

Digital Solutions for Laboratories





Helping dental labs transform creativity for over a decade

Founded in 2007, the Dental Wings breadth of products are distributed by leading dental companies in over 50 countries around the world.

Our **vision** 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** is 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.



Lab Scanners
pages 3-5



coDiagnostiX™
Implant Planning Software, pages 6-12



DWOS Lab
Management Software, pages 13-19



DWOS
Design Software, pages 20-25



3D Printers
D30 & D40, pages 26-31



Lab Scanners



Based on an integrated scan and design workflow with DWOS, Dental Wings manufactures distinct scanning systems to meet your varied and individual needs. Plus, you can add more modules as your lab and requirements evolve.

7SERIES

Model & Impression Scanner

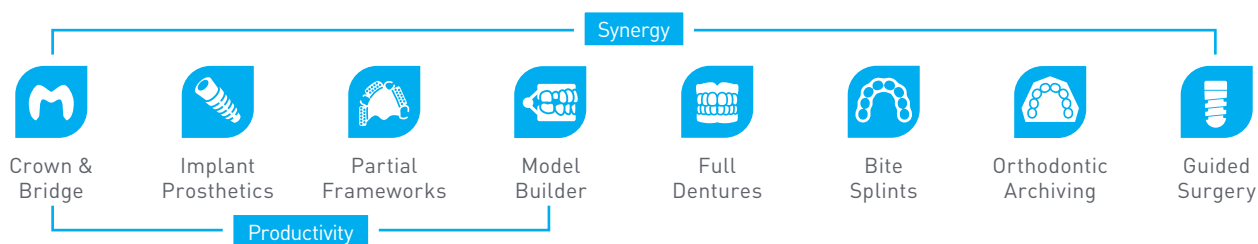
Featuring high scanning accuracy, significant ergonomic and functional advances for important improvements in productivity and efficiency. Delivered with several DWOS design applications suited for medium to large sized dental labs.



Accessories included:

- ▶ An integrated on-board computer with 64-bit processor
- ▶ Impression holder
- ▶ Calibration kit
- ▶ Automatic multi-die holder (up to 30 elements scanned and designed in 12 minutes, unattended)
- ▶ Sam® SE articulator

Choose between two DWOS packs: **Synergy** and **Productivity**



3SERIES

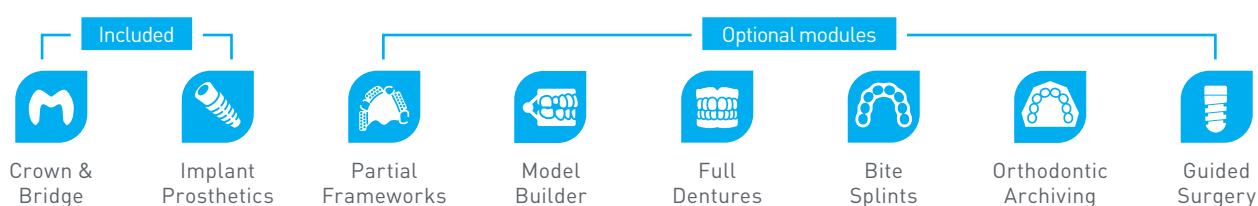
Model Scanner

Ideal for small and medium-sized dental labs, the 3Series offers extensive and flexible scanning capabilities that include gypsum models, wax-ups, check bites, implant scan bodies, and dental impressions for post and core cases.



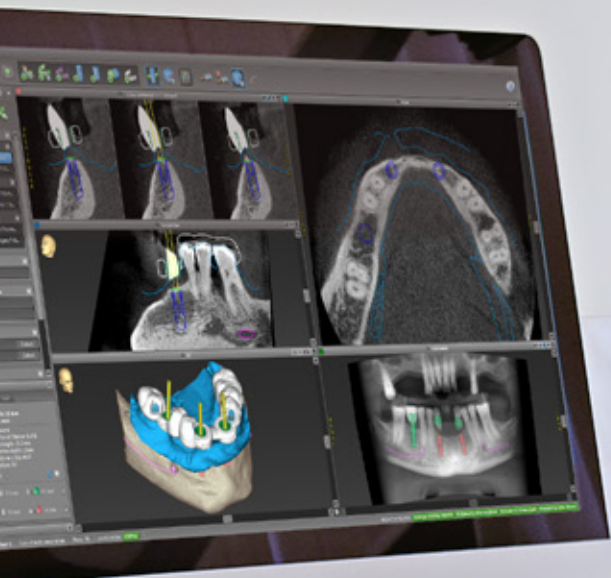
Accessories included:

- ▶ An integrated on-board computer with 64-bit processor
- ▶ Model holder
- ▶ Calibration kit
- ▶ Automatic multi-die holder (up to 12 elements scanned and designed in 8 minutes, unattended)



Technical specifications	3Series	7Series
Scanning volume	90 x 90 x 90 mm (3.54 x 3.54 x 3.54")	140 x 140 x 140 mm (5.51 x 5.51 x 5.51")
Optical technology	Class 1 laser product, 1 high speed measuring camera, 1 color video camera	Class 1 laser product, 2 high speed measuring cameras, 1 color video camera
Number of axes	3 (2 rotative 1 linear)	5 (3 rotative 2 linear)
Embedded computer & OS	Core i5, 16 GB memory, 2 GB of dedicated RAM graphic card, Windows 7, 64 bits	Core i7, 16 GB memory, 2 GB of dedicated RAM graphic card, Windows 7, 64 bits
Accuracy ¹	15 microns	15 microns
Output format	STL & supported partner formats	STL & supported partner formats
Scannable materials	Plaster, wax-up and impression (for post cores)	Plaster, wax-up and impression

¹ Based on Dental Wings testing standards.

