

# BOOST YOUR CAD DESIGN PRODUCTIVITY

exocad



OUR THREE CORE VALUES ARE

# FREEDOM, PASSION AND INNOVATION.

# Powerful CAD solution for dental professionals

exocad's *DentalCAD* is the leading OEM-branded dental CAD software: great for new users and even more powerful in the hands of an expert.

Simplify the communication process between labs and dentists with our CAD software. exocad's *DentalCAD* is known for its seamless workflows and ease of use for everyone!

To make <code>DentalCAD</code> as powerful as possible, our engineers draw from the latest research on organic modeling and stay in close conversation with our most important stakeholders—you! The robust technology we create in answer to your needs streamlines even the most complex cases.



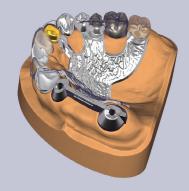
Discover DentalCAD—our globally renowned software solution for refined dental restoration designs.

# Freedom of choice for dental experts

With DentalCAD, the choice is yours.
Easily integrate our powerful dental
CAD software solution with all exocad
products and modules into one
seamless digital workflow. Thanks to
open and vendor-neutral software
architecture, DentalCAD works with
your existing equipment like open
scanners, 3D printers or
milling machines.

#### Restorative dentistry is an art and a science

From quick volume production to the most customized solutions—everything is possible with DentalCAD.



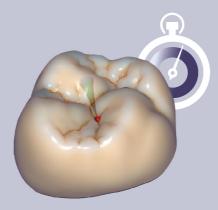
#### Versatile applications

Design a broad range of dental restorations: crowns, bridges, copings, veneers, inlays, onlays, pontics, provisionals, removables and dental appliances.



#### Robust computing

Enjoy the ease of working with software that operates reliably and processes large data volumes swiftly.



Adapts to your needs

DentalCAD adapts easily to your needs and workflows.



#### Open and integrated

DentalCAD's open software structure works with most scanners, 3D printers and milling machines. You also have access to open libraries of materials, both generic and from leading manufacturers.



#### Wizard

#### Guided workflows

The wizard-guided workflow guides you through every step of the dental restoration and production process. In expert mode, personalize settings and access extensive supplementary features and tools.



#### Easily combine source

Combine virtually any open data source relevant to your case: intraoral and model scans, 3D face scans, jaw motion data, DICOM files and patient photos.

#### The core version

Explore DentalCAD's fast and flexible core version with its intuitive user interface, extensive functions and open tooth and material libraries. Simplify the design of esthetic and functional dental restorations.





Design beautiful and functional crowns with minimal effort. Multiple high-quality tooth libraries included.



Anatomic/ simple copings

Inspired by the full anatomy, take advantage of cutback options to create optimal copings.



Attachments

from your design.

Tap into an extensive library to add attachment shapes or remove them





Create beautiful, natural-looking



Achieve beautiful results with just a few mouse clicks and inspiration from the tooth libraries.



Scan, edit and copy-mill handmade waxups or create waxups digitally.

inlay, onlay and overlay restorations.



Design full-contour bridges and frameworks including inlay, cantilever and Maryland bridges.

or simply scan the QR code.



Experience maximum flexibility when designing telescopic crowns.



Design post and core restorations. A crown matching the core can then be directly designed.

\*Available upon request for beta testers

#### DentalCAD's add-on modules

With DentalCAD, the sky's the limit! Explore some of the applications of DentalCAD's core version and modules. DentalCAD's add-on modules let you easily tailor services to meet your needs. Here you can explore all the functionalities available to you as add-on modules.

