specialists, reverse-engineering and newcomers to CAD — as well as users who occasionally need to generate design surfaces with no specialized knowledge. A very special feature: You can generate both multi-sided surfaces as well as any trimmed surfaces.

**Styling**: For the highest surface quality in design. Enables demanding styling of surfaces for direct continued processing in the CAS system. A very special feature: Curves and surfaces can be modeled and styled and included in the generated surface derived from the scan. Intended for design engineers and CAD professionals with stringent demands on surface layout and design quality.

**Reengineering**: For reverse engineering in design — with professional processing of scan data as well as comprehensive CAD functions. A very special feature: Curves and surfaces can be freely designed and included in the generated surface derived from the scan. Intended for design engineers and CAD professionals with stringent demands on surface layout and design quality.

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**Industrial Design // Standard**

**Industrial Design // Pro**

**Industrial Design // Premium**

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Whether you’re reverse-engineering, starting from existing CAD models or you’re testing, repairing, modeling or generating constant-curvature class-A surfaces — we’ll support you with unique, proven methods and functions.

**Industrial Design // Standard**

**Industrial Design // Premium**

**Industrial Design // Pro**
Design

Manufacturing-ready design

The Design special packages are the cost-effective solution for special design tasks in your CAD/CAM process chain. They lay the foundation for reliable, automated and cost-effective manufacturing. You can read in data from other systems, analyze geometry, repair models and supplement them with wire-frame and surface geometries. In floating environments, it’s easy to use the Design special packages in combination with shared add-ons such as in reverse engineering or surface morphing.

Advantages

// Enables design experts to specialize in various areas like reverse-engineering, design and NC preparation
// Fast and simple NC programming, shorter manufacturing times and improved surface quality with perfectly prepared parts
// Promotes reliable, automated and cost-effective machining processes on the machines
// Cost-effective workstation with extensive add-on options in floating environments

Specifications

// Create curve and surface geometry
// Generate mesh geometry from surfaces
// Measure, dimension, analyze and structure in the CAD surface model
// Analyze geometries with check templates
// Correct and supplement curve and surface geometries
// Generate and split surface shells suitable for manufacturing
// Generate blank geometries
// Prepare rib and slot geometry ready for manufacturing
// Generate guide, control and edge curves for NC machining
// Create die addendum
// Create high-quality meshes
// Work with reference models
// Create design data from meshes
// Manually correct CAD surface models

Design // Standard

The cost-effective package for simple CAD activities such as importing, analyzing, dimensioning and structuring CAD geometries or creating wire-frame model geometries. The ideal workstation for preparing subsequent NC processes in combination with add-ons from design, manufacturing preparation and interfaces.

The workstation for the entire Tebis surface technology. Ideal as a platform for reverse engineering and surface morphing, for efficient preparation of demanding standard and free-form geometry for automated NC manufacturing. Especially suited for use in a floating environment with shared add-ons.

Includes the scope of services in Design Standard.

Design // Pro

The high-end workstation for special tasks in active surface and NC preparation in die manufacturing. You can create high-quality meshes and benefit from the advantages of associative surface technology in reverse engineering. Correction and optimization functions enable surfaces to be quickly brought to top quality.

Includes the scope of services in Design Pro.

Design // Premium

The high-end workstation for special tasks in active surface and NC preparation in die manufacturing. You can create high-quality meshes and benefit from the advantages of associative surface technology in reverse engineering. Correction and optimization functions enable surfaces to be quickly brought to top quality.

Includes the scope of services in Design Pro.
Manufacturing

Special packages

Manufacture flexibly and cost-effectively

The Manufacturing special packages let you integrate cost-effective and flexible Tebis workstations into your CAD/CAM process chain. Lay the foundation for reliable, automated and cost-effective manufacturing. These workstations allow you to access the Job Manager that organizes the entire manufacturing operation, use NC libraries with the virtual models of tools and machines as well as the methods knowledge stored in NC templates. You can also read in data from other systems, analyze geometry, repair models and supplement them with wire-frame and surface geometries. In floating environments, it’s easy to use the Manufacturing special packages in combination with shared add-ons such as prismatic machining or 5-axis surface machining.

Specifications

// Access the Job Manager
// The entire machine manufacturing can be simulated, verified, documented and distributed to the machine controls
// Standardize and continuously optimize manufacturing with ongoing maintenance of libraries with virtual machines, tools and NC templates
// Measure, dimension, analyze and structure in the CAD surface model
// Generate and split surface shells suitable for manufacturing
// Generate blank geometries
// Prepare rib and slot geometry ready for manufacturing
// Generate guide, control and edge curves for NC machining
// Extensive possibilities for automation and feature processing

Advantages

// Specialized, highly flexible and cost-effective workstations
// Simplifies flexible responses to daily requirements – such as surface morphing, 5-axis programming and measurement on the machine at a single workstation – especially in floating environments
// Enables designers to specialize in various areas like design, NC preparation and NC programming
// Promotes time-saving NC programming with optimally prepared parts
// Increases reliability, quality and efficiency

Manufacturing // Standard

The universal workstation for reading in CAD data, preparing parts for subsequent Tebis NC processes and simulating and outputting NC programs to the control. Material removal simulation shows you machining results in advance, especially in critical areas. Ideal for flexible use of a wide range of shared add-ons in a floating environment. You can access the Job Manager and all libraries and are thus always integrated in the overall process.