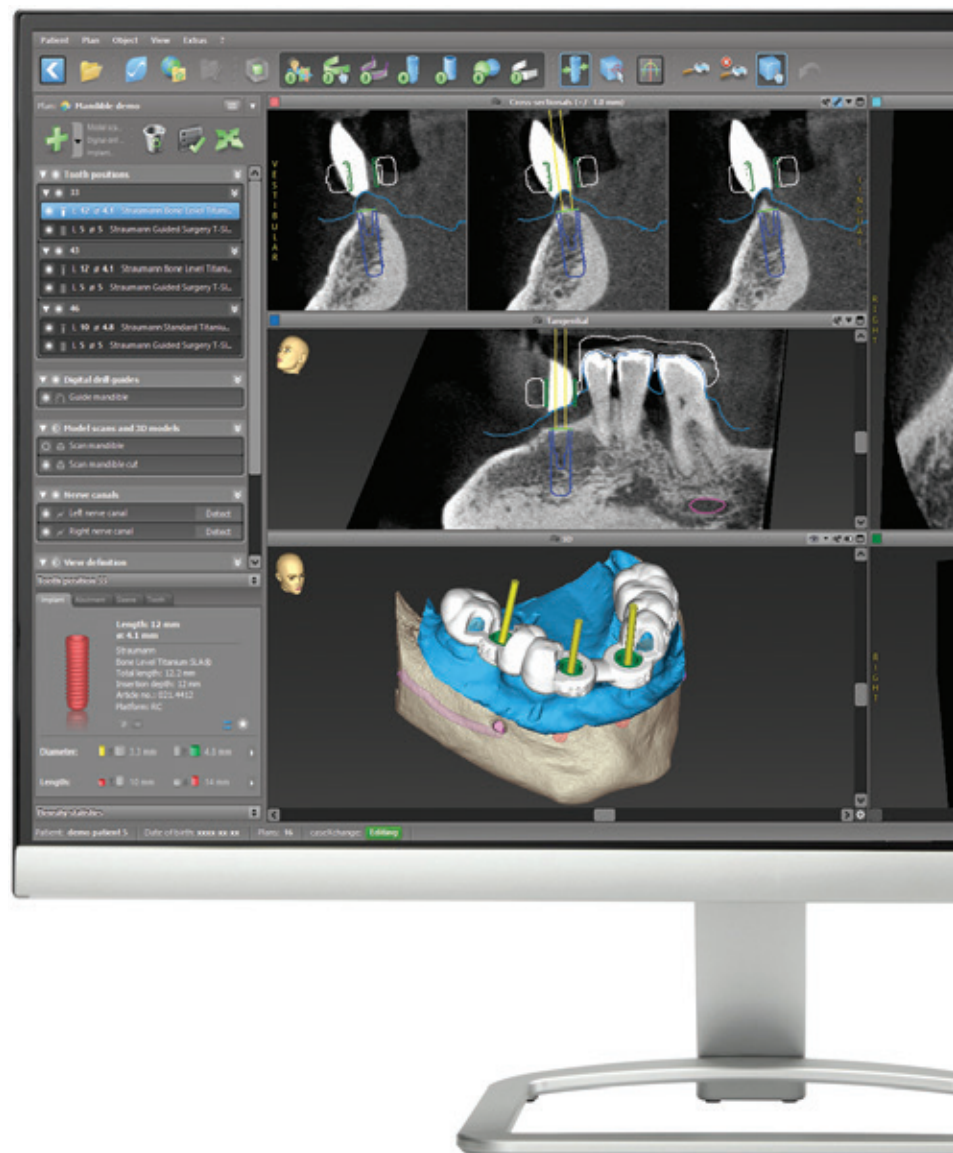


Predictable
Reliable
Consistent

20 Years
of clinical success

250,000+
Guided cases

coDiagnostiX is the intuitive and easy-to-use digital solution for implant planning and design of customized and highly-precise surgical drill guides. Receive **safe and predictable** results, all while increasing efficiency and productivity.





Meeting the most diverse needs

Design customized and highly-precise drill guides to enable cost-efficient production through automated, high-capacity 3D printing.

Benefit from a sophisticated communication technology that offers seamless integration of surgical and prosthetic workflows.

The completely digital workflow that requires no scan template



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



Permits the creation of custom elements to meet individual needs.



Matches DICOM data and optical scans.



Allows customizable designs to realize tooth, gingiva, or bone-supported drill guides, plus combined variants and drill guides with palatal support and/or lateral fixation.



Supports a dual-scan workflow.

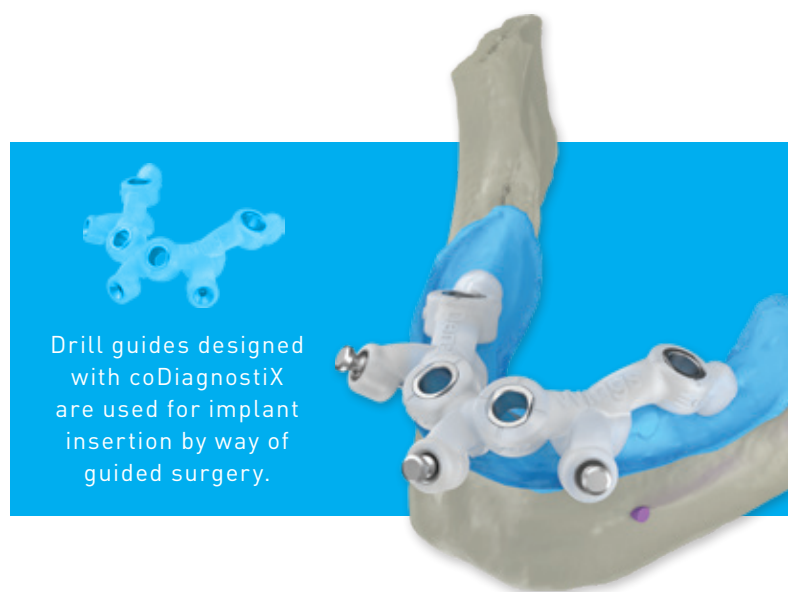


Includes workflows for edentulous cases.

