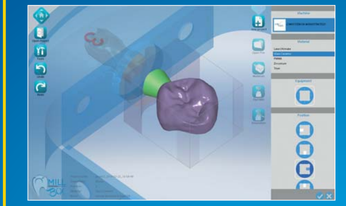
2015 NEW APPLICATIONS

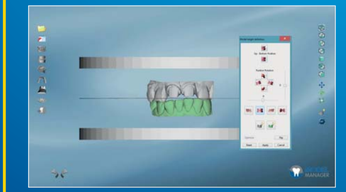
MILL BOX

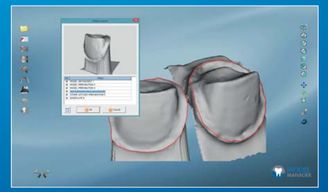


Dental CAM: simple and innovative

MillBox is the ultimate Dental CAM, developed for milling any type of material.
The simple, yet innovative user interface facilitates the tool path creation process. MillBox completes this process from start to finish in a few simple mouse clicks. The CAM operations are easy to perform and new users can become operative with minimal training.
All the capabilities of an advanced CAM in an easy-to-use interface that optimizes time and reduces waste to deliver the best return on your investment.

MODEL MANAGER



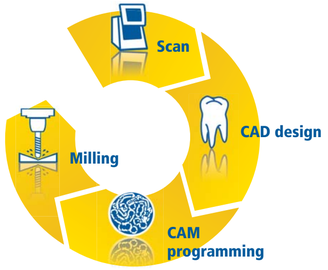


CAD for Model Design management

ModelManager is the application that helps users to create a completed model starting from an impression or intraoral scan. Users choosing the 3D design of ModelManager, will complement the work of the intraoral scanner increasing performance and generating faster results rather than relying on the traditional model creation process. The aim of the software is to make working with intraoral scanners as easy and functional as possible to meet the needs of dentists and dental technicians.

OPEN SOLUTION

- NO LIMITATIONS IN CHOOSING RAW MATERIALS OR MATERIAL SUPPLIERS
- STANDARD AND FULLY CUSTOMIZABLE STRATEGIES AND TOOL-PATHS
- WORK WITH VIRTUALLY ANY MILLING MACHINE



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MAIN FEATURES

- Dynamic preview with thickness value
- Automatic and Manual creation / modification of accurate Support Pins or Connectors
- Automatic creation and detection of prep-lines by auto-recognition or by utilizing 3rd party files from CAD
- Automatic detection and management of holes and implant planes
- Automatic creation of Bridge Stabilizers
- Automatic attachments management
- Automatic detection and management of undercut areas
- Automatic implant bridge management
- Automatic management of 5 axis drilling
- Automatic management of models and bites milling
- Automatic management of bars milling
- Management of partial denture frameworks

SUM3D DENTAL One step beyond

SUM3D Dental guarantees continuous evolution of the CAM Software, providing frequent updates that are always available to the software users. For more information, please see the "Release Notes" area on the website.

OEM Version

SUM3D Dental can be customized or integrated into an existing system. Customization can be set at the prompt level or with ad-hoc strategies for dedicated machines. Tailor-made importers and interfaces are designed upon request.
Furthermore, specific functions library can be displayed straight from pre-existing applications.

Company profile

CIMsystem is a leading provider of CAD/CAM solutions with a worldwide network.

The company relies on its strong expertise in the manufacturing industry to fully support hundreds of customers. Starting from the initial assessment of their needs, down to the implementation and customization of the right solution, we deliver high-quality, innovative, and powerful technical tools, with training from qualified individuals providing excellent after-sales service and support.

CIM system Computer Integrated Manufacturing

Reverse Engineering	CAD/CAM Systems	Data Transmission	Training & Consulting	AD HOC Solutions

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DENTAL CAM

Powerful, complete and flexible

SUM3D DENTAL One step beyond

CIM system Computer Integrated Manufacturing

SUM3D DENTAL
One step beyond

The best **CAM solution** for the dental technicians and labs!

