LABORATORY SOLUTIONS

dwos 7

dental wings
TRANSFORMING CREATIVITY
DENTAL WINGS IS THE RIGHT SOLUTION FOR YOUR LAB

Dental Wings software solutions cover prosthetics design, surgical planning, and communication in an integrated way. Our open architecture provides considerable freedom, while trusted workflows, products, and services from our many partners are made easily accessible.

DWOS is the foundation of our software applications that drives our 3D scanners. It is also available as an open stand-alone dental CAD software covering a complete range of dental indications that can be expanded with additional modules to meet the evolving needs of your laboratory.

Based on an integrated scan and design workflow with DWOS software, Dental Wings offers three distinct scanning systems to meet your varied and individual needs.
3SERIES
MODEL SCANNER

The Dental Wings 3Series compact model scanner is ideal for small and medium dental laboratories, and is designed to evolve with the growing needs of laboratories.

The 3Series is an affordable solution with high scanning accuracy thanks to Blue Laser Illumination combined with our proven high-precision mechanical and optical components. Extensive and flexible scanning capabilities include gypsum models, wax-ups, check bites, implant scan bodies and dental impressions for post and core cases. Streamlined design paths facilitate the creation of crowns and single customized abutments in just a few clicks.

Embedded with a powerful computer, the 3Series offers flexible software packages.

MODULE INCLUDED:
CROWN & BRIDGE
- Additional DWOS software modules can be added at any time.

HIGHLIGHTS & ACCESSORIES INCLUDED:
- An integrated on-board computer with 64-bit processor
- Model holder
- Automatic multi-die holder, up to 12 elements scanned and designed in 8 minutes, unattended
- Calibration kit

OPTIONAL MODULES & ACCESSORIES:
- IMPLANT PROSTHETICS
- PARTIAL FRAMEWORKS
- FULL DENTURES
- MODEL BUILDER
- BITE SPLINTS
- ORTHODONTIC ARCHIVING
- RAPID PROTOTYPING
- GUIDED SURGERY
- Impression holder adaptor
- Sam® SE articulator
- Axis finder holder
7SERIES
MODEL & IMPRESSION SCANNER

Delivered with several DWOS design applications, the Dental Wings 7Series is well-suited for the medium to large dental laboratory where high volume throughput is required.

The 7Series boasts high scanning accuracy with Blue Laser Illumination, significant ergonomic and functional advances resulting in important improvements in productivity and efficiency, and offers remarkable versatility, speed, and accuracy.

Additional DWOS software modules can be added at any time.

HIGHLIGHTS & ACCESSORIES INCLUDED:
• An integrated on-board computer with 64-bit processor
• Impression holder
• Automatic multi-die holder, up to 30 elements scanned and designed in 12 minutes, unattended
• Calibration kit
• Sam® SE articulator

MODULES INCLUDED IN:
SYNERGY PACKAGE
- CROWN & BRIDGE
- IMPLANT PROSTHETICS
- PARTIAL FRAMEWORKS
- FULL DENTURES
- MODEL BUILDER
- BITE SPLINTS
- ORTHODONTIC ARCHIVING
- RAPID PROTOTYPING
- GUIDED SURGERY

PRODUCTIVITY PACKAGE
- CROWN & BRIDGE
- IMPLANT PROSTHETICS
- PARTIAL FRAMEWORKS
- MODEL BUILDER
- RAPID PROTOTYPING

OPTIONAL MODULES & ACCESSORIES:
- FULL DENTURES
- BITE SPLINTS
- ORTHODONTIC ARCHIVING
- GUIDED SURGERY
  • Axis finder holder
iSERIES IMPRESSION SCANNER

The Dental Wings iSeries was designed to be the easiest way for dental clinics to transition to digital dentistry. Laboratories can also benefit from important workflow efficiencies and precision with in-lab impression scanning.

With its embedded computer, high scanning technology with Blue Laser Illumination plus a simple interface, traditional impressions are quickly and easily digitized either chairside or in-lab.

DWOS software modules can be added at any time.

HIGHLIGHTS & ACCESSORIES INCLUDED:
• An integrated on-board computer with 64-bit processor
• Impression holder
• Calibration kit

OPTIONAL MODULES & ACCESSORIES:

- CROWN & BRIDGE
- IMPLANT PROSTHETICS
- PARTIAL FRAMEWORKS
- FULL DENTURES
- MODEL BUILDER
- BITE SPLINTS
- ORTHODONTIC ARCHIVING
- RAPID PROTOTYPING
- GUIDED SURGERY

