Complete Dental Wings
In-Office Solution
Helping dental professionals transform creativity for over a decade

Founded in 2007, and now part of the Straumann Group, the Dental Wings breadth of products are distributed by leading dental companies in over 50 countries around the world. With offices in Canada, Germany, France, and China, and a growing team of passionate and talented employees, the overarching vision of the company is to create the largest global network of digitally-enabled dental professionals, and equip them with diagnostic, design, and manufacturing tools that increase the efficacy, quality, and profitability of the services they provide to patients.

Our mission remains firm – to help our customers improve the lives of millions of dental patients worldwide.

The right technology can achieve this and make dentistry predictable and seamless. Dental Wings is focused on helping dental professionals bridge the gap from analog to digital with possibilities that were once only imagined, but are now absolutely within reach.
Discover our solutions

Dental Wings Intraoral Scanner
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DWOS CAD Software
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DWOS Chairside CAD Software
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coDiagnostiX™ Implant Planning Software
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D20 3D Printer
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Putting your patients first

With the Dental Wings Intraoral Scanner, you can create digital impression data quickly and easily to design and produce effective restorations. The lengthy conventional and unpleasant tray impression process is eliminated and replaced with a patient-focused design that allows you to discuss as well as deliver same-day results with your patient and avoid return visits, thus accelerating treatment.

The integrated voice and gesture control modules combine ease of navigation and promote infection control, and the powerful and precise scanning access help further maximize patient comfort and clinical outcomes.

Multiscan Imaging™ 3D scanning technology consisting of ten miniature cameras in the handpiece tip allows for one of the smallest intraoral scanner handpieces in the industry. Furthermore, teeth and soft tissue are scanned from multiple orientations simultaneously, capturing difficult-to-see areas of preparations with minimal effort.
FEATURES

Gesture & voice control modules for infection control

Ease of maneuverability

Very small scanning tip

Luminescent status indicator to focus on patient

Lightweight & familiar profile

Compact footprint

10 miniature cameras
Gesture control technology

With a touch-free operation of the system, even while wearing gloves, the gesture control module prevents any cross-contamination during scanning. With the voice control module, you can perform scans without moving your hands away from the patient or handpiece.

Place the hand wide open in front of the sensor.  
→ Activates the gesture control feature.

Point one finger upwards. → Displays contextual menu.

Move the hand wide open from side to side.  
→ To navigate inside the contextual menu.

Point one finger upwards. → Stops the navigation.
You can move your hand without affecting the selection.

Move the arm towards the sensor while the finger is still pointing upwards. → Enters the selection.
The remarkably small handpiece

Resembling a standard dental tool, the small and lightweight handpiece ensures unparalleled patient comfort and allows you to assume a natural position relative to the patient when scanning.
NEW PORTABLE

Dental Wings Intraoral Scanner

Based on the same innovative technology and features as the Dental Wings Intraoral Scanner cart model.

The small, easy-to-carry format is specifically suited for clinics with space limitations or for frequent displacement between multiple operatories.

The portable addresses the need for mobility, but with the same feature-set as its cart counterpart.
Easy to Carry

Dental Wings Intraoral Scanner featuring the new portable version

or type in your browser:
dentalwings.com/videos
Wireless data transfer

Send captured data in-office or to remote systems for immediate prosthesis design and production.

Visual and audible feedback

A luminescent ring on the handpiece plus audible signals indicate when scan data is being successfully captured, so you can keep the focus on your patient rather than on the scanner screen.

Data export

Choose between the freedom of an open STL or convenience of DWOS Connect data export for optimal collaboration with your lab partners.

Software updates

New features and improvements are added frequently and communicated to all users in a timely manner to promote a continued and optimized experience.
Intuitive scanner interface

Simplicity, ease of use and flexibility are the hallmarks of Dental Wings software.

Linear workflow

Flexible and customizable, the linear workflow provides a logical and simple step-by-step scanning process.

Plan editor

An intuitive and streamlined plan editor allows you or any member of your team to quickly create a full prescription to be sent, along with the scan data, to lab partners through DWOS Connect.
Together with a highly versatile handpiece, the icon-driven user interface that provides direct instructions for scanning facilitates your daily dentistry requirements.

Review tools

Get an essential real-time evaluation of the clinical situation such as occlusal distance and undercuts, thus ensuring the resulting CAD design generates the best possible restoration.

Lock and clean

Preserve good data with the lock tool, and rescan only those surfaces where modifications were needed.
The complete in-office solution

Following a decade of CAD systems development for dental laboratories comes DWOS Chairside CAD solution. Designed to provide a fast and intuitive prosthetic design solution, DWOS Chairside CAD is a stand-alone open design software that can be combined with an intraoral scanner or impression scanner and milling machine to create a complete in-office solution.

