Digital Solutions
for Dentists

dental wings
A Straumann Group Brand

Helping dentists 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. With the right technology we can achieve this and make dentistry predictable and seamless.

Virtuo VIVO™ intraoral scanner
pages 3-9

DWOS Chairside
Design Software, pages 10-16

coDiagnostiX™
Implant Planning Software, pages 17-23

3D Printer
D20, pages 24-29

VIRTUOVIVO™

Intraoral Scanner

Create lasting impressions.

dental wings

Digital workflow solutions that take your scans even further.

With Virtuo Vivo™, accurate, full arch, and powder-less scanning is just the beginning of your digital journey.

Chairside Design & Production

Transfer your scan file for chairside design of the restoration with Dental Wings DWOS Chairside design software, or with a third-party software.

Benefit from a streamlined connection with the Straumann® CARES® C series chairside mill.

- Scan patient with Virtuo Vivo™.
- Discuss treatment with your patient.
- Transfer scan file via DWOS Connect for chairside design of virtual model with DWOS Chairside.
- Produce restoration with the Straumann® CARES® C series mill, or with other mill integrated with DWOS Chairside.

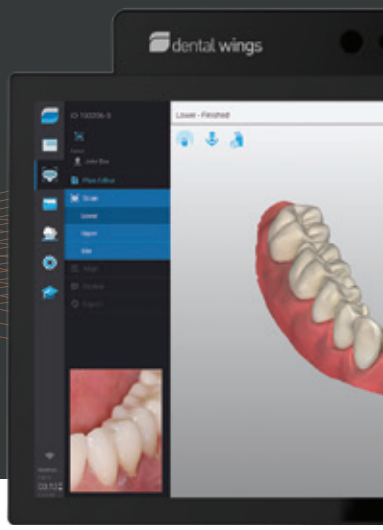
New laptop solution!

Outsourcing to Lab

With open STL files, you can send digital impression data directly to a lab for design and manufacturing, via Dental Wings DWOS Connect, or other export method.

- Scan patient with Virtuo Vivo™.
- Transfer file via DWOS Connect, or send to a third-party system via email or dropbox.

Real color scanning & increased field and depth of view.



Surgical Planning & Production

Send digital impression data directly from Virtuo Vivo™ to Dental Wings coDiagnostiX for seamless planning and design of surgical guides.

coDiagnostiX implant plannnig software offers a groundbreaking guided surgery workflow that integrates both surgical design and fabrication.

- Scan patient with Virtuo Vivo™.
- Import file to coDiagnostiX to determine the optimal implant position, and to design the surgical guide.
- Produce the guide with the Dental Wings D10+ 3D printer.

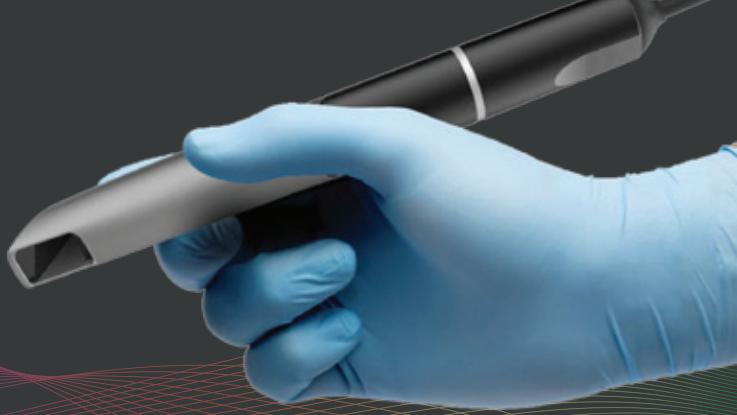
Orthodontics

Virtuo Vivo™ provides a direct connection with ClearCorrect™ clear aligner provider for orthodontic treatment. Clear aligners are removable, comfortable, effective and nearly invisible, and an increasing number of patients are opting for this solution.

- Scan patient with Virtuo Vivo™.
- Discuss treatment with your patient.
- Connect to ClearConnect™ clear aligner provider.

Replace traditional and unpleasant dental impressions with highly-accurate digital data.

With Virtuo Vivo™, acquire digital impression data quickly and easily.