Manufacturing // Pro

The cost-effective and flexible workstation to make optimal use of the Tebis surface and Job Manager technology. Includes many functions for generating and editing demanding wire-frame models and free-form surface geometries. Check templates and the possibility of automatically repairing curves lets you transfer your models to NC programming in outstanding quality. Ideally suited for shifting daily tasks. Easily combined with a wide range of shared add-ons in floating environments.

Includes the scope of services of Manufacturing Standard.
Special packages

Trimming

Trim plastic and composite parts efficiently and reliably

The Trimming special packages provide greater flexibility in 5-axis trimming of carbon and glass fiber-reinforced and composite parts. The programming and machining steps in processes can be separated. The packages include typical Tebis functions for geometry analysis, for NC preparation of curves and surfaces, for NC programming and for simulating toolpaths. To standardize processes, organize your tools including optimized cutting data and your NC templates with tested procedures in libraries.

Specifications

// Generate, analyze and prepare curves and surfaces
// Save trimming strategy as well as approach and retract movements
// Intuitively modify vectors and define machine commands
// Simulate NC programs and automatically check for head collisions
// Automatic circular interpolation
// Automatically detect standard geometric contours and calculate as machine macros
// Check limit positions and ensure optimal machine movement
// Read in modified NC programs or programs generated by teach-in

Advantages

// Easily prepare manufacturing geometry for NC programming
// Save time creating 3 to 5-axis trimming programs in offline operation
// Increase manufacturing speed, accuracy and quality
// Increased reliability with simulation
// Reduce throughput times and costs

Cost-effective package for 5-axis trimming of plastic and composite parts with analysis and preparation functions for curves. Especially suitable as a second workstation in the shop for optimizing previously generated programs, such as to change orientation or to incorporate machine properties. This package helps you maintain a flexible process.

This package combines trimming with functions for prismatic drilling and milling as well as surface machining, such as, for producing flanges. You can quickly and conveniently machine features like pockets, slotted holes and plane faces as well as areas with 3D free-form geometry. Analysis functions detect defects in CAD files such as excessive segmentation and gaps and offer a preview of automatic repair options.

Includes the scope of services in Trimming Standard.

The fully equipped trim machining workstation for series production of molded plastic and composite parts – with automated offline NC programming. Extensive analysis, design and preparation functions for curves and surface geometry are available. You can standardize your programming work with tested tools and protect your machines and tools with simulated collision checks. You can run calculations in the background and prepare additional parts in the foreground.

Includes the scope of services in Trimming Shopfloor.
Special packages

Laser Cutting

Efficiently and reliably cut sheet metal

The Laser Cutting special packages are independent, automated NC programming solutions with integrated collision checking. The packages include typical Tebis functions for geometry analysis, for NC preparation of curves and surfaces, for NC programming and for simulating toolpaths. Tested tools are available to standardize your processes.

Advantages

- Easily prepare manufacturing geometry
- Design setup devices and prepare for 2D manufacturing
- Save time creating 3 to 5-axis trimming programs in offline operation
- Increase manufacturing speed, accuracy and quality
- Increase reliability with simulation
- Reduce throughput times and costs

Specifications

- Generate, analyze and prepare curves and surfaces
- Generate setup devices with the aid of an assistant
- Save trimming strategy and approach and retract movements
- Intuitively modify vectors and define machine commands
- Correct trim paths based on vehicle position or machining position
- Simulate NC programs and automatically check for head collisions
- Automatic circular interpolation
- Automatically detect standard geometric contours and calculate as machine macros
- Check limit positions and optimum machine movement
- Import modified NC programs or programs generated by teach-in

Laser Cutting // Shopfloor

A cost-effective package for 5-axis laser cutting of sheet metal parts with curve analysis and preparation functions. Especially suitable as a second workstation in the shop for optimizing previously generated programs, such as to change orientation or to incorporate machine properties. This package helps you maintain a flexible process.

Laser Cutting // Standard

The fully equipped workstation for laser cutting of drawn sheet metal parts – with automated offline NC programming. Extensive analysis, design and preparation functions for curves and surface geometry are available. You can standardize your programming work with tested tools and protect your machines and tools with simulated collision checks. You can run calculations in the background and design items such as setup devices in the foreground.