Open system

coDiagnostiX features an open architecture with interfaces that ensure compatibility with all CBCT, intraoral, model, and impression scanners, plus open CAD/CAM solutions.

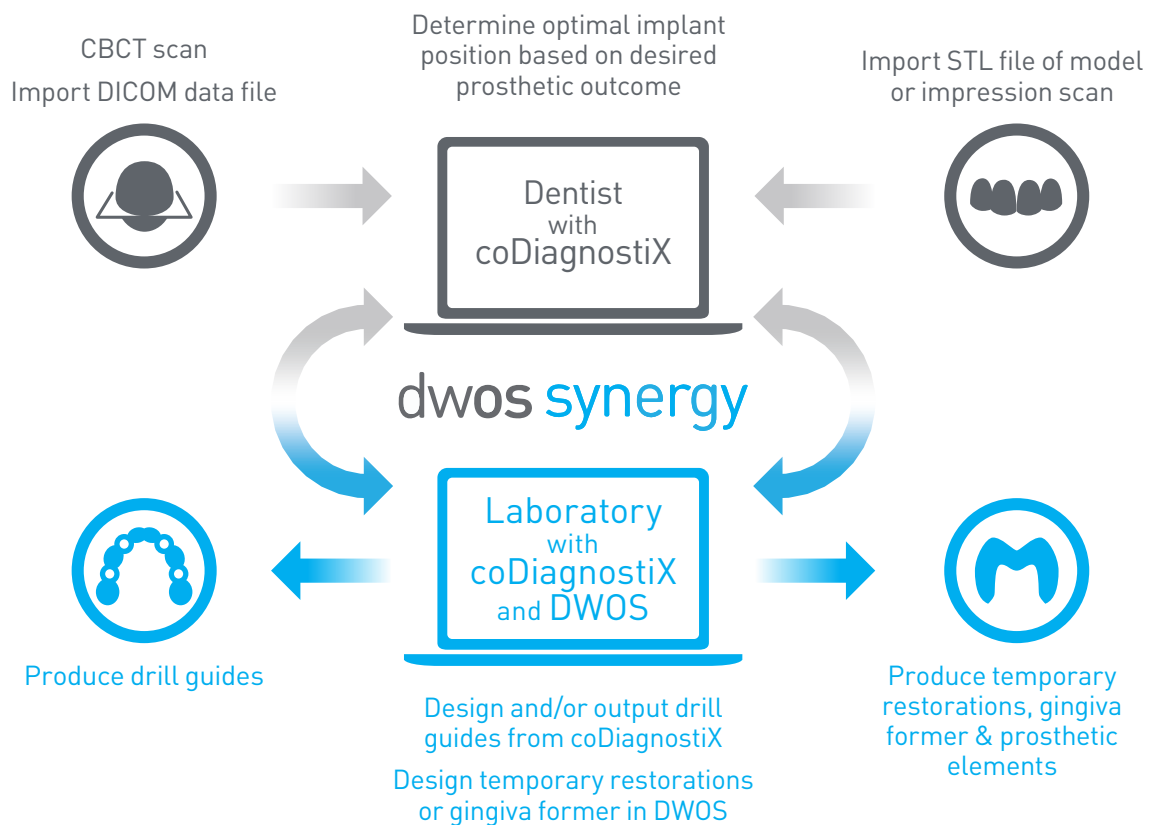
Data export in open STL format allows for local drill guide production with cost-efficient and high-volume production technologies.



Drill guides designed with coDiagnostiX are used for implant insertion by way of guided surgery.

coDiagnostiX

Digital workflow



DWOS Synergy

Making treatment planning
a collaborative process

The integrated planning environment allows for real-time communication with DWOS to 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.

DISCOVER Digital workflow



DISCOVER DWOS Synergy



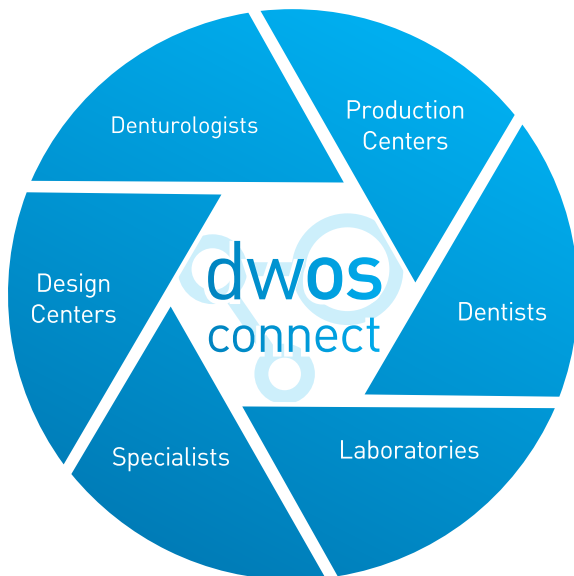
Visit dentalwings.com/videos



Maximize treatment outcomes through fully digital collaborative planning.