Ease of Handling with a Remarkably Small Handpiece

Resembling a standard dental tool, the compact and lightweight (213 g/ 7.5 oz) handpiece is one of the lightest and smallest on the market, and ergonimically designed to provide a pen-like grip. It also offers unparalleled patient comfort and allows you to assume a natural position relative to the patient when scanning.

The handpiece features removable sleeves that can withstand up to 250 sterilization cycles in an autoclave. The easy interchangeability of the tips eliminates patient turnover time.

Real-time Digital Results

A **luminescent ring** on the handpiece and audible signals indicate when scan data has been successfully captured. Data quality can be validated in real time as the software creates the 3D model, and data can be sent immediately to an external service provider.

Unsurpassed Scanning Access in Real Color

Multiscan Imaging™ captures data from all angles simultaneously. 3D scanning technology, packs the power of five miniaturized 3D scanners into one of the smallest hand-held intraoral scanners available. Teeth and soft tissue are scanned from multiple orientations simultaneously, capturing difficult-to-see areas with minimal effort.

Gesture & Voice Control

Integrated motion technology allows touch-free manipulation of the screen imagery while wearing gloves. Using voice-control* prevents cross-contamination while performing the scan, and you don't ever move your hands away from your patient or handpiece. Use the air mouse feature to enable movement of the screen based on the tilt of the handpiece.

Patient-focused Design

Unpleasant and time-consuming conventional tray impressions are eliminated, allowing more time to discuss results and treatment options with your patient in realtime, and accelerate treatment.

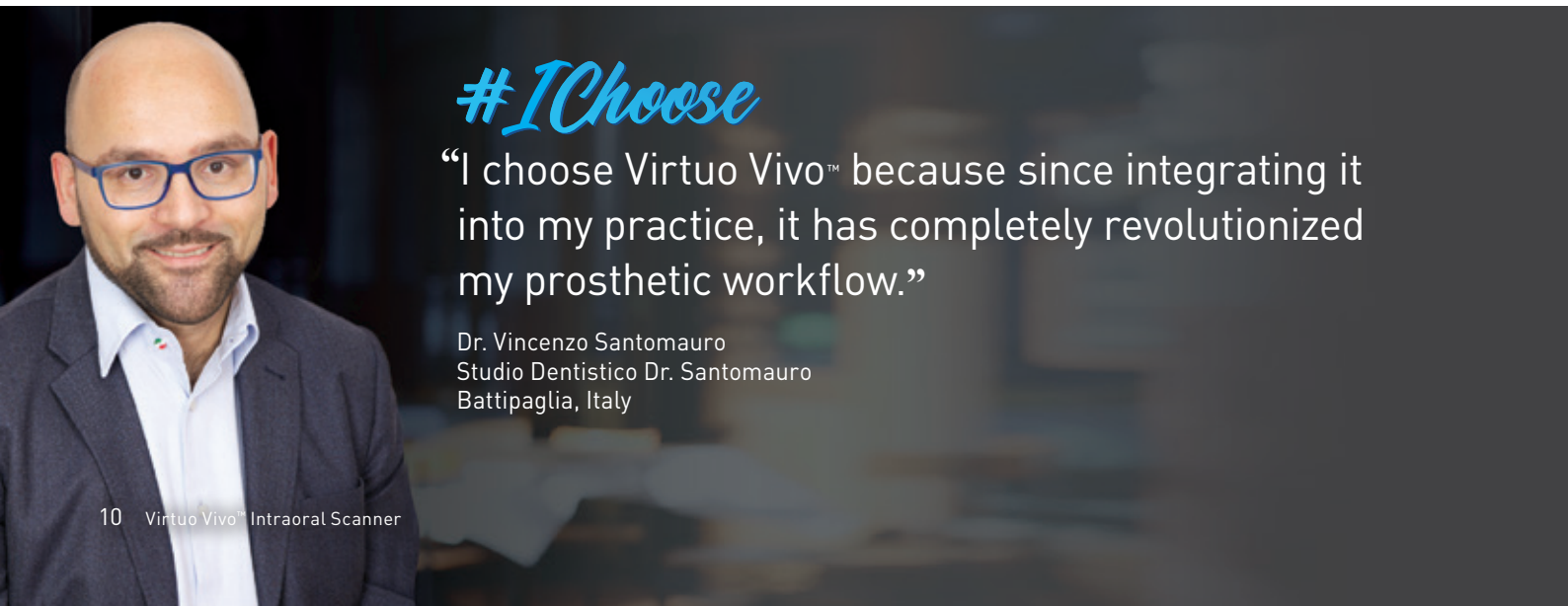
*Available with the cart version only.