#### Models

Models from digital scans Model Creator **Model Creator** Diagnostic models

Attachments

(models with designs included) Models with implant analogs Model Creator/Implant Module

> Removable dies **Model Creator**

Text labels **Model Creator** 

Models with printable articulator Model Creator/xSNAP Module

Bite Splint Module/Virtual Articulator Night guards

Model Creator

Substructure on bar Denture Module, Bar Module or PartialCAD

Try-in smile Smile Creator Partial dentures **PartialCAD** 

Full dentures with Ivotion™ Denture System Full Denture Module including Ivotion™ Denture System

> Full Denture Module/PartialCAD Flex dentures

#### **Implantology**

Screw-retained crowns and bridges Implant Module

Custom abutments Implant Module Implant restoration Implant Module

Bar Module/Implant Module Bars, hybrid/implant framework

Models with implant analogs Model Creator/Implant Module

#### **Extended Features**

Eggshell provisional crowns and bridges Provisional Module

Realistic visual rendering of proposed restoration TruSmile Module Simulated articulator movements and Virtual Articulator

dynamic occlusion

Import jaw measurements Jaw Motion Import

Jaw movement simulations Jaw Motion Import

Visualization of CBCT data **DICOM Viewer** 

Extensive selection of teeth models **ZRS Tooth Library** 

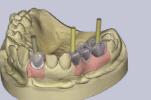
#### **Cosmetic Dentistry**

Smile design setups Mock-up models

(models with designs included)

Smile Creator/TruSmile Module

**Model Creator** 

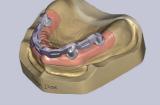




Create abutments and screw-

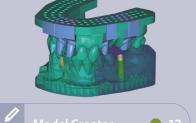


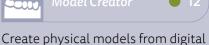
retained designs.

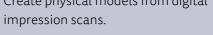


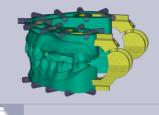


Model advanced designs for both standard or complex bars.











Create models with a printable articulator.



Design night guards, bite splints and tabletop structures.



Create eggshell temporaries based on pre-op scans.





Design removable partial denture frameworks.

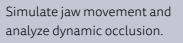


Digitally design full- and single-arch dentures. Including Ivotion™ Denture System.



Create realistic rendering of dental restorations.





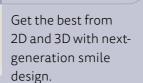


Import real movements from jaw measurements or digital facebow data.



Visualize voxel CT data during the design process.







Extend your library

with even more beautiful, natural teeth.

**Available bundles:** Advanced Lab Bundle

Implant Lab Bundle

Ultimate Lab Bundle



Implant Module

# Design implant-based restorations

With Implant Module, directly design Screw-retained crowns, bridges, copings and abutments.

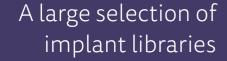
- Create abutments and suprastructures in one single CAD session, including full support of angulated screw channels
- Mill in-house on a wide range of milling systems or send out easy-to-use files to leading production centers



Flexible design options for various types of implant-based restorations



Advanced implant bridge design



exocad's *Implant Module* comes with an extensive set of implant libraries and supports a vast selection of implant systems. You can choose from a wide range of titanium bases from third-party manufacturers, and many milling centers provide dedicated libraries for exocad's *Implant Module*.

exocad.com/library-integration

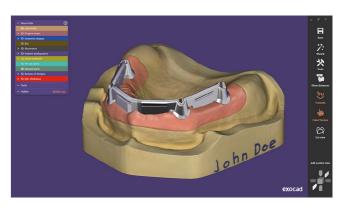


Bar Module

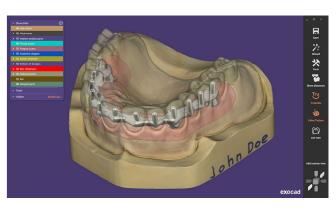
# Advanced bar design

exocad's Bar Module enables the efficient design of a wide range of dental bars, from standard to more complex cases, providing maximum patient comfort in minimal time.

- Benefit from a bar design that accommodates the shape and position of full anatomical restorations
- Simply add attachments or retentions to the design; cylindrical holes or varying geometric shapes can be cut out to bolt or glue prefabricated attachments to the bar
- Select from an extensive library of predefined, editable bar profiles to efficiently meet patients' expectations



Bar with attachments



Bar with retentions





Secondary structure with retentions

Fast design of standard bars

#### Extreme accuracy



Producing bars with optimal fitting requires an ultraprecise scanning system. Our software features workflow integration with high-precision measurement devices, including tactile scanners, to ensure high process reliability. Thanks to our collaboration with leading CAM vendors, you can expect precision and process reliability during production.