DWOS Connect

The powerful and flexible network in digital dentistry



Connecting clinics, labs, production centers and other collaborators in a powerful network that leverages their investments to securely share:

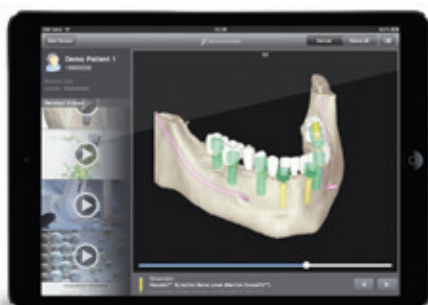
- ▶ Case details
- ▶ 3D scans
- ▶ Design files
- ▶ Invoices
- ▶ Digital invoices
- ▶ Other information when and where it is needed across the entire value chain.

caseXchange

Interactive communications platform that allows collaboration among users

Includes an integrated order placement plus order management functions. Facilitates case-sharing through enabled communications:

- ▶ Between you and your dental partners for the production of drill guides or for treatment planning.
- ▶ Between you and radiologists to get a second opinion or to receive an expert assessment.



Simplifies case presentation to patients with the coDiagnostiX iPad® app.



Why choose DWOS Lab?

Dental Wings understands the challenges of a fast-growing laboratory and has developed both standard and **completely customizable workflows** covering the spectrum of manual and digital manufacturing activities in the dental lab.

Employing an intuitive user interface, accessible through a web browser from any computer or tablet, DWOS Lab simplifies case management, case-related data organization, and monitoring of the lab's activities so you get a complete overview in real time.

Make treatment planning a truly collaborative process

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

Get a second opinion from a colleague and ensure that everyone's expectations are met by facilitating case-sharing with other specialists, referring dentists, labs, and service providers.



Streamline your workflow with this breakthrough in cloud-based management software



Productivity boosting tools

- ▶ Real-time case exchange is integrated with Dental Wings products, and open to connect to any other CAD/CAM process.
- ▶ Production time is reduced due to easy and quick access to data and timetables.
- ▶ Case information is exchanged automatically to help eliminate double entries and errors.
- ▶ Customer portals simplify communications with dentists.



Performance dashboard

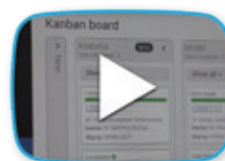
- ▶ Continuous overview of the most relevant data to help improve efficiency and effectiveness.
- ▶ Ability to monitor individual workstation level activities as well as overall operations through key performance indicators.



Data management systems

- ▶ Unique Lab-Kanban methodology minimizes shelf-time between tasks.
- ▶ Automatic scheduler and automatic flags warn of impending delays.
- ▶ Prioritized tasks by employee include details, notes, and documents when needed.
- ▶ Simplified output of travelers (case document), shipping documents, and invoices.

DISCOVER DWOS Lab



Visit dentalwings.com/videos

One-stop case management

When considering a full-cycle workflow, DWOS Lab is the one place to manage your digital and traditional cases seamlessly and simultaneously.

- ▶ The production dashboard displays current production load, flagged cases to warn of possible delay, plus critical cases are monitored, and any outsourced cases are tracked.
- ▶ Workflows allow for any case-specific adjustments.
- ▶ Invoices are configurable and all shipments trackable.


View the current case schedule based on the Kanban

Not respecting critical deadlines triggers warnings

Keep track of who did what and when

Tasks are automatically assigned to technicians in their schedule

TASK	STARTED	COMPLETED
Case analysis	15 Feb, 16:00 David	15 Feb, 16:14 David
Cast model	15 Feb, 16:19 Alice	Complete
Ditch model	17 Feb, 13:23 Alice	Start
Case analysis with model	17 Feb, 13:28 David	Start
Scan	17 Feb, 13:43 Alice	Start
Design structure	17 Feb, 13:58 David	Start
Outsource structure	17 Feb, 14:13 XYZ Prod Center	Start
Scan & Glaze	21 Feb, 14:38 Emma	Start
Inspect	21 Feb, 14:43 David	Start



View your lab's
activity from
anywhere,
anytime.

Reduce production time and boost productivity

Based on the manufacturing industry's proven Kanban methodology, **Lab-Kanban** improves productivity with dynamic worksheets and schedules that synchronize with any changes in case information and priorities.

Cases flow through stages of production



Live view of the production floor.
See technicians currently working on tasks

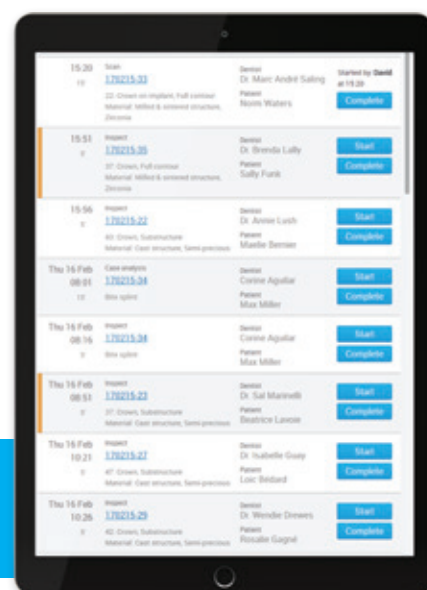
Dynamic schedules

Enjoy easy access to a dynamically-updated list of tasks with important details, notes, and documents. As priorities and workloads change throughout the day, the master and individual schedules update automatically to **optimize overall throughput of the lab.**

- ▶ Lessen the time it takes to track cases.
- ▶ Allow employees to focus on what they do best – adding important value to lab output.



Perfectly designed to meet the requirements of digital dentistry.



Connectivity to Dental Wings open system CAD/CAM software

Cases entered in DWOS Lab are automatically routed to DWOS. Case status is updated in DWOS Lab in real-time following the DWOS workflow.