DWOS Connect

Connecting dental professionals around the globe.

With a few clicks, you can share information with any member of the dental practice team to digitally send intraoral or impression scans to the laboratory of choice, and tracking tools will provide information on the status of the case.

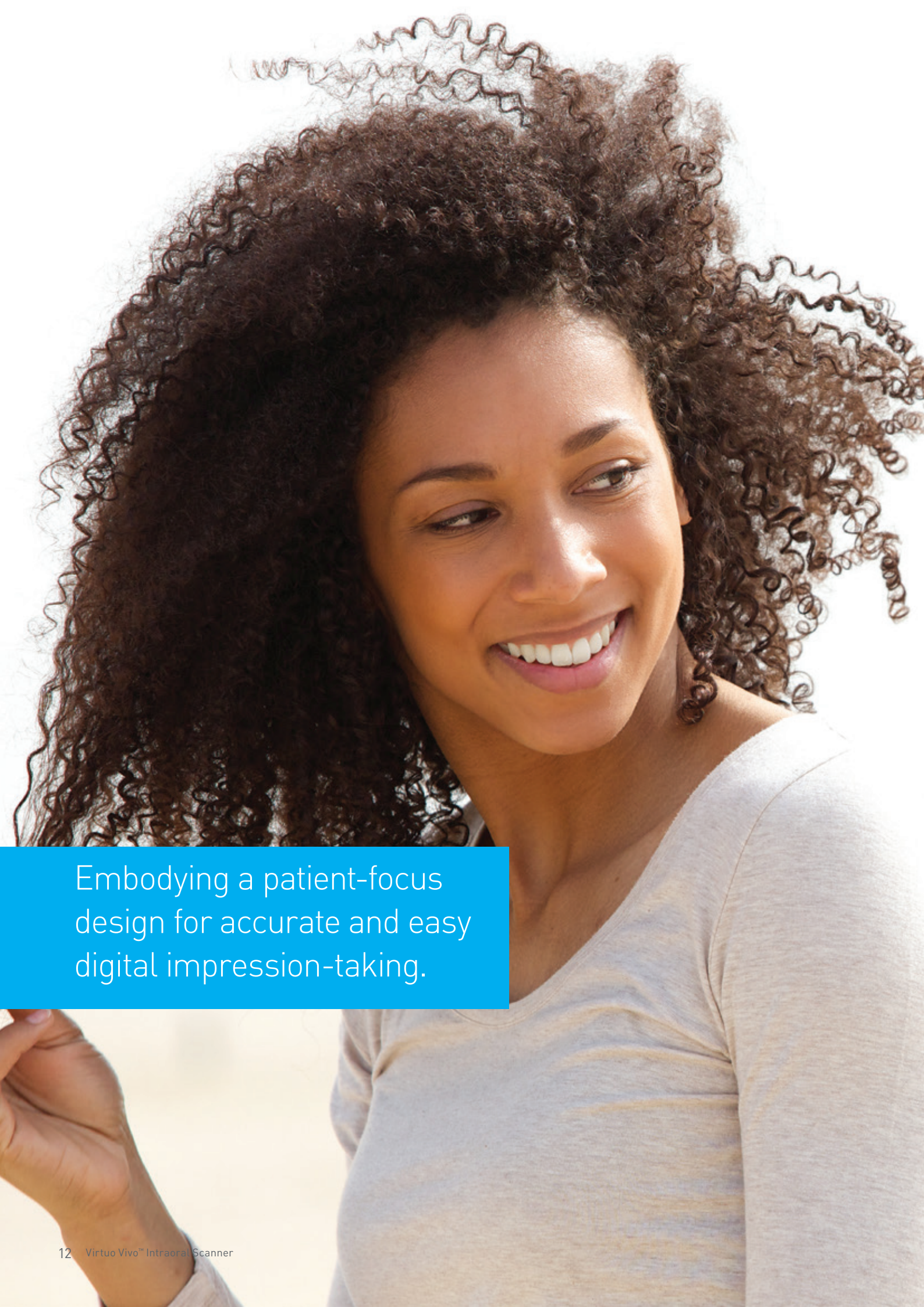
Output files can include case details, 3D scans, design files, invoices, and more.