Includes the scope of services in Laser Cutting Shopfloor.
Special packages

Lathe

Generate turning programs quickly and easily

The cost-effective solution for generating NC programs for turning. Includes extensive turning functions as well as several drilling functions. You can analyze curves and surface geometries and prepare the part design and structure. All of the equipment is accounted for in the simulation – you can output reliable NC programs in the control format.

We recommend one of the Mechanical Engineering packages with the Lathe add-on for combined drilling, milling and turning. Corresponding information is given on pages 20/21 and 42/43.

Advantages
/// Easily integrated in existing CAD environments with high-quality interfaces
/// High productivity with standardized and automated NC programming
/// Powerful NC strategies
/// Very high process reliability with collision check of the complete tool already in calculation and automatic area reduction
/// Reliable processes with programming and simulation in a realistic manufacturing environment

Specifications
/// CAD functions for design
/// Comprehensive analysis functions for geometry
/// Repair and preparation functions for NC programming
/// Extensive NC functions for contours, grooves and threads as well as for end-face drilling
/// Collision avoidance and automatic area reduction already during calculation
/// All equipment and control properties are accounted for

Wire EDM

Precisely cut complex shapes

The Wire EDM special package is used to generate collision-tested NC programs for 4-axis wire EDM. You can use your geometry interfaces, prepare the component geometrically and also manage wire EDM jobs in the Tebis Job Manager for its creation.

The integrated technology of the DCAMCUT calculation software is used for detailed definition of the NC programs. The software accounts for the capacity of your machines in order to avoid unnecessary work in the control.

Advantages
/// Milling, drilling and wire EDM combined in a single programming environment
/// Fast, standardized and automated NC programming
/// Use the full capacity of the machine controls
/// Maximum reliability
/// Increased machine productivity

Specifications
/// Wire EDM processing on any volume of 3D data
/// Semi-automatic and fully automatic detection of erodible contours
/// Templates for recurring manufacturing demands
/// Powerful NC strategies and optimized clearing cycles
/// 3D material removal simulation
/// Checking before output
/// NC Browser and NC postprocessors
/// Hole output up to 5 axes via NC Browser
/// Extendable to multi-sided and multi-axis wire EDM as well as erosive grinding
For paperless information both at the start and end of the process chain. Ideally suited for obtaining and using important information like dimensions and comments for calculations directly from the part. Different views of the part can be selected. Personnel in assembly can determine all necessary information on completed parts and purchased parts with just a few clicks. Can be extended with features such as interfaces with other systems, PDM automatic splitter and Proleis structure tree coupling.

**Viewer**

**A window on the virtual world**

Tebis Viewer special packages bridge the gap between the virtual computer world of CAD and CAM and the real processes in planning, manufacturing and assembly. The software provides personnel with the necessary information and lays the foundation for precise calculation and effective work preparation.

It ensures that the correct tools are output and that all data relevant for manufacturing, such as for tools, setup and NC programs, are available at the milling machine. The Viewer special packages prevent unnecessary requests for further information and interruptions and ensure smooth processing.

**Specifications**

- You can import, visualize, organize and structure data and supplement it with your own comments
- Dimension 3D models (coordinates, lengths, diameters etc.) and determine surface areas and volumes
- Analyze CAD geometry and quality (skews, curvatures, plane and rounded surfaces, defects)
- Preview of automatically correctable surface defects (ticks, segments, gaps)
- Compare engineering levels
- Create intersection curves interactively
- Access databases relevant for manufacturing (tools, virtual machines, machining sequences)
- View NC programs with milling parameters and call up NC information in the Job Manager
- Simulate toolpaths and check for collisions
- Adjust technical values in toolpaths
- Output NC programs via postprocessors
- Prepare NC documentation in PDF format
- Obtain information on machine, setups and tools
- Track machining with simulation of material removal

**Advantages**

- Paperless manufacturing
- Information for personnel is always up to date
- Ensure consistent flow of information
- Reliably calculate and plan manufacturing
- Reduce idle, setup and down time
- Can be used even without extensive CAD/CAM experience
- Quick and easy operation
- No size limitations

**Viewer // Standard**

For quick access to complex information. Provides extended editing options as well as comprehensive functions for geometry and quality analyses. Everyone can quickly determine the details relevant to their task by comparing files in work preparation. Users can make plans based on databases that contain the manufacturing environment and manufacturing expertise.

Already includes the scope of services in Viewer Standard.

**Viewer // NC**

For an end-to-end digital work method. Machine operators can also access all relevant manufacturing information, flexibly monitor and control the entire process and incorporate their own practical expertise. You can change tools based on orders and output tested NC programs in the correct control format, regardless of programming.

Includes the scope of services in Viewer Pro.

**Viewer // Pro**

For paperless information both at the start and end of the process chain. Ideally suited for obtaining and using important information like dimensions and comments for calculations directly from the part. Different views of the part can be selected. Personnel in assembly can determine all necessary information on completed parts and purchased parts with just a few clicks. Can be extended with features such as interfaces with other systems, PDM automatic splitter and Proleis structure tree coupling.