DWOS®

CAD/CAM Software

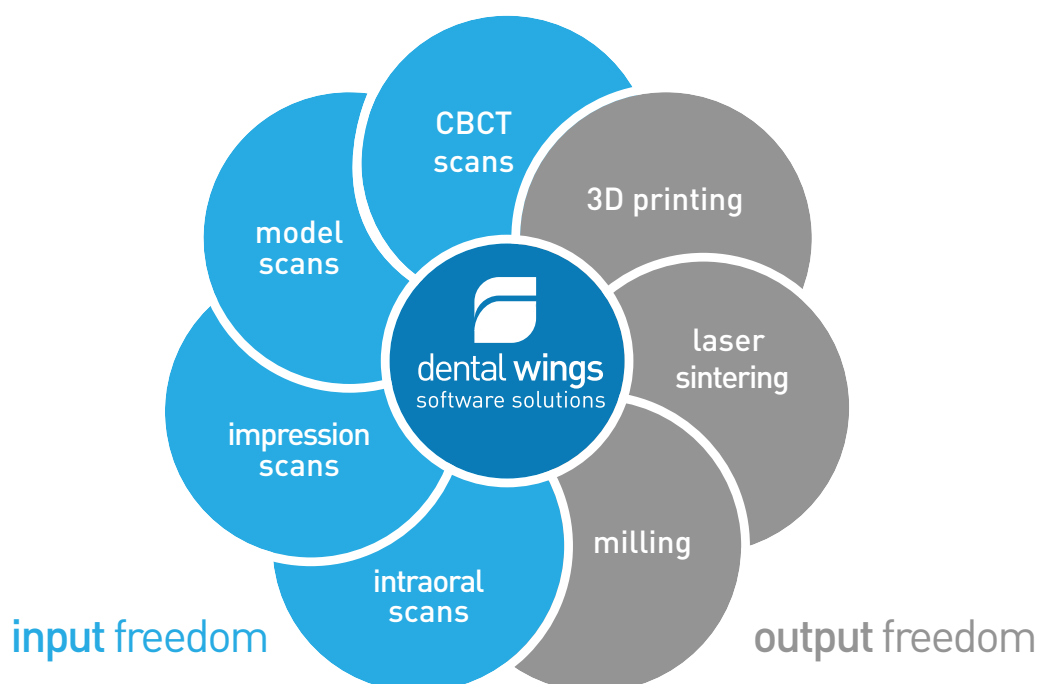
The knowledge-based ecosystem

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

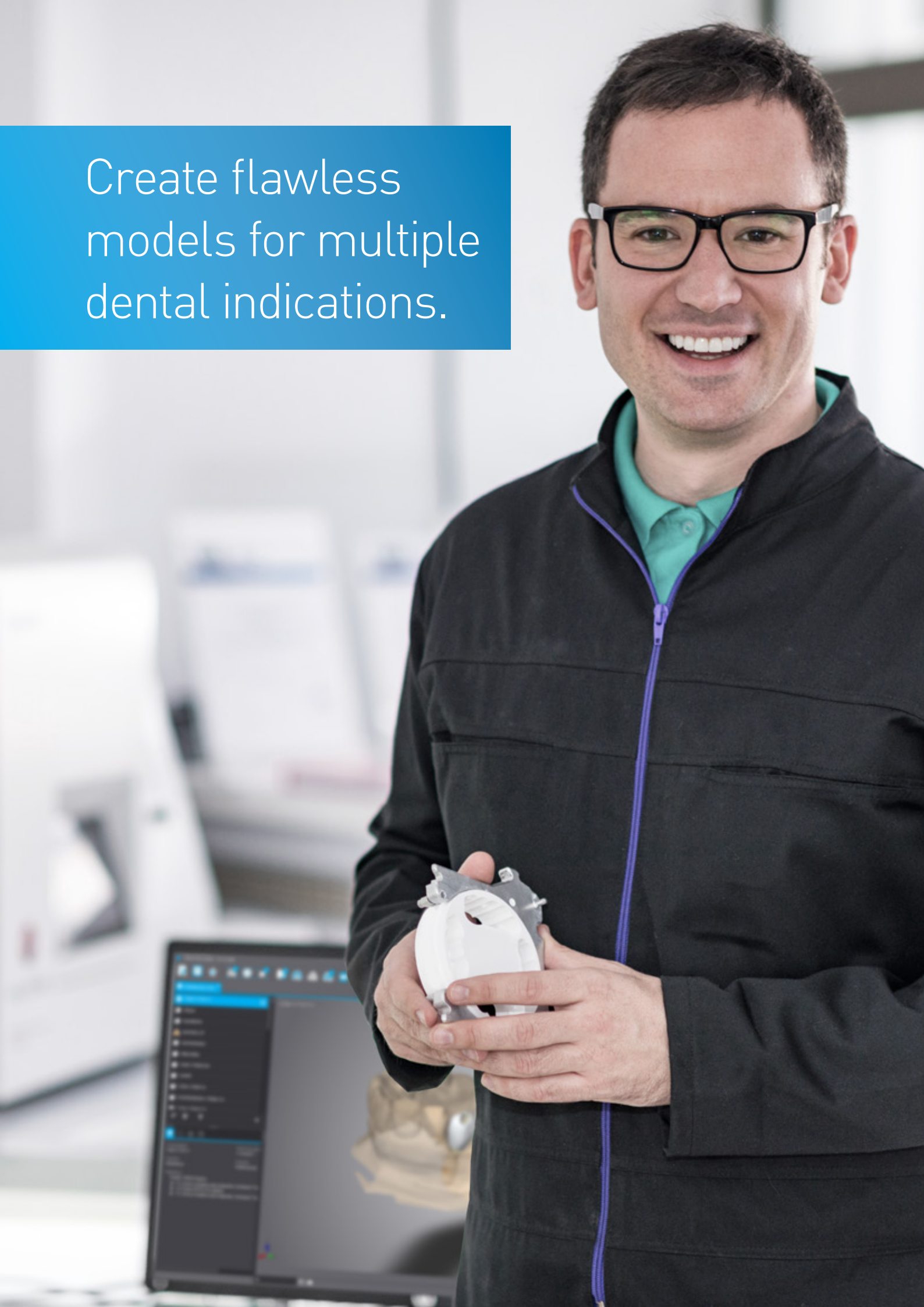
Comprehensive clinical information is treated within a knowledge-based design engine to deliver solutions that are produced with trusted materials and manufacturing technologies.