Your freedom of choice: exocad.com/scanner



Model Creator

# Scan and create physical models

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# exocad's *Model Creator* creates physical models from intraoral scan data or impression scans.

- Design models with detachable segments that use premanufactured bases and monolithic models where the prepared die is either removable or a separate check die
- Create models with lab analogs and removable gingiva masks





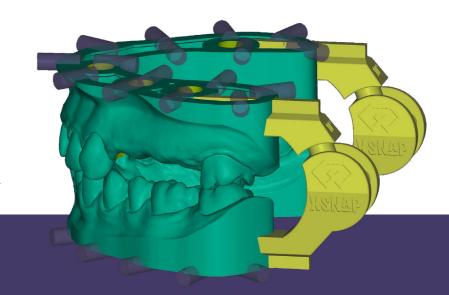
xSNAP Module

# Create models with a

# printable articulator

# exocad's xSNAP Module\* lets you print models and articulators in one piece to save time and increase accuracy.

Until now, 3D-printed jaw models were only available with a clip-fold articulator that allowed users to check the static occlusion. xSNAP is a 3D articulated system featuring a spherical head that allows not only a simple opening and closing movement but also precisely executed protrusion, mediotrusion and laterotrusion.



\*Available as an add-on module for our  $\mathit{Model}$  Creator

# One add-on module: many possibilities



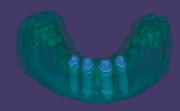
Full-arch, upper and lower models



Model with detachable segments



Labeling your models



Different model/die styles available



Hollow models allow extremely cost-efficient printing



Model with implant analogs



Printed model with articulator



Bite Splint Module

# Design **night guards**

exocad's Bite Splint Module lets you rapidly design high-quality therapeutic night guards in just a few steps.

User-friendly customization tools and intuitive workflows guide you through the design process, making bite splint production efficient and profitable.

- Adjust occlusion and remove undesirable interferences virtually
- Smooth and morph the surface of night guards individually or select the option for automatic flattening of the posterior occlusal surface
- Use a combination of both Bite Splint Module and Virtual Articulator for optimal results

- ALSO AVAILABLE AS STANDALONE VERSION
- Design anatomic bite splints with anatomic tooth shapes and tabletops
- Produce night guards in both jaws simultaneously
- Get a new automatic bite splint design proposal using cloud-based features
- Use original tooth shape of patient for tabletops based on cloud-based tooth segmentation



Provisional Module

# Create **temporaries** from scans

Produce temporary crowns and bridges using the eggshell technique prior to a patient's surgery.

- Create temporaries based on a patient's preoperative anatomy
- Create provisional crowns or bridges by using the tooth library and fine-tune using an extensive selection of free-forming tools
- Clinically evaluate new tooth morphologies within the module, reducing chair time
- Create models based on the virtual preparation of eggshell crowns, in combination with Model Creator



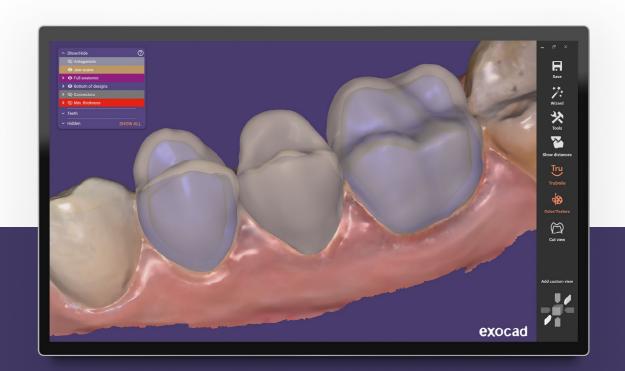
### Single-visit solutions

Provide patients with solutions on the same day using exocad's open architecture.

Fabricate custom-designed therapeutic night guards directly on any compatible, open milling machine or 3D printer.







16 | DentalCAD DentalCAD | 17

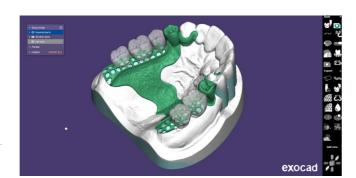


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# Partial denture design made easy

The partial framework module PartialCAD provides a digital solution for designing high-quality removable partial denture frameworks.