Includes the scope of services in Viewer Pro.
Special packages

DNC

Serial and network connection of NC controls

The DNC special package is used to supply NC programs to one or more milling machines (maximum 4 channels). Controls in particular that only have a serial interface are precisely integrated in the data network with DNC. DNC enables you to separate NC processing from NC programs in time, location and organization. Mechanical manufacturing personnel decide when which NC programs are to be processed and on which machine, independently from NC programming. They retrieve the NC programs from the server and transfer these to the connected NC controls in the required format.

Advantages

- Separation of NC processing from NC programs in time, location and organization
- Reliable central data transfer
- Control-specific NC format not generated until necessary
- Quickly set up and equip tools
- Simple and powerful package for the shop floor

Specifications

- Integration of machines with serial interfaces in manufacturing networks
- Check and edit tool properties like tool number, speed, feed rates, coolant and spindle rotation
- Manage NC files on the control with Heidenhain communications protocol
- Zero-point displacement and switching of the working plane
- Placement of restart points, e.g. continuation with a sister tool after tool breakage
- Report for technological and organizational data of the NC programs and tools
- Combination of multiple NC files in a single NC program
- Repeated use of NC files in various setup orientations
- 3D graphical visualization of NC programs

The package includes direct machine connections with queue management and online format conversion. The required tools can also be displayed. Programmed values for tool number, cutting data etc. can be checked and if necessary adjusted to the correct values for manufacturing. This convenient data transfer tool can also be used to simply transform coordinates and to turn, reflect and scale NC programs.
Add-ons

The best solution for every requirement: Ensure a competitive advantage for your company with maximum automation, data management or specialized functions in design or manufacturing preparation. We offer individual add-ons for your industry and special packages that do not have to be included in every application package.

Process Libraries

The best solution for every manufacturing environment: We have virtual machines, postprocessors, NC templates, clamping devices and NC documentation templates to ensure that your Tebis software knows every detail of your manufacturing environment. We offer these as catalog standards that you can adapt to your requirements – with implementation services and in some cases also by yourself.

Interfaces

The best solution for every connection: Powerful interfaces to all common CAD systems ensure a high degree of data compatibility. The common transfer of geometry, structure and product and manufacturing information results in greater process reliability. We offer a wide spectrum of interfaces for this purpose.
Add-ons

Design

Generate, supplement and change surface models

Tebis add-ons from the design category are tailored to specific tasks in the industrial design process chain as well as in die, mold and model manufacturing. They are used to generate, supplement and modify free-form surfaces and lay the foundation for high-quality manufacturing results. You can easily expand your industry and special packages as needed.

Advantages

// Practical and flexible design
// Save time performing special industry-specific tasks with just a few mouse clicks
// Always generate good surfaces with manual and automatic repair and optimization functions
// Quickly and easily generate reliable surface models for NC programming

Surface Design – Plus

Perform special design tasks with only a few mouse clicks. Generate profile, shift, tangential, closing, extension and active surfaces.

Digitized Data Processing

Quickly transfer an existing physical object to the CAD world and create high-quality meshes from digitized data.

Faro Integration

Connect Faro arm to Tebis, measure points, scan surfaces and process surface model digitally in Tebis. Compare surfaces with existing CAD geometry.

Surface Optimization – Automatic

Detect problem areas in the CAD surface model at the click of a button and automatically repair with better than 90% success rate.

Surface Modeling

You can optimize curves and surfaces relative to their connections to adjacent elements and for their surface quality (class A). The model can be based on mesh data or designed curves and surfaces.

Surface Morphing

For morphing of surface models over large areas in forming tool manufacturing, design and model and mold manufacturing. Result: A quality-checked surface model morphed to your specifications.

Reverse Engineering – Design

Complete function scope for design-based reverse engineering. Mix curves and surfaces connected to mesh data with freely designed curves and surfaces.

Reverse Engineering – Classic

Create design surfaces with tangential, smooth transitions as well as smooth surface curves from mesh data and process these in other CAD systems.
Add-ons from the manufacturing category are optimized for machining tasks that occur regularly in the process chains of die, mold and model manufacturing. These add-ons give you perfect manufacturing results and maximum process reliability. You can therefore very easily expand your industry and special packages as needed.

### Advantages

- Consistent processes
- Fast NC programming – save your manufacturing expertise in templates
- Optimize all machining operations in a clearly structured Job Manager
- Short throughput times in manufacturing with collision-checked complete programs
- High manufacturing quality with strategies for optimal tool utilization

### Manufacturing

**Machining functions for every need**

**2.5D Drilling and Milling – Plus**
More NC functions for drilling and prismatic milling.

**5-Axis Laser Cutting**
Generate multi-axis NC programs for laser cutting in offline operation. Teach-in is completely eliminated.