The scan
Eliminate the unpleasant tray impression process for your patient with the powder-free, small hand-held scanner handpiece.

The design
The user-friendly interface of the DWOS Chairside CAD will allow you to quickly design an accurate restoration proposal.

The milling
Produce predictable precision using a variety of indications, restorative options, and materials.

More to discover >
DWOS CAD software

The knowledge-based ecosystem

One of the most flexible and powerful open software platforms in the industry, DWOS is a seamlessly integrated ecosystem of dental technologies that work together to boost productivity and efficiency for dental professionals.

Comprehensive clinical information is treated within a knowledge-based design engine to deliver flexible solutions that are produced with trusted materials and manufacturing technologies.

Open access

DWOS is an open platform. This means it is accessible to all systems that support common and unrestricted data file formats. This allows users to grow with the latest state-of-the-art technologies without business restrictions or technological limitations. Input devices generating clinical information, such as CBCT and intraoral scanners, are easily integrated into 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.

Crown & bridge
The foundation of prosthetic design within DWOS.

Inlays and onlays
Design of the whole range of inlays and onlays including simple shells.

Full anatomical restorations
Allows for the creation of richly defined anatomical restorations with access to more than 20 detailed kits including anatomies by Merz®, Cândulor® and VITA®.

Mirror anatomies
Easily mirror anatomy.
Vestibular veneered crowns (¾)
Flexible incrustation design for perfect mix of aesthetic and function.

Diagnostic and temporary elements
Allows for temporary design even before the preparation of the tooth.

Diagnostic crown with homothetic reduction or egg shell.

Telescopic copings
Full support of telescopic and partially telescopic elements for advanced and/or removable prosthesis.

Guided surgery
Advanced implant planning with coDiagnostiX.

Millings and interlocks
Design dental milling and interlock.
Veneers
Design of anatomical and reduced veneers.

Post & cores
Design from pure core to full anatomical element. Also allows abutment wedge creation.

Bridge on implants
Create a bridge over implant borne.

Bars for removable prosthetics
Design of standard bar shapes as well as milled and custom profiles.

Frameworks
Design of bridge frameworks including reductions and attachments.

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.

Screw-retained hybrid bars
Free-form design of partially exposed or fully encased bars.

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

Custom healing caps and abutments
Design of radical area reusable for prosthesis design.
Screw-retained bridge

Implant bridge with gingiva

Overpressed
Easily create overpress.

Full dentures
A full featured application for the design of digital dentures.

Partial frameworks
Design of highly accurate frameworks for partial dentures.
Model builder
Easy design of digital models of all types.

Bite splints
Design of splints and nightguards.

Orthodontic archiving
Scanning, design and archiving of study model.
iSERIES Impression Scanner

Designed to be the easiest way for you to transition to digital dentistry without changing your familiar impression-taking protocol. The iSeries simplifies access to a world of restorative opportunities that is usually associated with intraoral scanning. With its optimized scanning technology and simple interface, traditional impressions are quickly and easily digitized.

DWOS software modules can be added at any time to meet the growing needs of your practice.

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

Highlight & accessories included:
- An integrated on-board computer with 64-bit processor
- Impression holder
- Calibration kit
By connecting clinics, labs, production centers, and other collaborators, DWOS Connect allows each of them to be part of a powerful network that leverages their investments, and to securely share case details, 3D scans, design files, invoices, digital images, and other information when and where it is needed across the entire value chain.

Available worldwide, you can find the expert partners you need to expand your product offering and production capacity with DWOS Connect.
The complete in-office solution

Following a decade of CAD systems development for dental laboratories comes DWOS Chairside CAD software - a fast and intuitive prosthetic design solution.

Using the latest innovative technology within an optimized user interface, special design tools facilitate the design of highly-aesthetic restorations such as inlays, onlays, full contour crowns, and veneers, as well as other indications such as implant abutments, and all in a few minutes.

The stand-alone open design software can also be combined with an intraoral scanner or impression scanner and milling machine to create a complete in-office solution.

Facilitating better outcomes for patients

The benefits of chairside solutions for your patients are significant.

There is no more need for impression-taking, which in turn removes a source of discomfort for the patient, and the restoration could be ready in one appointment, eliminating the need for a follow-up visit.

The restoration software reduces the potential for error, and is user-friendly, allowing you as well as other members of your team to control each aspect of the design.
Supporting a wide range of indications

- Crowns, inlays, onlays and veneers
- Short-span bridges
- Implant-borne crowns

Contextual help

- For an optimized user experience, the dentist is guided from start to end with step by step instructions.