- Apply advanced design and customization features for retention meshes, major connectors, clasps, lingual aprons and finish lines
- Experience high design flexibility for clasps, post design with retention and auto-relief for optimal fit
- Combine partial frameworks with crown and bridge design elements, create support bars for printing, and import parts like attachments
- Combine secondary telescopic crowns with partial framework
- Design flipper dentures for temporary complete acrylic restorations



Set up teeth in exocad's DentalCAD and combine them with the framework

• Use the QuickSnap feature to divide your partial denture into individual pieces of gingiva, teeth and metal framework—enabling an accurate assembly of printed or milled parts to save valuable time and standardize workflows



Full Denture Module

# Digital design of full dentures

Our Full Denture Module provides a guided workflow for designing full dentures in both upper or lower jaws.

- Perform model analysis digitally to derive automatic full-arch tooth setup suggestions
- Use your choice of production process: two-step milling, printed denture bases or monolithic printed dentures (with try-ins, for example)
- Spend significantly less time for optimal denture setups with pre-created presets or your own
- Quickly and inexpensively produce a new denture using the copy denture workflow instead of relining



**ALSO** 

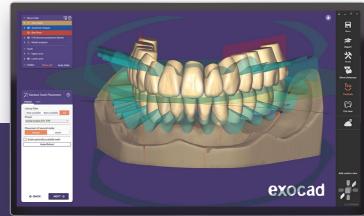
**AVAILABLE AS** 

**STANDALONE** 

**VERSION** 

Plan full mouth rehabilitation cases and create removable dentures on implants in one workflow







Add-on for the Ivotion™ Denture System now available\*

The unique shell geometry of the Ivotion disc defines the transition between gingiva and teeth and offers a highly esthetic result, milled from one single disc.

Outstanding design flexibility

Everything that can be made in wax can also be designed using our software. PartialCAD provides unparalleled design freedom, exceeding the expectations of even the most demanding experts in partial design.



TruSmile Module

# Realistic rendering of dental restorations

exocad's *TruSmile Module* provides near photo-realistic rendering of dental restorations in realtime during the design process.

- Enjoy a "what you see is what you get" user experience
- Offer patients a helpful preview of the final result when choosing, for example, between a ceramic restoration and a metal crown





Virtual Articulator

# Simulate **jaw movement** and consider **dynamic** occlusion

exocad's Virtual Articulator allows you to consider dynamic occlusion when designing any restoration with occlusion.

- Position stone models within the physical articulator and precisely transfer into the software using a virtual articulation-supporting scanner to achieve perfect individual results
- Adjust parameters such as condylar angle, Bennett angle and immediate side shift just like in a physical articulator
- Import jaw motion data from third-party measurement devices
- Combine Virtual Articulator with Jaw Motion Import for a digital facebow setup
- Use anatomical "in-skull" articulator visualization



### Natural coloring



Select coloring based on well-known standard color presets for a realistic result preview.

## Select articulator types:







Almost 20 different articulator types are available with automatic occlusion adjustment.

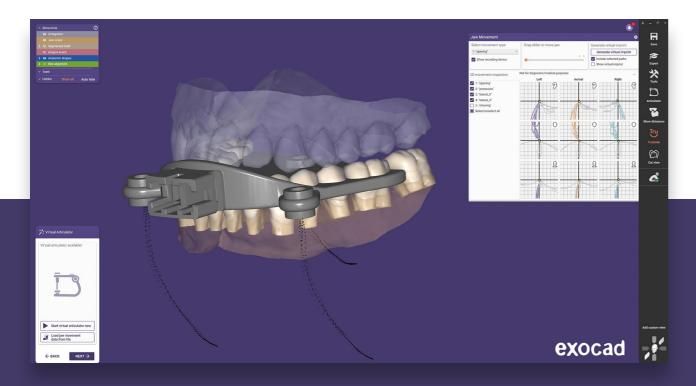


Jaw Motion Import

# Import jaw measurements

Jaw Motion Import transfers jaw movement registration data from external devices such as the JMA system from Zebris.