**5-Sided Machining**
Lets you spatially orient the tool in 2 and 3-axis machining and to interactively optimize this orientation.

**5-Axis Trimming**
Prepare multi-axis NC programs in off-line operation for trimming plastic and composite parts. Teach-in is completely eliminated.

**5-Axis Surface Milling**
Program toolpaths for face milling. You can generate five-axis milling programs for parts of any complexity.

**3+2-Axis Undercut Machining**
Easy and reliable machining of geometries with undercut.

**5-Axis Curve Milling**
Program 5-axis toolpaths for curve center, contact and frontal curve machining.

**5-Axis Side Milling**
Program 5-axis toolpaths to machine suitable component surfaces with the side of the tool (swarf milling).

**5-Axis Curve Milling**
Program 5-axis toolpaths for curve center, contact and frontal curve machining.

**5-Axis Laser Cutting**
Generate multi-axis NC programs for laser cutting in offline operation. Teach-in is completely eliminated.

**5-Axis Trimming**
Prepare multi-axis NC programs in off-line operation for trimming plastic and composite parts. Teach-in is completely eliminated.

**5-Axis Surface Milling**
Program toolpaths for face milling. You can generate five-axis milling programs for parts of any complexity.
Add-ons

Manufacturing Preparation

Preparation is half the battle

The add-ons from the manufacturing preparation category are specifically intended for optimal preparation of the CAD model for all subsequent NC processes in die, mold and model manufacturing.

Your benefit: Faster, more reliable and more cost-effective processing. Depending on the requirement, these add-ons can be combined with add-ons from other categories such as NC Automation.

Advantages

// Great flexibility in configuring specialized workstations
// Enables targeted implementation of personnel for specific tasks
// High process reliability in all subsequent CAD/CAM processes
// Simple, faster NC programming
// Shorter machining times
// High-quality manufacturing results

Electrode Preparation

A complete collection of functions to derive electrodes for die sinking EDM from the mold geometry, supplement them technically, manage them and prepare them for manufacturing and quality measurement.

Active Surface Preparation

Prepare geometrically exact parts without the need for workarounds. Define NC attributes such as stock allowances or wall thickness (pressure areas, relief areas). The generated geometry can be used directly for NC manufacturing. Recommended in combination with the Exact Solid Preparation add-on.

Exact Solid Preparation

Combine active surface and solid geometry in a single data set using an automatic cutting function based on freely definable rules to provide all of the relevant results. The geometry is colored and is stored in specific layers for automated NC programming. Recommended in combination with the Active Surface Preparation add-on.

Part Fixture Preparation

Assistant for quickly and simply designing complete clamping devices in rib form for trimming by laser cutting and trim machining.

Lathe Contour Preparation

Quickly and easily generate parametric profile contours for turning. The entire sketch will be updated with any changes. Imported geometry elements are also automatically parameterized and dimensioned.

NC Geometry Preparation

Highly automated preparation of CAD models suitable for subsequent NC programming. Several of the functions are tailored to special high quality NC functions and strategies such as milling grooves or surface finishing with a spatially constant step.
Add-ons

NC Automation

On the road to a pushbutton solution
These add-ons enable you to automate and standardize your processes in 3 to 5-axis NC programming. You can work faster without losing quality.

NC Automation Base
Simplifies NC programming using machining templates with automatic element selection.

NC Safety
Good to know it’s working
The add-ons for NC Safety are beneficial for all manufacturing methods. You can virtually check the actual conditions, intervene with collision avoidance and mark conflicts for easy correction later. The safety functions are specifically designed to enable unattended processing without the worry.

Advantages
- Fast and reliable NC programming
- Use proven machining standards
- Shorter lead times in manufacturing

Feature Technology – Free-form
Machining of prismatic geometries that cannot be described as standard geometries. These are automatically detected and are assigned machining steps.

Feature Technology – Ruled-form
Save time programming and editing standard geometries. These are automatically detected and are assigned machining rules. You can work clearly, reliably and quickly.

Advantages
- Operation of multiple machines
- Optimal use of tools
- Establish reliable processes
- Maximum utilization of machines
- Reduce personnel workload

Collision Avoidance – Areas
This automatic function reduces milling areas to prevent collisions between the tool holder and the component. Deregulated areas are saved and can be machined in the next step using a different tool.

Collision Avoidance – 3 to 5-axis
Detect and prevent collisions of the tool holder with the component already during toolpath calculation. The tool avoids a detected collision hazard with a pivoting movement. This automatically turns 3-axis toolpaths into 5-axis toolpaths.

Machine Collision Check
Checks toolpaths for collisions and limit switch violations. Calculates the entire kinematics from the machine head, turret etc. through all linear and rotating axes up to the workpiece. This enables timely adjustments to the setup, tool choice, alignment and retracts for trouble-free manufacturing.