- Model holder
### 3Series Model Scanner

<table>
<thead>
<tr>
<th>Specifications</th>
<th>3Series Model Scanner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scanning volume</td>
<td>90 mm x 90 mm x 90 mm</td>
</tr>
<tr>
<td>Optical technology</td>
<td>Class 1 laser product</td>
</tr>
<tr>
<td></td>
<td>1 high-speed measuring camera</td>
</tr>
<tr>
<td></td>
<td>1 color video camera</td>
</tr>
<tr>
<td>Number of axes</td>
<td>3 (2 rotative, 1 translative)</td>
</tr>
<tr>
<td>Embedded computer &amp; OS</td>
<td>Core i5, 16 GB memory</td>
</tr>
<tr>
<td></td>
<td>1 GB of dedicated RAM graphic card</td>
</tr>
<tr>
<td></td>
<td>Windows 7, 64 bits, 250 GB SSD</td>
</tr>
<tr>
<td>Accuracy 1</td>
<td>15 microns</td>
</tr>
<tr>
<td>Output format</td>
<td>STL &amp; supported partner formats</td>
</tr>
<tr>
<td>Scannable materials</td>
<td>Plaster, wax-up and impression (for post cores)</td>
</tr>
<tr>
<td>Electrical data</td>
<td>100-240 V AC / 50-60 Hz / 160 W</td>
</tr>
<tr>
<td>Certifications</td>
<td>CE, OHSA, Canada (SCC)</td>
</tr>
<tr>
<td>Screen ports</td>
<td>DVI, HDMI &amp; VGA</td>
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1. Based on Dental Wings testing standards.

### 7Series Model & Impression Scanner

<table>
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<tr>
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<tr>
<td></td>
<td>1 color video camera</td>
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<tr>
<td>Number of axes</td>
<td>5 (3 rotative, 2 translative)</td>
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<td>Plaster, wax-up and impression</td>
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<tr>
<td>Electrical data</td>
<td>100-240 V AC / 50-60 Hz / 230 W</td>
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<tr>
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### iSeries Impression Scanner

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<tr>
<td>Number of axes</td>
<td>5 (4 rotative, 1 translative)</td>
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<tr>
<td>Scannable materials</td>
<td>Impression materials and plaster (for solid models)</td>
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<tr>
<td>Electrical data</td>
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Select the right solution for your individual needs.
DWOS – A COMPREHENSIVE PROSTHETICS DESIGN SUITE

DWOS covers a complete range of dental indications such as crowns, implant bars and bridges, full and partial dentures, custom abutments, onlays, veneers, and more. It offers an open architecture .STL import and export, providing workflow independence and freedom, including the ability to import intraoral scan files. Furthermore, DWOS CAD is modular and can be expanded to new indications to meet the evolving needs of clinics and laboratories.

TOOTH-BORNE CROWN & BRIDGE
The foundation of prosthetic design within DWOS.

FULL ANATOMICAL RESTORATIONS
Allows for the creation of richly defined anatomical restorations with access to more than 20 detailed kits including anatomies by Merz, Candulor and VITA.

MIRROR ANATOMIES
Easily mirror anatomy.

INLAYS AND ONLAYS
Design of the whole range of inlays and onlays including simple shells.

VESTIBULAR VENEERED CROWNS (%)
Flexible incrustation design for perfect mix of aesthetic and function.

TELESCOPIC COPINGS
Full support of telescopic and partially telescopic elements for advanced and/or removable prosthesis.
OVERPRESSED
Easily create overpress.

VENEERS
Design of anatomical and reduced veneers.

MILLINGS AND INTERLOCKS
Design dental milling and interlock.

POST & CORES
Design from pure core to full anatomical element.

DIAGNOSTIC AND TEMPORARY ELEMENTS
Allows for temporary design even before the preparation of the tooth.

FRAMEWORKS
Design of bridge frameworks including reductions and attachments.

Diagnostic crown with homothetic reduction, or egg shell.

Easily design connectors.
IMPLANT PROSTHETICS
Design custom abutments, healing caps, bars and more with an extensive set of implant libraries. To be used with both titanium bases, and for design one-part abutments or screw retained bridges.

CUSTOM ABUTMENTS
Support for all types of abutments either screw-retained or with Ti base. Full customized abutment with or without rotational stop.

TI-BASE ABUTMENTS
Automated detection of axis for most conically shaped Ti Bases even with or without predefined implant kits (Directly scanning the TiBase).

BRIDGE ON IMPLANTS
Create a bridge over implant borne.

SCREW-RETAINED BRIDGE

IMPLANT BRIDGE WITH GINGIVA

CUSTOM HEALING CAPS AND ABUTMENTS
Design of radical area reusable for prosthesis design.

SCREW-RETAINED HYBRID BARS
Free-form design of partially exposed or fully encased bars.
BARS FOR REMOVABLE PROSTHETICS
Design of standard bar shapes as well as milled and custom profiles.

FULL DENTURES
A full featured application for the design of digital dentures.

PARTIAL FRAMEWORKS
Design of highly accurate frameworks for partial dentures.