- Transfer patients' actual, dynamic jaw movements into the software
- Simulate during the design process and create custom-fit restorations
- Import real jaw movement registration data or use a digital facebow in combination with Virtual Articulator
- Combine with *Model Creator* to create innovative, semi-dynamic physical models at an expert level
- Benefit from five different systems integrated by default





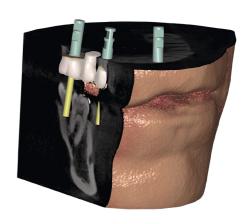
DICOM Viewer

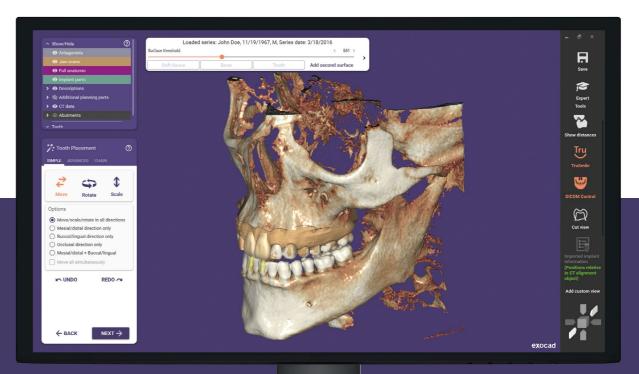
# Visualize DICOM data

# during the design process

exocad's DentalCAD platform includes an optional DICOM Viewer\* that creates visualizations of voxel data from CT machines during the design of dental restorations.

- Process large CBCT files quickly and efficiently
- Experience the DICOM Viewer's market-leading DICOM loading and visualization speeds, driven by optimized data-handling algorithms and snappy graphics rendering





DICOM Viewer is not for diagnostic/medical purposes

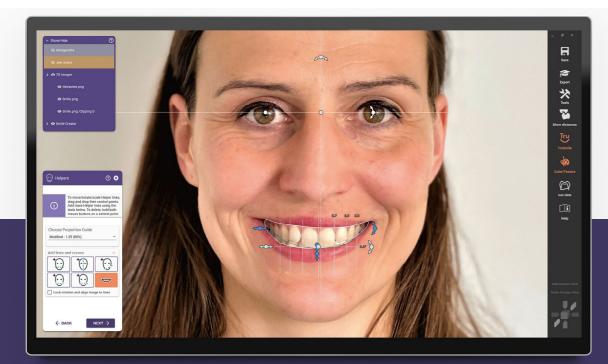


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# InCAD smile design

See realistic renderings of restorative treatment plans and get greater control over outcomes with *Smile Creator*—exocad's innovative InCAD smile design solution for predictable, esthetic smile makeovers.

- Combine patient photos, outlines and 3D situations to evaluate esthetic relationships between teeth, smile and the face
- Automatically convert patient photos to 3D objects and then match to 3D scans of the teeth
- Easily detect facial features with the support of artificial intelligence
- Improve patient communication with mock-up tooth setups
- Design smiles with virtual gingiva for superior outcomes
- Use patients' natural teeth as a template for the smile design with the tooth segmentation tool



Perfect foundation for prosthetic execution

With Smile Creator, obtain a real 3D tooth setup as the perfect foundation for later prosthetic implementation with DentalCAD as well as implant planning with exoplan. Create digital waxup models with exocad's Model Creator.



ZRS Tooth Library

# Extensive library of

# beautiful, natural teeth

#### Get inspired by exocad's DentalCAD tooth libraries.

- Get full access to an extensive library of beautiful, natural teeth including 61 sets of upper-arch anterior teeth, plus 19 sets of lower-jaw anteriors, upper-arch posteriors and lower-arch posteriors
- Make adjustments to predefined teeth for maximum flexibility
- Enjoy fully anatomical library teeth, reproduced according to natural morphologies for optimum results
- Easily adapt all integrated tooth libraries from a younger to an older anatomy with Parametric Shape Adjustment







#### Comprehensive content

The ZRS library includes tooth shapes based on the "Anteriores" collection by Dr. Jan Hajtó.