Add-ons

Feature Technology – Free-form
Machining of prismatic geometries that cannot be described as standard geometries. These are automatically detected and are assigned machining steps.
Add-ons // NC Efficiency

Can it go a little faster?

Expand your NC workstations specifically for greater efficiency. Robots increasingly fill the gap between manual manufacturing and machine centers. You can use virtual machines to optimize your manufacturing. Simultaneous calculation processes accelerate your NC programming. Multiple Setup and Tool Match bring measurable time benefits to your shop.

Advantages

- Best possible implementation of machine centers
- Save time with parallel calculation
- Easily control everything from demanding kinematics to robots
- Work in a realistic virtual manufacturing environment
- Control all measures directly from NC programming

Full-Width Avoidance

Depending on the machining task and the machine, the feed rate can be reduced in full-width situations, circular (trochoidal) tool movements generated or a dynamic path layout calculated for adaptive roughing. The latter permits especially large cutting depths. The resulting large steps can then be re-roughed from bottom to top in a time-saving step.

Robot Kinematics

Program and check machines with more than 5 axes, using virtual machine models. For example, you can use 6-axis articulated robots for easily machinable materials and for applications with lower accuracy requirements.

Programming with virtual machine

Plan setups, tools and tool orientation before programming. You can set up the machine and associated equipment during the definition of NC machining operations. Equipment and machine axes can be individually positioned in the NC program. You can individually optimize calculated toolpaths during the machine simulation.

Simultaneous Calculation Process

Multiply the existing scope of NC functions for a simultaneous NC calculation and simulation. This is required for off-screen calculation to enable continued unrestricted access to NC calculation and the Job Manager, for defining, running and simulating NC calculations and for outputting NC programs.

Multiple Setup

Manufacture several components on the machine table, on grid plates and on tombstones. This separates the time between NC programming and setup planning by allowing you to first program and then define the setups shortly before machining.

Tool Match

Compare the real milling and drilling tools with the virtual ones at the tool setup station. This enables you to ensure that the tools used do not cause any collision or limit switch problems.
Add-ons // Quality Assurance

**Quality Assurance**

Quality without compromise

Quality assurance is an important part of every manufacturing chain. That's why the end-to-end Tebis solution integrates the testing of any parts or electrodes directly into the manufacturing process.

Whether you want to measure your parts on milling or measuring machines with NC control or by hand – Tebis provides all the necessary functions. Manufacture quality. Right from the start.

**Advantages**

// Simply, quickly and comfortably compare the geometry of parts or electrodes with the actual manufactured parts
// Use the well-known Tebis operating scheme for quality assurance
// Benefit from working with a single system for different applications
// Obtain exact electrodes and quality-tested parts at the end of the process

**Measure Base**

Basic functions for creating measuring toolpaths, measuring parts on NC machines, checking electrodes for quality and offset and measuring with manually-guided measuring machines.

**Manual Measurement**

Functions for simply ensuring part quality with manually guided measuring machines.

**NC Point Generator Surface Measurement**

Create and calculate measuring tools directly in Tebis for computer-supported quality control, combine milling and quality assurance.

**Surface Measure – NC-controlled**

Perform quality analyses on completed components and optimally integrate measurement operations in the manufacturing process. Use previously created measurement paths for measurement, data evaluation and documentation at a workstation on the machine.

**NC Point Generator Electrode Measurement**

Create measuring tools for determining offset and quality of completed electrodes, check electrodes with measurement probes on a measuring or milling machine.

**Electrode Measure – NC-controlled**

Analyze manufacturing differences between electrode geometries in Tebis and on finished electrodes, determine offset values on real electrode and check the burn surfaces for quality.
Add-ons // Data Management

Data Management

Client/server technology for data transfer with PDM and TDM

A powerful client/server technology is a prerequisite for real-time access to data from other IT systems from Tebis workstations. Tebis workstations can be used in combination with other systems using the data management add-ons. This integrates systems for PDM (product data management) and TDM (tool data management) in your Tebis environment and ensures better data management.

We also offer the Proleis client/server product range from ID GmbH in addition to the Tebis add-ons. For powerful data management, combine your Tebis workstations as clients with the Proleis server, supplement your installation with a Proleis client, if necessary and expand both server and clients with various add-ons. Use Tebis and Proleis add-ons for data management to organize the interaction between all process stations participating in manufacturing. Based on this, you can extend for manufacturing planning and control, depending on your company’s requirements.

Advantages

// Import bill of materials from CAD models or ERP systems (Enterprise Resource Planning)
// Central data management with change management and release management
// Automated NC program import and management
// Effective communication due to releases
// Administration of access rights ensures process reliability
// Connection to tool management systems

Server Connection

Connect a Tebis workstation as a client to a Proleis server and to the Tebis server for data management, external tool management systems and/or manufacturing planning and control.