Open access

DWOS is accessible to all systems that support common and unrestricted data file formats. Input devices generating clinical information such as CBCT and intraoral scanners are easily integrated into DWOS.



Create flawless
models for multiple
dental indications.

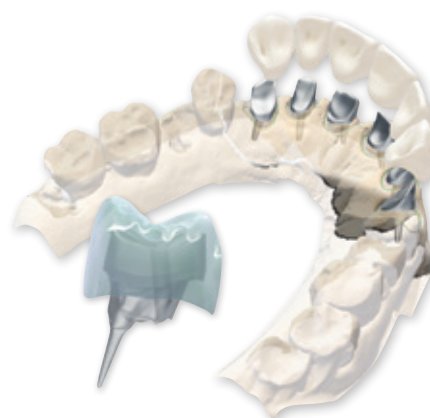


DWOS Crown & Bridge

Included in Productivity and Synergy packs.

The foundation of prosthetic design within DWOS with extensive capabilities that provide both very simple and efficient workflows.

- ▶ Full contour crowns & bridges
- ▶ Copings and bridge frameworks
- ▶ Anatomical telescopes
- ▶ Hollow pontics
- ▶ Attachments
- ▶ Single custom abutment
- ▶ Virtual wax-up
- ▶ Design of telescopic crown (parallel axis groups)
- ▶ Inlays, onlays and veneers
- ▶ Post & core
- ▶ Milling with attachments
- ▶ Telescopic bridge
- ▶ Overpressed crowns & bridges
- ▶ Shell temporary bridge
- ▶ Abutment wedge
- ▶ Mirror anatomy
- ▶ ¾ Crown with retention beads
- ▶ Virtual articulator
- ▶ Diagnostic
- ▶ Several anatomy libraries available on website
- ▶ Milling area zone
- ▶ Multi-die plate
- ▶ 16-unit bridge



Post & core

DWOS Implant Prosthetics

Included in Productivity and Synergy packs.

Manages the design of custom abutments, healing caps, implant bars, and full virtual wax-ups for screw-retained bars & bridges, while giving access to a wide range of implant systems.

- ▶ Superstructure
- ▶ Implant bridge with gingiva
- ▶ Bar with wax-up
- ▶ Implant bar
- ▶ Healing screw
- ▶ Implant screw bridge
- ▶ Scan the Tibase for implantology



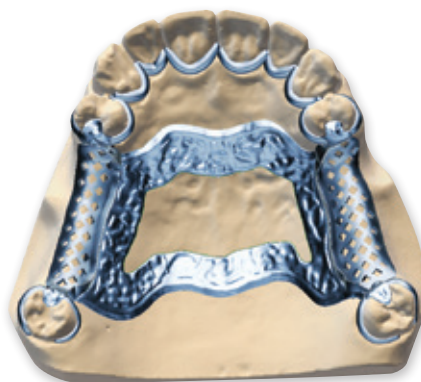
Implant bridge with gingiva

DWOS Partial Frameworks

Included in **Productivity and Synergy packs**.

Offers intuitive tools that design highly accurate frameworks for partial dentures in just a few minutes, for significant savings in time and materials.

- ▶ Combined order (Telescopic crown)
- ▶ Upper and lower arch frameworks
- ▶ Definition of the insertion axis
- ▶ Automatic undercut detection
- ▶ New feature now only for clasps

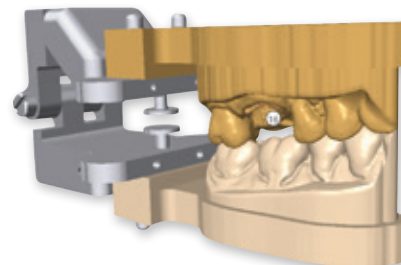


Upper arch framework

DWOS Model Builder

Included in **Productivity and Synergy packs**.

Replaces the manual model-making process with the equivalent digital creation to create precise models and consistent results efficiently and economically.



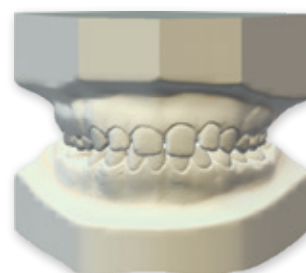
Upper and lower arch frameworks

DWOS Orthodontic Archiving

Included in **Synergy pack**.

Allows the design of virtual orthodontic study models for digital archiving and digital manufacturing.

- ▶ Parameters of the model
- ▶ Study model
- ▶ Orthodontic archiving



Study model

DWOS Full Dentures

Included in Synergy pack.

Provides an easy and efficient way to digitally address edentulous cases with functional tooth set-up and esthetic gingiva proposal.

- ▶ Teeth library
- ▶ Positioning of the teeth



Full denture

DWOS Bite Splints

Included in Synergy pack.

Designs protectors and mouth guards of various kinds.

- ▶ Flattening of the bite splint
- ▶ Occlusion with the virtual articulator



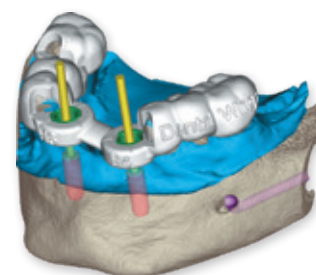
Bite splint

coDiagnostiX™

Included in Synergy pack.