Open system

- Allows for input and output of STL for 3rd party systems support.

Material-driven and ease of in-office production

- STL output for any open in-office mill.
- Customizable material parameters specified by the dentist are respected to ensure quality restorations, while the minimum thickness is safeguarded during design.
Seamless integration between Dental Wings products

- Direct Integration from Dental Wings Intraoral Scanner to DWOS Chairside CAD.
- Exchange of case details between DWOS Chairside CAD and Dental Wings Intraoral Scanner: scan data, materials, shade, and implant.
Clinical definition

[Image]

Order revision

Review and edit scans from the Dental Wings IO, Dental Wings iSeries impression scanner and other open intraoral devices. Optimize surfaces to obtain the optimal workflow.

Assignation

Quickly assign the preparation of the cases to detect any implants and fill technical data required by tooth-chain technology.

Margin

Automatic margin proposal on all elements type. Easy modifications of the margin and insertion access to obtain the best fit possible.

Undercut highlight

Automatic insertion that gives lowest undercut possible based on the analysis of the case.

Verify alignment result

Clip profile & highlight of the margin
Automated proposals

The advanced tooth-chain technology computes the shape of the proposed restoration, including anatomy, cusps, marginal ridges and emergence profile, by analyzing and mimicking the anatomical features of the adjacent teeth. Occlusion is automatically computed from the antagonist teeth.

Nesting & machining

Simple and intuitive restoration block nesting for fast in-office milling preparation.

Milling

Depending on the machine output, select parameters and any connection possible and finish the workflow.
Predictable. Reliable. Consistent.

codiagnostix is the intuitive and easy-to-use digital solution for dental implant planning and design of customized and highly-precise surgical drill guides to help dental professionals offer gold standard treatment with minimal patient visits, and provide safe and predictable results while increasing efficiency and productivity.
Open system

As with all our solutions, coDiagnostiX features an open architecture. Thanks to a pre-installed library with implant, abutment, and sleeve systems from major manufacturers, plus the option to create and add customized elements to the library, all implant and sleeve systems can be planned with coDiagnostiX.

The open interfaces ensure compatibility with all CBCT, intraoral scanners, 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.

Meeting the most diverse needs

- Allows the design of customized and highly-precise drill guides.
- Enables cost-efficient production through automated, high-capacity 3D printing.
- Optimizes flexibility due to drill guide fabrication by your local lab.
- Provides a sophisticated communication technology that offers seamless integration of surgical and prosthetic workflows.
A completely digital workflow

coDiagnostiX reads 3D image data from CBCT scanners and matches model or impression scans containing gingiva and tooth information. The digital workflow requires no scan template thereby the decision on guided surgery treatment can be taken after the CBCT scan.

- Includes a comprehensive and regularly updated library of implant, sleeve, and abutment systems from multiple manufacturers.

- Matches DICOM data and multiple optical scans.

- Allows the creation of custom elements to meet individual needs.

- Supports a dual-scan workflow.

- Offers customizable drill guide design to realize tooth, gingiva, or bone-supported drill guides, as well as combined variants and drill guides with palatal support and/or lateral fixation.

- Includes special workflows for edentulous cases.
Making treatment planning a collaborative process

DWOS Synergy

The integrated planning environment allows for real-time communication with DWOS to help speed up work considerably.

For collaboration with other third-party systems, a separate open interface is provided to easily exchange surgical and prosthetic data between open CAD systems and coDiagnostiX.

Watch Synergy in action and witness how changes in the implant positioning affect the design options, and vice versa.

Watch in action

or type in your browser:
dentalwings.com/videos
Communicate with caseXchange

The interactive communications platform that allows collaboration among coDiagnostiX users, and includes an integrated order placement and order management functions, plus it simplifies case presentation to patients with the coDiagnostiX iPad® app.

caseXchange facilitates case-sharing to create a truly collaborative process through enabled communications between you and the lab for the production of drill guides or for treatment planning, and between you and radiologists to get a second opinion, or to receive an expert assessment.
9.8

> Enhanced support for edentulous cases

The automatic placement of correctly angulated screw-retained abutments based on the position and angulation of the implant will add further support for screw-retained bars and bridges via DWOS Synergy, and enhance existing edentulous workflows.

> DWOS Connect interface

Dentists who work with a Dental Wings scanner can now transfer scans seamlessly via DWOS Connect to create perfectly fitting drill guides in coDiagnostiX.