To assist technicians using the library, a full-color book, poster and models for each set of teeth are available from third parties.





exocam

## ALSO AVAILABLE AS STANDALONE VERSION

# State-of-the-art **CAM technology**

Perfect integration, outstanding results—exocam makes milling simpler than ever.

With exocam, even novice users can take advantage of state-of-the-art CAM technology. Seamlessly integrated into our CAD software products, exocam provides you with everything for a smooth workflow in the daily operation of a dental lab.



Supports production using premill/preform abutment libraries



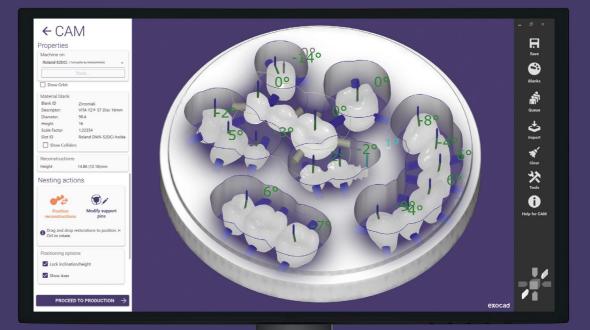
Supports different preform holders



Multilayered blank support



Visualizes multilayer blanks realistically during the CAD design process with our TruSmile technology



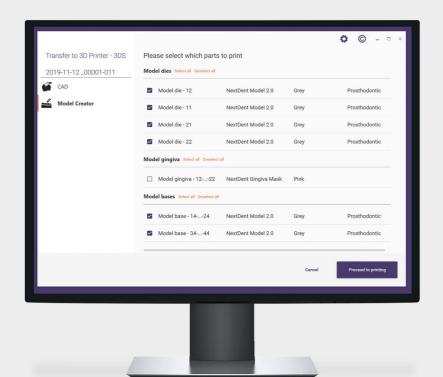
Milling setup made simple with exocam

#### exocam features:

- Design nested within material blocks
- Production queue management
- Material block management
- Automated tool path creation
- Visualization of tool paths and milling simulations

Our open XML-based exchange formats let *DentalCAD* be easily integrated with other CAM products. Visit our website for further information:

exocad.com/exocam





exonrint

# The easiest way from CAD to 3D printing

Simplify your 3D printing with exoprint—for greater convenience and usability.

exocad's *DentalCAD* provides a seamless workflow with 3D printers, and our new *exoprint* tool enables a smooth transition from *DentalCAD* to 3D printers.

Connecting *DentalCAD* with your printing software requires minimal effort. Designs and associated information can be passed directly from *DentalCAD* to 3D printing software, using an open XML-based interface. Discover *exoprint*—the smartest way to transfer your 3D-printable files.



dentalshare

# Fast, secure and **easy data transfer**—free of charge

More than just "upload to lab"—we cover the full spectrum of multidirectional digital data transfer between clinicians, dental technicians and production centers.

dentalshare enables distributed workflows and efficient online collaboration. We use next-generation compression technology combined with a robust transfer protocol so that even big data sets travel through unstable mobile network connections and restrictive firewalls with ease. Designs can be exchanged, modified and reviewed prior to production. All transfers utilize state-of-the-art encryption technology and are fully verified once received.

For maximum reliability and fast network throughput, exocad operates its own redundant, distributed server infrastructure with multiple gigabit internet connections and server locations around the world.



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

With dentalshare, we won't gnaw away at your profit margin.

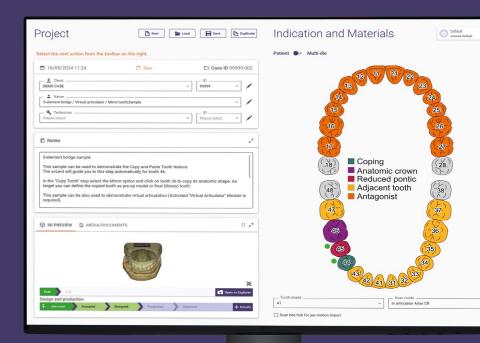
#### Transparency and privacy

As a dentalshare user, you're in complete control of what data is being sent and when.