BITE SPLINTS
Design of splints and nightguards.
MODEL BUILDER
Easy design of digital models of all types.

ORTHODONTIC ARCHIVING
Scanning, design and archiving of study model.

GUIDED SURGERY
Advanced implant planning with coDiagnostiX.
WHAT'S NEW IN DWOS 7

The DWOS 7 upgrade includes new features and improvements to increase both efficiency and productivity in digital dentistry. This new Dental Wings DWOS suite of open CAD applications covers the complete range of fixed and removable indications, providing even more powerful design tools that are both versatile and highly productive.

CREATE A VIRTUAL SETUP AS THE DESIGN OF AN IMPLANT BRIDGE

With DWOS 7, you can add a new layer of aesthetic elements atop the virtual setup, such as placing a full crown onto a telescopic crown.

PARTIAL DENTURE WITH VIRTUAL TEETH

Turn an anatomical reduced crown, telescopic crown, and a 3/4 crown, with or without gingiva, into metal, by merging the elements directly into the partial framework design.

SUPERSTRUCTURE

Create a precise superstructure according to the bar’s form design.
WAX-UP OVER BAR SUPERSTRUCTURE
Create a virtual set-up or even scan a diagnostic wax-up and add it on the top of the superstructure.

PARTIAL FRAMEWORK OVER BAR SUPERSTRUCTURE
Simply design a partial framework and add it onto the superstructure.

ADVANCED ANGULATED SCREW CHANNEL SUPPORT
Includes flexible parameter adjustments for optimized milling, significantly improving the design of the angulated screw channel.

PLUS, IMPROVED FREE-FORM WAXING DESIGN TOOLS & USER INTERFACE, INCLUDING A CUSTOMIZABLE BACKGROUND AND APPLICATION NOTIFICATIONS
Featuring a new, free waxing tool to work scanned files in a high-resolution mode, and an enhanced graphical interface for an optimal user experience.
CONNECTIVITY TO INTRAORAL SCANNING

The natural option for creating digital impressions, featuring innovative voice-command and gesture control functionality together with a remarkably small handpiece, the Dental Wings Intraoral Scanner is designed to help you maximize patient comfort and clinical success.

The new portable version provides the same performance, but in a small, lightweight format specifically suited for dental clinics with space limitations, and for easy and frequent displacement.

A REMARKABLY SMALL HANDPIECE

Resembling a standard dental turbine handpiece, the lightweight, all-metal, and familiar shape of the handpiece easily lets the user assume a natural position relative to the patient.

COMING SOON!

POWDER-FREE SCANNING WITH GREY SCALE TEXTURE*

Increased efficiency, accuracy, and comfort for your patient. The Powder-Free handpiece is compatible with all current Dental Wings Intraoral Scanners as well as the new portable.

*Available summer 2017 for all Dental Wings Intraoral Scanners (standard and portable systems).
LASERMILL SYSTEM

Based on a process called laser ablation the Dental Wings Lasermill represents a revolution in dental production technology. Dentists and laboratories can use this innovative CAM device to create restorations from proven materials with unprecedented levels of detail, easily, reliably, and economically.

The Lasermill uses laser energy to transform material directly into a plasma, which is ejected away from the block, assuring that the remaining material is no adversely affected. The laser beam is moved relative to the block with six independent axes to cut the final dental restoration according to an open .STL design file.

The Lasermill system integrates closed loop control using Dental Wings 3D scanning technology to adjust the material removal path and to verify the final geometry.
coDiagnostiX - DIGITIZE YOUR WORKFLOW AND TAKE ADVANTAGE OF EXCITING OPPORTUNITIES

codiagnostix is the dental implant planning software for dental clinicians and laboratories.

- It works with any implant or guided surgery kit.

- The open interfaces ensure compatibility with all (CB)CT, Intraoral scanner, model & impression scanners and open CAD/CAM solutions.

- Data export in open .STL format allows for local drill guide production with cost-efficient and high-volume production technologies, such as 3D printing.

- The completely digital workflow requires no scan template. The decision on guided surgery treatment can be taken after the (CB)CT scan.

- A sophisticated communication technology offers seamless integration of surgical and prosthetic workflows.
WHAT’S NEW IN coDiagnostiX 9.8

INTEGRATED TRAINING
An integrated training feature for dedicated functions provides you with step-by-step instructions and intuitive guidance within the coDiagnostiX user interface and while you are working with the software.

IMPROVED SUPPORT FOR EDENTULOUS
Automatic placement of correctly angulated screw-retained abutments based on the implants’ position and angulation adds further support for screw-retained bars and bridges via DWOS Synergy and enhances existing edentulous workflows.

DWOS CONNECT INTERFACE
If you own a Dental Wings scanner, you can now seamlessly transfer your scans via DWOS Connect to create perfectly fitting drill guides in coDiagnostiX.