> Storage of native DICOM data

The full DICOM grayscale range will now be stored with the dataset, making it unnecessary to adjust presets during import. This further simplifies the DICOM import and allows the user to adjust the grayscale range and modify the contrast to improve visibility any time during implant planning.

> caseXchange: increased efficiency & ease of use

- Add supplemental information when transmitting data.
- See when the data set has been downloaded.
- Quickly return an edited or approved case plan to the sender.
- Hide completed cases for easier management.
- Download cases with just one click.

Contact your reseller about availability of this latest update in your area.

Find a reseller: dentalwings.com/wherebought

In Germany, Austria, or Switzerland, email codiagnostix@dentalwings.com
coDiagnostiX digital workflow

- CBCT scan
  Import DICOM data file

- Model or impression scan
  Import STL file of model or impression scan

- Dentist with coDiagnostiX
  Determine optimal implant position based on desired prosthetic outcome

- Laboratory with coDiagnostiX and DWOS
  Design and/or output drill guides from coDiagnostiX
  Design temporary restorations or gingiva former in DWOS

- Drill guide
  Produce drill guides

- Temporary restoration or gingiva former
  Produce temporary restorations and prosthetic elements

Scan this QR code link to view our workflow video.
D20 3D Printer
The compact solution for use in dental clinics and chairside

Developed specifically to generate optimal results quickly, the short production time of the Dental Wings D20 printer eliminates the need for your patients to schedule a second appointment. It’s the perfect compact unit for dental clinics, small labs, and chairside.

Introduced in partnership with RapidShape® Dental and SHERA® Werkstoff-Technologie, the high-precision, accurate, and aesthetic dental products produced by the D20 are made from certified biocompatible materials, enabling dentists to cover a wide range of applications while saving costs due to reduced material waste.

- Temporary crowns & bridges
- Models
- Castable wax patterns
- Custom impression trays
- Drill guides

Open system

The D20 printer can be integrated with other Dental Wings products for complete end-to-end solutions, and is open to third-party design software and materials. Furthermore, it provides:

- Highly-aesthetic prints with pure color and transparency based on professional UV LED.
- Ease of use thanks to resin handling system and control features.
- Certified auto calibration sensor.
- Fastest printed speed makes chairside treatment and short lag response possible.
- Ultra-compact design.
All around versatility.

- Casts and partials
- Stump- or implant-models
- Gingiva masks
- Surgical guides
- Temporary crown and bridges
### APPLICATIONS

<table>
<thead>
<tr>
<th>APPLICATIONS</th>
<th>PRINTING TIME (approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casts &amp; partials</td>
<td>50 min.</td>
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<tr>
<td>Stump- or implant-models</td>
<td>45 min.</td>
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<tr>
<td>Gingiva masks</td>
<td>15 min.</td>
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<tr>
<td>Surgical guides</td>
<td>16 min.</td>
</tr>
<tr>
<td>Temporary crowns &amp; bridges</td>
<td>18 min.</td>
</tr>
<tr>
<td>Trays</td>
<td>60 min.</td>
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<tr>
<td>Ortho models</td>
<td>60 min.</td>
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<tr>
<td>Splints</td>
<td>60 min.</td>
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</table>

All mentioned printing times are based on jobs done on a printer equipped with Force Feedback System.
Performance Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
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<tbody>
<tr>
<td>Building area</td>
<td>130 × 75 mm</td>
</tr>
<tr>
<td>Native pixel</td>
<td>±/− 34 μm</td>
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<tr>
<td>Max. part height</td>
<td>90 mm</td>
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<tr>
<td>Light source</td>
<td>385 nm UV LED</td>
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<tr>
<td>Resolution</td>
<td>HD 1920 × 1080 px</td>
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<td>Dimension (W × H × D)</td>
<td>335 × 541 × 349 mm</td>
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<tr>
<td>Connections</td>
<td>WLAN, TCP/IP, USB</td>
</tr>
<tr>
<td>Control</td>
<td>7” LCD-Display, 3-button control</td>
</tr>
</tbody>
</table>
Certified material partner

SHERAprint® materials are available for biocompatible printing of all kinds of dental applications.

SHERAprint® available from Dental Wings
Dental Wings digital workflow

1. INTRAORAL SCANNING
2. FILE TRANSFER WITH dwos CONNECT
3. VIRTUAL MODEL DESIGN WITH dwos
4. DESIGN AND PLANNING WITH dwos & coDiagnostiX
5. MANUFACTURING OF THE MODEL
4. MANUFACTURING OF THE PROSTHESIS OR PRODUCTION OF THE DRILL GUIDE
Reseller contact information