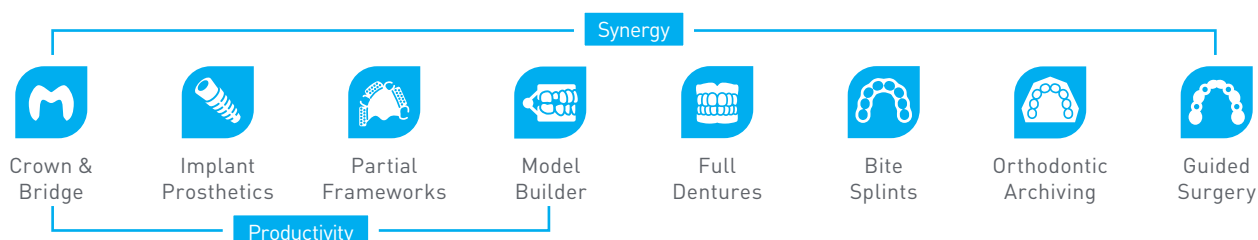
Covers implant planning and design of surgical drill guides, helping dental professionals provide safe and predictable results while increasing efficiency and productivity.

- ▶ Implant planning
- ▶ CAD
- ▶ Drill guide design

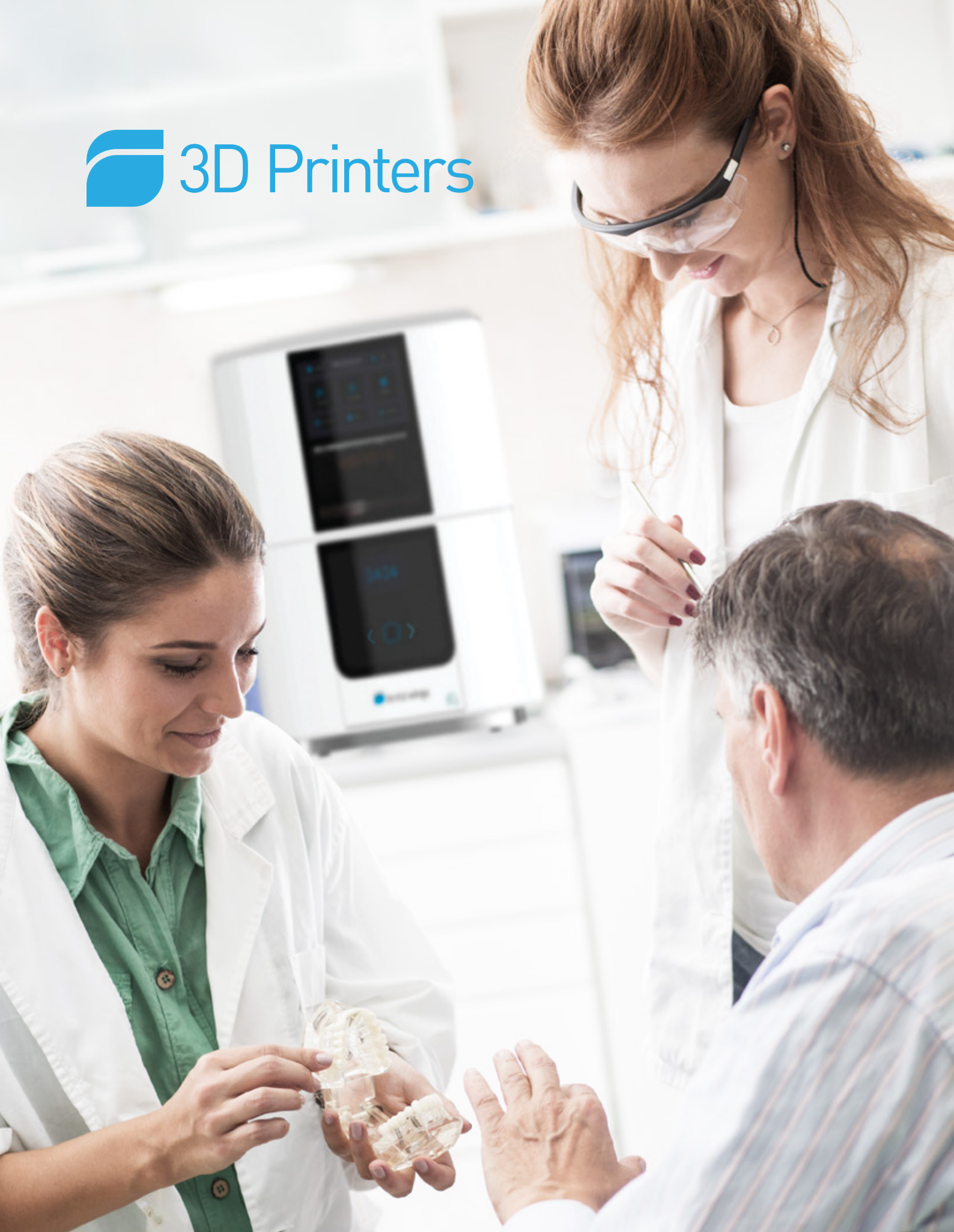


Implant planning

Choose between two DWOS packs: **Synergy** and **Productivity**



3D Printers



Powerful and professional 3D printing solutions

Introduced in partnership with RapidShape® Dental and SHERA® Werkstoff-Technologie, the high-precision and aesthetic products produced by the D30 and D40 printers are made from certified biocompatible materials to cover a wide range of applications while saving costs due to reduced material waste.

Available in two models to cover a lab's specific indication and productivity needs, from producing a few drill guides to round-the-clock production of models in a high-volume lab.

Seamless integration between products

Integrated with other Dental Wings products for complete end-to-end solutions, the 3D printers are also open to third-party design software and materials.



Ease of use thanks to resin handling system and control features.



Certified auto calibration sensor.




Highly-esthetic prints with pure color and transparency based on professional UV LED.



Fastest printed speed makes chairside treatment and short lag response possible.



Ultra compact design.