Tool Database Management Server

Required to manage and buffer data from external tool management systems. The server communicates with Tebis workstations via the server connection add-on. The data server can be equipped with the Walter TDM and Zoller TMS tool management systems.

Structure Tree Connection – Proleis

Access Proleis data structures from Tebis and display person and project-specific data. The status of an order is visualized with a stop-light control in manufacturing planning and control.

Walter TDM Connection

Establish an online connection between the Walter TDM tool management system and connected Tebis workstations to transfer information on existing tools from an external tool database and to display this in Tebis tool administration.

PDM Splitter – Automatic

Quickly split large assembly files like die designs in individual files for CAD/CAM.

Zoller TMS Connection

Establish an online connection between the Zoller TMS tool management system and connected Tebis workstations to transfer information on existing tools from an external tool database and to display this in Tebis tool administration.

Job Manager Connection – Proleis

Use the Proleis data management function in Tebis, prepare manufacturing templates in Proleis and directly store Tebis results data (NC programs, tools, NC documentation) in Proleis.

Proleis Data Management

We offer extensive software components from ID GmbH for Proleis-server, Proleis clients and Tebis clients to implement a data management solution with Proleis. Proleis server and client, manufacturing data management, Tebis integration, design data management, archiving, PDM system interface, ERP system interface.
Add-ons

Manufacturing Planning and Control

Connect ERP systems, centralize manufacturing data (MES)

Connect to ERP systems using the powerful Proleis client/server product palette from our cooperation partner ID GmbH. You can plan your manufacturing, make optimal use of resource capacity, develop and consistently apply strategies for bottlenecks. Job lists for personnel and machine assignment scheduling are available at Tebis workstations and are integrated in the Tebis user interface. The entire logistics cycle is supported, from procurement to goods receiving and management of storage areas to the generation of transport orders. You can also manage your tool magazine and create assembly orders for the setup area and thus ensure a reliable tool supply to the machines. The Server Connection and Proleis Structure Tree Connection add-ons from the Data Management category are required to perform manufacturing planning and control on Tebis workstations.

Advantages

// End-to-end manufacturing planning with MES (Manufacturing Execution System)
// Optimized production flow accounting for the logistics of all individual parts
// Transparent manufacturing
// Reliable basis for decision-making processes
// Central information hub in manufacturing
// Reliable provision of tools to machines
// Integration of all IT systems
Tebis Implementation specialists prepare additional libraries for standardized and automated NC programming:

- Tool library representing your actual tools with proven and optimized cutting data. Groups of tools in machine magazines and tool cabinets can also be represented.
- NCSet library describing standardized manufacturing sequences – with the NC calculation functions and strategies used, the required tools and all calculation parameters.
- Feature library containing the parametric manufacturing objects which can be transferred to the component by scanning and for which NC manufacturing is described with a manufacturing sequence.
- Job Manager library with Job Manager templates that are used for the same and similar manufacturing tasks.

For representing your actual clamping devices. The setup is thus unequivocally specified by the NC programmers. This prevents collisions with clamping devices that would require renewed NC programming.

For documenting your NC programs for your shop in PDF format, used for printing hard copies and for viewing on screen. Tebis Implementation technicians use the available catalog templates to program your individual templates to your exact specifications.
Interfaces

Direct, standard and special interfaces

Tebis provides you with interfaces to all of the common CAD systems. You can rest easy if your customers change design systems. The powerful connections ensure a smooth, two-way and especially reliable data transfer.

Tebis also offers many special interfaces such as reading in digitized data. You determine the scope of services for your interfaces yourself.

Advantages

- Broad spectrum of interfaces
- Direct interfaces to CATIA, NX, Creo, SolidWorks, Parasolid
- Standard interfaces to JT, VDAIS, VDAFS, STEP, STL and others
- Depending on the format, transfer of both geometric and structural data, including assemblies, layers, sets, filters, and color information
- Import existing drilling features as well as product and manufacturing information via direct interfaces
- Good communication capabilities and improved process reliability

### Direct interfaces

<table>
<thead>
<tr>
<th></th>
<th>CATIA V4</th>
<th>CATIA V5</th>
<th>NX</th>
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<th>SolidWorks</th>
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### Standard interfaces

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<td>Import of tolerance information and comments</td>
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<td>Import meshes</td>
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### Special interfaces

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</table>
Tebis is your trusted partner for structuring and optimization of your processes with the Tebis CAD/CAM software. Our application engineers support you in mapping your manufacturing environment and your manufacturing methods in Tebis. This results in libraries containing virtual representations of tools, machines, control postprocessors, clamping devices and manufacturing sequences. This selection of standardized process libraries represents a basic framework that our specialists exactly adapt to your infrastructure and your processes. Your Tebis installation then represents your shop and knows the details of the tested and proven manufacturing methods in your facility.