Are you dreaming of more functionality from your CAM software in the future?
SUM3D Dental makes your dreams a reality, right now!

The reliable CAM which enhances your technical capabilities,
while improving the quality and range of your products.

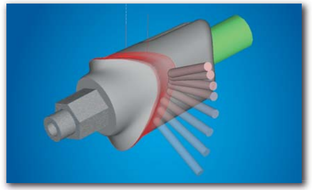
SUM3D Dental is a CAM solution designed specifically for dental applications. The CAM software has been developed in coordination with direct feedback stemming from milling centers. SUM3D Dental is an open CAM software, it is versatile and very user friendly, offering high performance in minimal processing times. All at a really convenient and affordable price!

Using SUM3D Dental eliminates the need to manually adjust orientation of the restorations to remove the undercuts. There are no manual selection of curves needed to identify milling areas & no manual input required to drill holes and to identify the milling areas.

BUSINESS BENEFITS

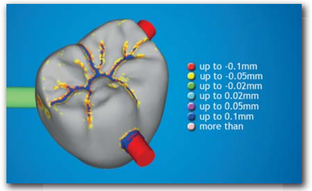
- INCREASE YOUR BUSINESS THROUGH USE OF A WIDER RANGE OF PRODUCTS
- REDUCE MILLING TIME, MATERIAL AND TOOL CONSUMPTION
- SAVE TIME AND COSTS FOR TRAINING AND SUPPORT

NEW



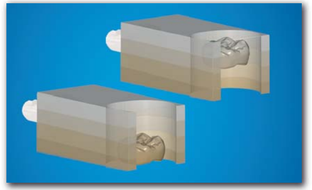
Premilled Abutment

The new Premilled Abutment workflow allows the user to perform cutting that simulates turn milling, using a 4 or 5 axes machine. A significant difference is that in utilizing spherical tools, you can now achieve quality finishes on your abutments, allowing for its use immediately after the milling stage.



Rest Material Visualization

The Rest Material Visualization is a new feature that can be used before the machining. This feature allows the user to visualize any residual material of the restoration that may remain after the milling process is completed. This will provide a realistic expectation of what SUM3D Dental can mill based on the minimum tool sizes in use and operations that it can perform on the surface designed in the CAD software. By using different colors, the portions of the rest material are visualized directly on the restoration and therefore provide the user with a visual guide of areas that will be left unfinished due to tool size restrictions. This allows the user to run or modify the milling options or cutting parameters, so that the end result will be the best for the detail in the part being machined.

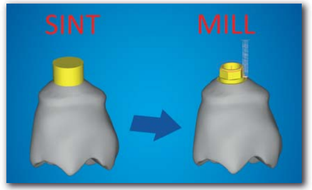


Multi Layered Material (or Pre-shaded)

The management of the Multi Layered or Pre-shaded Material allows for more precise positioning of a restoration relative to the different shades as they exist in the physical disc or block.

When transitioning from CAD to CAM processing, it will be easier to reproduce the exact shade of color and positioning specified during the design phase.

This new feature in SUM3D Dental will minimize wasted time during the nesting stage and eliminate costly mistakes on restorations being machined in the incorrect positions when using multi-layered material.



Post-Sintered Milling feature

The Post-Sintered milling feature allows us to mill on an object after it has been through the Laser Sintering (Laser Metal Fusion) process. The CAM software gives the user the capability to manage the project in a single and unique environment. Starting from the sintering process and finishing with the transition to the milling machine, users can define additional detail on parts to be machined.

By combining the two manufacturing techniques, the milling process is reduced and wasted material is minimized: this makes the operation therefore much more economic.

The CAM software handles both of the processes natively, this eliminates any issues with the passage and reading of data from one software to another with consequent variations in licensing costs and problems that can arise from data incompatibility.

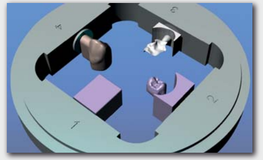
www.sum3ddental.com

MAIN FEATURES

SUM3D Dental imports data from any open CAD system: 3Shape®, Dental Wings®, EGS®, Exocad®, etc.