NATIVE DICOM DATA STORED
With coDiagnostiX 9.8, the full DICOM grayscale range is stored with the dataset abolishing the necessity to adjust presets during import. This further simplifies DICOM import and allows you to adjust the grayscale range and modify the contrast any time during your planning activities to improve visibility.
DWOS SYNERGY: INTEGRATION OF PLANNING AND PROSTHETICS FOR IMPLANT CASES

DWOS Synergy workflow is the Dental Wings comprehensive and integrated solution for implant-borne cases. It brings the dentist-lab collaboration to an unprecedented level by merging digital guided surgery to CAD.

A SYNERGISTIC LIVE CONNECTION
Dental Wings DWOS Synergy is a communication feature that synchronizes planning and design work between coDiagnostiX and DWOS stations. The technology allows dental technicians and dentists to work together in real time to determine the optimal implant position for the desired outcome and design the best prosthetics.
A software perfectly adapted to ensure optimized dental lab management, and specifically designed to meet the requirements of digital dentistry.

—Dr. Eric Caron, Prosthodontist and Operations Director, CamCube

COMING SOON!
CONNECTIVITY TO DWOS LAB MANAGEMENT SOFTWARE

Dental Wings DWOS Lab Management is a cloud-based solution for dental lab managers and employees designed to increase the efficiency and effectiveness of both digital and analog workflows in dental laboratories of all sizes.

Employing an intuitive user interface, accessible through a web browser from any computer or tablet, DWOS Lab Management simplifies managing cases, organizing case related data, and monitoring the lab’s activities to give complete overview in real time.

Innovative scheduling tools, operations dashboards, file management to and from outside partners and dentists, and integration with the full range of Dental Wings dentist and lab solutions are just a part of the power of the DWOS Lab Management solution.
3D PRINTING

The high speed, accuracy, and reliability of the new Dental Wings professional grade 3D printers are combined with multiple certified materials, enabling dentists and laboratories to cover a wide range of applications:

- Models
- Castable wax patterns
- Drill guides
- Temporary crowns and bridges
- Custom impression trays
- And much more!

PROFESSIONAL SOLUTIONS FOR A WIDE RANGE OF APPLICATIONS

To cover customers’ indication and productivity needs, Dental Wings 3D printers will be available in three models: D20, D30, and D40.

From producing a few drill guides in a small surgical practice up to round-the-clock production of models in a high volume lab, the Dental Wings 3D Printer portfolio has a solution. In addition, like all Dental Wings products, our printers are open to 3rd party design software and materials.
D20
THE COMPACT SOLUTION FOR USE IN SMALL LABS AND DENTAL CLINICS

The Dental Wings D20 produces high precision and esthetic dental products made from certified and biocompatible materials. Developed specifically to generate the best and fastest 3D results in the market, the short production time eliminates the need for patients to schedule a second appointment. The D20 is the perfect compact unit for dental clinics and small labs. A certified software interface for common lab programs comes standard with each unit.

D30 & D40
POWERFUL AND FLEXIBLE, THE PROFESSIONAL SOLUTION FOR LABS

The Dental Wings D30 and D40 printers are designed with automatic temperature control for continuous use without dimensional changes of the final products. A touch-door opener, 10-inch color display and patented Force Feedback technology comes standard in each unit to optimize productivity and flexibility.

“We are exceedingly happy to announce a partnership with RapidShape and Shera to provide leading edge, professional grade 3D Printing solutions to our customers. The D20, D30, and D40 systems are ideal solutions for dentists and labs looking to complete their digital suite with fast, robust, and flexible printers and proven dental materials.”

—Michael Rynerson, CEO, Dental Wings
DWOS CONNECT: MOST POWERFUL AND FLEXIBLE NETWORK IN THE DENTAL INDUSTRY

DWOS Connect is an extremely powerful network communication platform that links all dental professionals who work with DWOS software. Within a few clicks, dentists, laboratories, and production centers can share case details, 3D scans, design files, invoices, digital images, and other information when and where it is needed across the entire value chain. Secure file transfers, customizable rule-based data management, archiving, and real-time reporting are all key attributes of DWOS Connect.

DWOS Connect can be configured to enhance the customer’s operations, from small laboratories to multinational industrial scale organizations.

LABORATORY ENVIRONMENT

Benefit from an expanded offering and production capacity by providing a list of DWOS registered production and design centers in a specific area or around the world, DWOS Connect helps you find the partners you need to expand your product offering and production capacity.

CLINIC ENVIRONMENT

Benefit from a smooth transfer of digital impressions and follow-up DWOS Connect enables any member of the dental clinic team to digitally send intraoral orimpression scans to the laboratory of choice. Subsequently, tracking tools will keep her informed about case status.