A close-up photograph of two women smiling and looking upwards. The woman in the foreground is older, with dark hair and visible wrinkles, showing her teeth. The woman behind her is younger, also smiling. The background is a soft-focus green, suggesting an outdoor setting.

Meet and exceed
patient needs
with fast, esthetic
restorations.

All-around versatility



Bite splints



Surgical guides



Stump or implant models/Gingiva masks



Casts and partials



Impression trays



Ortho models



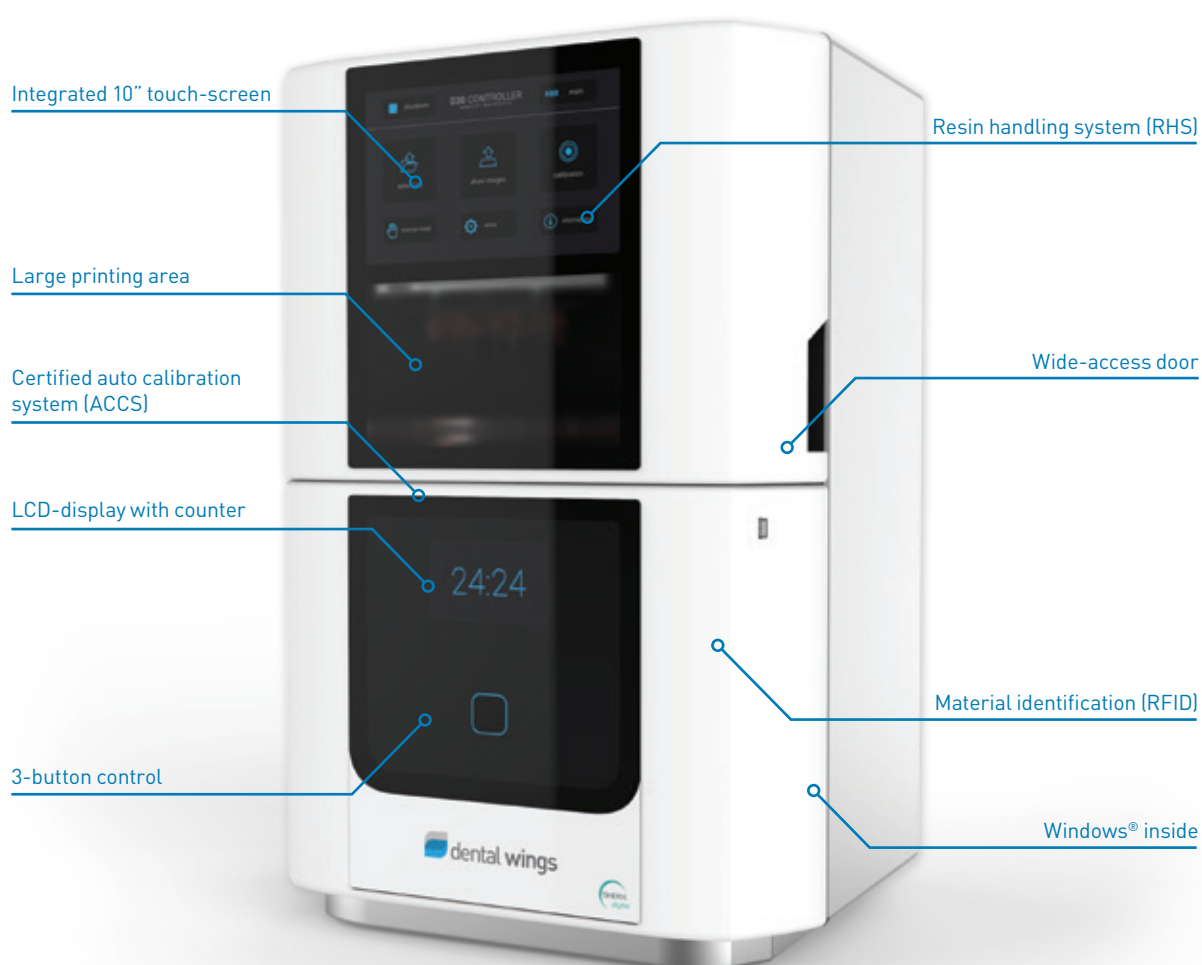
Temporary crowns & bridges

Applications	Printing time (approx.)
Casts and partials	50 min.
Stump or implant models	45 min.
Gingiva masks	15 min.
Surgical guides	16 min.
Temporary crowns & bridges	18 min.
Impression trays	60 min.
Ortho models	60 min.
Bite splints	60 min.

All printing times are based on jobs done on a printer equipped with force feedback system.

D30 & D40

3D Printers



Performance parameters	D30	D40
Building area	130 x 75 mm (5.1 x 3")	(2x) 130 x 75 mm (5.1 x 3") (dual projection unit)
Native pixel	+/- 34 µm	+/- 34 µm
Max. part height	110 mm (4.3")	110 mm (4.3")
Light source	385 nm UV LED	385 nm UV LED
Resolution	HD 1920 x 1080 px	Dual HD 1920 x 1080 px
Dimensions (W x H x D)	480 x 690 x 410 mm (13.2 x 21.3 x 13.7")	480 x 690 x 410 mm (13.2 x 21.3 x 13.7")
Control	7" LCD-display, 3-button control	7" LCD-display, 3-button control



Certified material partner

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

SHERAprint® available from Dental Wings.



Dental Wings Inc.
2251, av Letourneux
Montréal (QC) H1V 2N9
Canada

Dental Wings, DWOS and
coDiagnostiX are trademarks
or registered trademarks of
Dental Wings Inc. PI0318.vE2

© 2018 Dental Wings Inc.

T 514 807.8485 | 1 888 856.6997 (toll free in U.S. & Canada)
E info@dentalwings.com
W dentalwings.com/brochures