The **guided import** interface automatically chooses the best strategy to suit the type of imported object.

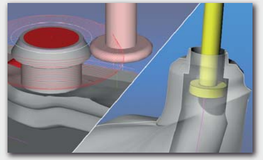
The system is simple and intuitive and it can be configured to operate in 5 different interface levels, depending on operator experience.



It is possible to mill any kind of material: zirconia, chrome cobalt, titanium, peek polymer, lithium disilicate, ceramic, PMMA, fiberglass, composite, wax, gypsum, sinterable metal, etc.

The stock library is fully customizable through the guided creation of new shapes and materials.

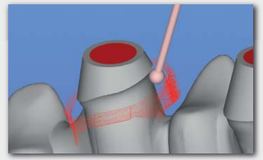
Material consumption is optimized thanks to advanced features, such as: re-machining of partially used stocks, automatic optimization of the axis inclination to reduce the stock thickness, nesting for stock optimization.



The **tool library** is fully customizable and easy to edit. SUM3D Dental can manage shape and life of all tools, supports and spindles.

The milling **simulation** and **collision check**, between the computed tool-path and all the components, prevent mistakes and damages to stock, tools, fixtures and the machine itself.

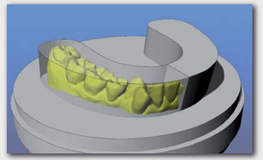
The "T" tool allows the machining of angled implants and the removal of internal and external undercuts.



Implant bridges are fully managed thanks to the automatic undercut detection and to the proper automatic tool's axis orientation.

Undercuts re-machining, internal or external, can be performed with continuous or indexed 5 axis machining, depending on the user's preference.

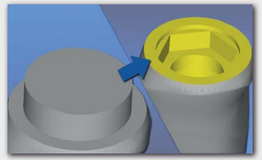
With a **lollipop tool**, undercuts can be easily removed by utilizing 3 and 4 axis machining.



With SUM3D Dental you are able to mill models with specific optimizations (strategies that allow to differentiate the level of finishing by areas).

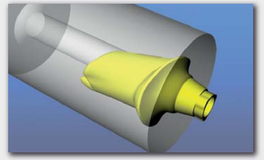
It is possible to manage standard and customized stock.

The workspace is optimized according to the characteristics of the machine. Removal of material gives freedom to manage any type and size of the tool, even of large diameter, so as to guarantee shorter machining times.



In **SUM3D Dental, implant connections** are available from libraries that can be inserted directly **during the CAM process**, replacing the existing or missing ones in files coming from CAD modeling.

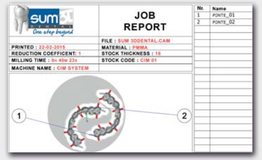
The library, fully customizable by the user, allows the association of specific strategies to each interface (shape and size of the tools, technological parameters, type of machining, etc.)



In **SUM3D Dental** several **Premilled Abutment** libraries are at your disposal (NT Trading®, Medentica®, Symbiosis®, Bluesky®, etc.). The abutment is automatically positioned and oriented in the cylinder.

SUM3D Dental offers different types of specific machining, according to the type of equipment and machine used.

The **Premilled** Library can also be implemented / created by the user.



The creation of **custom reports** and print-outs facilitates the organization and management of orders, avoiding production and shipment mistakes.

A wide range of variables can be managed to allow the automatic insertion in printing of information concerning the model of the machine, the type and material of the stock, milling time and many others.

The templates are available for both Microsoft Office® and OpenOffice®.

SUM3D Dental also offers integration with select CAD Software (**Exocad, 3shape, DentalCad**).
This version works directly within CAD, allowing direct data exchange and resulting in a reduction of processing time.
Furthermore, SUM3D also utilizes 3rd party data from the CAD (**Exocad, 3Shape, DentalWings, DentalCad**), such as margin / prep line designation, insertion axes, etc. This reduces import times and enhances our ability to precisely mill what has been designed.