exocad

The complete software solution for digital dentistry

exocad.com
Robust and well established platform
Leading OEMs have chosen exocad software for their dental CAD/CAM offerings, and thousands of exocad® DentalCAD licenses are being sold each year. Our mission is expand the possibilities of digital dentistry, and provide solid, reliable and easy to use software solutions for a rapidly evolving market.

Open and integrated
As an independent software provider, we’re open for integration with a wide range of 3rd party devices. For system integrators it is the perfect choice to build up their systems – and end users can choose the best system fit to their particular needs.

Future-proof solution
A decision for exocad is a future-proof decision. Our software is under sustained active development by our highly specialized development team, and in close collaboration with our partners. Our development model ensures efficient communication paths between dental professionals and our software engineers, to ensure optimal usability in day-to-day usage, and to anticipate emerging trends in digital dentistry. The world of computing is changing, and we are ready for it. Thanks to support for the Microsoft Surface Pro platform, exocad offers a full-featured dental CAD software that runs on tablet computers.

The most advanced, complete CAD/CAM software for dental applications, targeted at the OEM market.

New in 2013: Support for Microsoft Surface Pro
Powerful dental CAD software

exocad® DentalCAD is the leading OEM branded dental CAD software: great for beginners, yet powerful in the hands of an expert.

Our CAD software is known for its speedy operation and ease of use, helping you minimize training costs and maximize productivity. It is reliable and robust even when dealing with complex cases on a daily basis.

Wide range of indications
Already the standard version, exocad® DentalCAD covers a wide variety of indications:
- Anatomic crowns
- Anatomic copings
- Simple copings
- Bridge frameworks
- Inlays
- Onlays
- Veneers
- Waxup digital copy milling
- Waxup-based frameworks
- Primary telescopes
- Extra-coronal attachments

The possibilities grow with your experience
Once you’re familiar with the base functionality of our software, there’s more to discover:
- Work with pre-op models, and adapt your restorations to them
- Copy previous designs, or mirror healthy teeth
- Load 2D images during the design
- Take advantage of our advanced mesh editing and matching features
- Save real 3D PDF files, to send out design previews that can be viewed in 3D using a standard PDF viewer

Add-ons for further indications
For more advanced indications, such as bite splints, abutments, and more, add-ons are available.
Custom abutment design
With exocad’s implant module, the design of custom abutments is easy and straightforward. When designing bridges on custom abutments, the software will ensure that all abutments holding the bridge will have the same insertion axis.

Screw retained bridges
The design of screw retained bridges, crowns, and copings also becomes an easy task. Take advantage of our advanced screw channel design, to simplify subsequent ceramic layering and minimize risk of chipping.

High productivity and process reliability
Custom abutments and suprastructure can be designed together in a single CAD session. Since milling parameters for both abutment and suprastructure are correctly considered during the design phase, optimal fitting is possible when producing all parts in one go – without the intermediate step of rescanning the produced abutment in order to design the suprastructure. It’s your choice if you mill in-house or send out your files for production. A wide range of in-house milling systems are supported, and leading production centers will accept files written by exocad software.

Implant libraries already included
exocad’s implant module ships with an extensive set of implant libraries, both for usage of titanium bases, and for designing one-part abutments or screw retained bridges.
Virtual articulator

For dynamic occlusion

exocad’s Virtual Articulator allows users to consider dynamic occlusion when designing crowns and bridges. The positioning of the stone models within the physical articulator can be precisely transferred into the software (with the aid of a scanner that supports virtual articulation as well), for perfect patient specific results.

Parameters such as condylar angle, bennet angle, immediate side shift, can be adjusted just like on a physical articulator and can also be imported from 3rd party measurement systems though an open, XML-based format.

Bar module

For advanced dental bar design

exocad’s bar module allows both fast and easy realization of standard dental bars, as well as advanced custom bar design. The bar is designed within the context of full anatomical restorations to be supported. Attachments or retentions can be added to the design, cylindrical holes or even arbitrary geometries – can be cut out, in order to bolt or glue prefabricated attachments onto the bar.

Thanks to its elaborate design options, exocad’s bar module allows you to design dental bars that deal gracefully with complex clinical situations, and provide maximum comfort for patients.

Producing bars with optimal fitting requires an ultra-precise scanning system. Our software features workflow integration with high precision measurement devices, including tactile scanners, to ensure high process reliability.
exocad’s upcoming model creator module helps you create physical models from intra-oral scan data, or impression scans. Both the design of models with detachable segments (using premanufactured bases), and the design of monolithic models (where only the prepared die is removable) are supported.

With the provisional module, individual temporary crowns and bridges can be designed using the eggshell technique. The temporaries are created based on scans of the preoperative situation; the shape of the provisional crown/bridge can either be copied from the original anatomy (if the original tooth is still in reasonably good shape), or the tooth libraries can be used.

Hollow models allow extremely cost efficient printing.

Different model/die styles.

Individual provisional designed by using the eggshell technique.
With exocad’s bite splint module, therapeutic night guards can be designed quickly and in high quality. We recommend to use the bite splint add-on in combination with the Virtual Articulator, for optimal patient specific results. Output files can be either milled or printed.

exocad’s DentalCAD platform includes an integrated DICOM viewer that allows you to visualize voxel data from CT machines, during the design of dental restorations. Thanks to its integrated HTTP server, exocad’s software enables online exchange of implant and tooth position data with third-party programs, such as implant planning software. The DICOM viewer functionality is available as an add-on module and requires a graphics card with at least 1.5 GB of video memory.
With exocam, even novice users can take advantage of state-of-the-art CAM technology – seamlessly integrated with the CAD software.