#### Hardware independent

dentalshare is integrated with a wide range of CAD/CAM hardware and software on the market. Regardless of the specific products used by your partners, you can be confident that with dentalshare you can connect reliably.

\*Depending on the type of integration chosen, additional fees may apply





# Make your exocad designs

## available on all devices

#### Share interactive 3D previews of your exocad CAD designs

With just a few clicks, you can generate a secure link to your design that you can share with anyone online. This link can be opened with both desktop and mobile browsers to experience an interactive, true 3D preview of your CAD design.

#### Free tools and samples

This fast and convenient multi-platform 3D viewer allows you to visualize common 3D formats on the go and can also show CAD scenes from preview links generated with *dentalshare*. Visit webview.dental to try it out or experience interactive demos at webview.dental/demo









DOWNLOAD THE APP NOW!

webview.dental/demo



# Integrated solutions powered by exocad

Selection of integrated scanner manufacturers



opera-system.com

<sup>\*\*</sup>Integration only available for exocad licenses purchased through the respective reseller



Our distributors

# Purchase exocad through one of our many partners

You are free to choose the best fit for your budget and your workflow needs.

Our resellers provide their customers with extensive training and expert support. Contact one of our partners.

shining3d.com

<sup>\*</sup>Depending on the type of integration chosen, additional fees may apply

Design complex restorations in simple steps



Sean Han, Dental Technologist









# Why dental experts trust our software solutions

exocad's comprehensive software solutions provide the tools to keep pace with the fast-moving dental industry. Dental experts choose exocad for the ease of use, simple acceleration of daily workflows, support of flexible business models, continuously improved software security and more. With the guiding principle "your freedom is our passion," exocad is committed to providing software solutions that work on a wide spectrum of devices and systems.

#### Faster and more efficient Our users save time with our

robust, high-performance software that runs quickly, even when processing large and complex cases.

## Complex cases simplified

The cases may be complex, but using our software is simple.

#### Flexible software. flexible business model

We offer maximum flexibility and freedom through our modular and open approach. Customers can mix and match modules, buy perpetual CAD software licenses, or rent the software at attractive rates.

# Reliable

We focus on the details when developing our software. That's why exocad products are known for their reliability.

### Independent and innovative

Our open platform software puts our users at the forefront of digital dentistry. Our engineers and researchers continuously push the boundaries of dentistry.

# Truly future-proof

We're the dental CAD/CAM software provider with a wide choice of integrated solutions using third-party scanners, mills, printers and materials. We are always open to new ideas, ready to support today's and tomorrow's best innovations.

# Your benefits at a glance

#### Create exceptional dental solutions for almost any indication

DentalCAD supports you in designing various esthetic and functional dental restorations and appliances based on individual anatomies and requirements.

#### Stay ahead of your competitors

DentalCAD is developed based on latest research results and market insights and is continuously innovated by our team of engineers.

#### Minimize training costs

DentalCAD is easy to learn and guides you step-by-step through the process.

#### Maximize your return on investment

DentalCAD enables you to integrate hardware and materials of your choice.

#### Access extensive features and functionalities

DentalCAD allows you to individually adjust each setting and offers you a broad range of supplementary tools in the expert mode.

#### Enjoy exceptional flexibility

DentalCAD lets you control every step according to your requirements and fully adapts to your workflows, equipment and services.

#### Profit from an unlimited number of cases

DentalCAD has no hidden costs or click fees.

#### Enjoy freedom of choice

DentalCAD supports file formats for open scanners, 3D printers and milling machines, enabling you to work with your existing equipment.

#### Collaborate effortlessly with your partners

DentalCAD facilitates your communication with clients and service providers for predictable outcomes.

#### Experience hassle-free and speedy operations

DentalCAD is ultrafast in processing even high data volumes, thereby guaranteeing you maximum ease of use and performance.

#### Integrate workflows seamlessly

DentalCAD interoperates with all exocad products and add-on modules.

#### Expand your service offerings

DentalCAD can be upgraded with various add-on modules according to your needs.

#### Benefit from our proven software platform

exocad software has been established in labs for more than 14 years.

#### exocad.com

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