Your users then work with these libraries. Of course the stored manufacturing expertise developed with your specialists is protected against unintentional transmittal to third parties.

Thanks to our broad and in-depth knowledge of manufacturing and CAD technologies, we can guarantee maximum value added to your daily requirements in model, mold, die, and machine manufacturing. Implementation projects are designed, implemented and controlled by our consultants and application engineers. In our training courses, we’ll bring your employees up to date.
Seamless combination of design and manufacturing
We help ensure optimal flow between design and manufacturing, create the design guidelines, and define any interfaces required. After the completion of CAD process structuring:
// Your NC programmers no longer have to rework the design data
// Your designers work with standardized CAD templates
// You use the same manufacturing process for different customers

Thanks to our expertise in all standard design systems, we know what can be done in modern design processes to eliminate the need for reworking. And when you store and document the accumulated expertise in the design data, you not only save time, but also costs.

Implementation
Exploit the maximum potential of your Tebis software. Working with our experts, you can develop the technological edge that will make your company more successful.

CAM Process Structuring
Integrate technologies – Reduce process expenditure
Get the maximum benefit from your investment in Tebis software. In our over 30 years of company history, we have optimized the manufacturing processes of Tebis customers in roughly 2000 projects. Working together with your specialists, our application engineers examine procedures, define standards, and derive templates and patterns. The focus is on maximum utilisation of programming, machine capacity and the manufacturing technologies. Tebis specialists help your organization reach its goals by increasing your entrepreneurial flexibility.

Postprocessors
Programs that your machine understands
We create powerful postprocessors for the distinctive features of every machine and controller. A postprocessor must be capable of more than simply converting geometric data to a CNC format. This is why we create all postprocessors in-house. When it comes to reliability and execution of your specific concept, we go beyond general off-the-shelf solutions. Our postprocessors are individually adapted to each machine and control and to their characteristics.

Virtual Machines
Your workshop on the desktop
We measure your machines on site – with all tools, clamping devices, extension parts and units. You can use the virtual machines which map your real machines 1:1 for NC programming before the NC code has been written. The integrated postprocessor then passes on only the approved movements as NC code. The Collision Check Machine add-on gives you full functionality. This includes a limit switch check, collision checking of the entire machine model up to the traversing movements between the individual toolpaths and machine macros for tool change, for example.

Training
Targeted implementation of software
More knowledge is your key to success. Attending our CAD, CAM, update, and individual training sessions teaches your personnel how to utilize all options and functions of the Tebis CAD/CAM software and how to integrate them in your processes and thus improve your qualification. Our practice-oriented training sessions are conducted in our own modern training rooms or at your location. Our training courses are offered online at www.tebis.com/training.
Tebis Support is available with friendly assistance, expert and in-depth application knowledge for all questions regarding your Tebis installation – on the phone, by email or by remote service. We can also support you with individual servicing of your Tebis installation at your facility if required. The Tebis service contract gives you the latest software versions, releases and service packs, and you can license new modules. Tips and tricks can be found at www.tebis.com/tips.

Reliability and service for your daily CAD/CAM processes
Support

Tebis Support provides consulting, support and a broad spectrum of service and help desk offers to ensure smooth operation of your daily CAD/CAM processes.

Help Desk
The help you need from competent experts

Our experts will answer all your questions about the Tebis application, installation, and configuration. You can reach us during regular office hours. We will reply to your questions as quickly as possible and help you with the right tools via remote maintenance or remote support, if needed. You can use the hotline free of charge if you have a service agreement.

Please ask your sales representative for contact details of the Tebis Help desk.

Individual support
Support as needed – reliable productive operation

Our applications engineers will provide one-on-one support and advice, and will visit your organization if required. They are expert contacts who will answer all your questions about your Tebis system, provide “tips and tricks” for your daily work with Tebis, and help you with the configuration of your Tebis installation. On-site support is invoiced based on time and effort.

The Tebis service contract
A long-term partnership

New features
Tebis is continuously developing new products that help to automate manufacturing processes, reduce manufacturing expenditures and improve quality. The Tebis service contract gives customers the latest software versions, releases and service packs, and you can license new modules. The service contract ensures that you stay ahead of the competition.

Continuous improvements
We are continuously improving and expanding our functions. Our customers can thus keep step with current technical developments. Use our current data interfaces to ensure sustainable compatibility with your customers and suppliers.

Additional advantages

// Pay off your investments faster. Increase productivity with free software updates and direct access to new features.
// Accelerate your workflow. You can immediately integrate all new Tebis modules, functions and possibilities in your system.
// Stay up to date. You can continuously update the technical status of your CAD/CAM software with the new software versions.
// Optimize system performance. Seamless integration of Tebis in the current IT environment reduces throughput times.
// Reduce expenses. Save costs for new licenses. Your investments are secure, and you can calculate and budget more accurately.

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