**exocam features:**

- Nesting of designs within material blocks
- Production queue management
- Material block management
- Visualization of tool paths, milling simulation

Following our philosophy of offering ‘open, yet integrated’ solutions, exocam is available either as a complete CAM solution (including tool path calculation), or as a ‘nesting only’ variant for integration with tool path calculation algorithms purchased from 3rd parties.

Not yet using exocam? Keep in mind that thanks to our open, XML-based exchange formats, exocad® DentalCAD can be integrated easily with other CAM products. Please see our website for further info.

An exocad® DentalCAD add-on

TruSmile Technology

For realistic rendering of dental restorations in real-time

exocad’s TruSmile technology provides nearly photo-realistic rendering of dental restorations – in real time, already during the design process. In addition to providing a “What You See is What You Get” user experience, TruSmile can also become a powerful marketing tool for dentists using chairside CAD/CAM systems – e.g. to convince a patient to get a ceramic restoration instead of a metal crown.

Rendering presets are available for common materials such as ceramic, NP metal, or zirconia; in addition, OEMs can customize render effects to match the visualization the materials they offer. TruSmile is available as an add-on module, and requires at least a midrange 3D card (nVidia GeForce GTX 460 or faster).

Two of the three top-selling 5-axis dental milling machines take advantage of exocam’s easy to use interface. There’s a reason for that.

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**Seamlessly integrate your scanner with exocad® DentalCAD platform**

exoscan is a full-featured dental scanning software, designed to work with a wide variety of scanners and scan technologies.

Are you a provider of 3D scanning solutions, and would like to make your technology available to the dental market? With exoscan, exocad can help you integrate your scanner with our dental CAD platform, with an easy to use, perfectly integrated GUI.

exoscan complements exocad’s classical XML-based scanner workflow integration, for an even more seamless user experience. More and more scanners are being integrated with exoscan. It is also suitable for integrating legacy dental scanner with exocad dental CAD – previously used with other CAD software.

exoscan is applicable for both intra-oral and desktop scanners.

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**Scanner integration**

Integrated solutions powered by exocad

Thanks to partnerships with leading dental scanner manufacturers, exocad® DentalCAD is the basis for CAD/CAM systems with smoothly integrated workflow – while still leaving the freedom of choice between many different 3D scanners.

From inexpensive laser scanners to high precision devices using structured light, conoscopic holography, or tactile technology. You are free to choose what is best for your budget and your accuracy requirements.

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Thanks to **dentalshare**, users can exchange large 3D data sets without having to fiddle with email attachments, web-based file hosting services, or ftp servers.

Send and receive data sets from within the exocad software platform.

It’s more than just ‘upload to milling center’: we aim to cover the full spectrum of multi-directional digital communication between dentists, dental technicians, and production centers. **dentalshare** uses latest generation compression technology, combined with a robust transfer protocol, so that you can squeeze big data sets even through unreliable mobile network connections, or restrictive firewalls.

For maximum reliability and fast network throughput, exocad operates its own distributed server infrastructure, with multiple gigabit internet connections and server locations in Europe and the US.

**No per-transfer fees, no commission**

With dentalshare, we’re not gnawing away your profit margin. There’s no per-transfer fee, nor do we accept commission from production centers.

**Transparency and privacy**

As a dentalshare user, you’re in complete control of what data is being sent, and when. We know that there’s some information you will not want to share with the recipient of your data set. For example, a dental technician sending a data set to another lab for milling might not be willing to disclose what dentist he is working for.

All transfers are encrypted using state of the art encryption technology.

*subject to fair usage policy*

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**Denture module**

A new add-on module for total prosthesis

With the upcoming denture module, exocad will provide a digital solution for designing full dentures. Model analysis can be performed digitally, and the results will be used for an automatic tooth setup suggestion. The prosthesis can be milled or printed, or produced using a combination of methods.
We’ve applied our expertise in creating easy to use, accessible digital dentistry solutions to the area of implant planning. exoplan can load DICOM data from a wide selection of CT/DVT machines, and provides advanced 2D and 3D visualization and analysis features. In a straightforward workflow, the user is guided step-by-step through the entire process of planning implant positions.

**Implant planning**

**exoplan — the integrated solution for 3D implant planning**

We’re restyling our software: This year, our proven user interface gets a new look that’s clean and stylish. When it comes to UI design, less is often more. We’ve gotten rid of anything that would distract you from your work. Our user interface is multi-touch compatible, and even runs on the latest generation of Windows 8 Pro tablet computers (Microsoft Surface Pro and similar devices).

Although the new user interface is designed with the Windows 8 platform in mind, and seamlessly blends with the Windows 8 UI, it is still compatible with older Windows versions.
About exocad®

A young dynamic start up company

exocad GmbH was founded in 2010 as a spinoff of the world renowned Fraunhofer Organization, by the team that created the Fraunhofer IGD Dental CAD Platform.

For many years, Fraunhofer’s Institute for Computer Graphics (IGD) has been providing state of the art innovations in the area of CAD and visualization.

exocad GmbH has an exclusive license for Fraunhofer’s dental CAD technology, developed by the founders of exocad while being researchers at Fraunhofer IGD.

1949
Fraunhofer founded

2010
exocad founded