#IChoose

"I choose Virtuo Vivo™ because since integrating it into my practice, it has completely revolutionized my prosthetic workflow."

Dr. Vincenzo Santomauro
Studio Dentistico Dr. Santomauro
Battipaglia, Italy



Embodying a patient-focus design for accurate and easy digital impression-taking.

Dental Wings can help you every step of the way on your digital journey.

Software Updates

New features and improvements are added frequently and communicated in a timely manner to all users of Virtuo Vivo™ to promote a continued and optimized experience.

Contact your local Dental Wings distributor for more information about Virtuo Vivo™ or to schedule a live demo.

DWOS Chairside

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Facilitating better outcomes for patients

The benefits of chairside solutions for your patients are significant. Eliminating the need for impression-taking removes a source of discomfort for the patient, and the restoration could be ready in one appointment with no follow-up visit required.

The restoration software reduces the potential for error and is user-friendly, so you and other members of your team can control each aspect of the design.

The complete in-office solution

Using the latest innovative technology within an optimized user interface, the special design tools of DWOS Chairside facilitate the design of highly-esthetic restorations, including 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 plus milling machine, to create a complete in-office solution.

SCAN

Eliminate the unpleasant tray impression process for your patient with the small hand-held scanner handpiece.

DESIGN

Quickly design an accurate restoration proposal with the user-friendly interface.

MILL

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

Seamless integration between products

- Direct integration from Virtuo VIVO Intraoral Scanner to DWOS Chairside.
- Exchange of case details between DWOS Chairside and Virtuo VIVO Intraoral Scanner: scan data, materials, shade, and implant.

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.

Supporting a wide range of indications

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

Open system

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

Direct full-case transfer from the Virtuo VIVO Intraoral Scanner to the Chairside software.

Clinical definition

Order revision

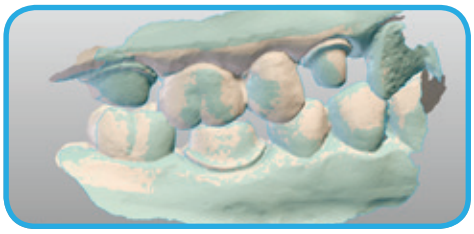
Review and edit scans from the Virtuo VIVO Intraoral Scanner, iSeries impression scanner and other open intraoral devices. Optimize surfaces to obtain the optimal workflow.

Assignation

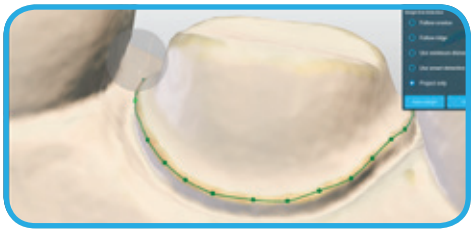
Quickly assign the preparation of the cases to detect any implants and fill technical data required by tooth-chain technology.

Margin

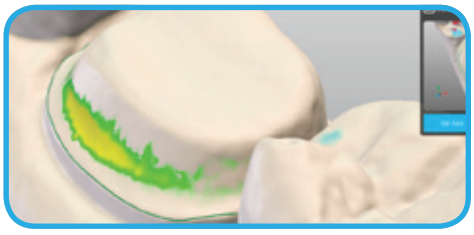
Automatic margin proposal on all elements type. Easily modify the margin and insertion access to obtain the best fit possible.



Verify alignment result.



Clip profile and highlight of the margin.



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

Design & nesting

Automated proposals

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.

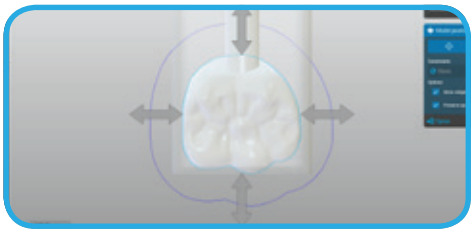
Nesting & machining

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.

Morphological area deformation.



Optimize blank position.

A complete in-house workflow that allows for more time for communication and patient care.

iSERIES

Impression Scanner

Transition to digital dentistry without changing your familiar impression-taking protocol

A complement to the Dental Wings full range of chairside solutions, the iSeries simplifies access to restorative opportunities that are usually associated with intraoral scanning.

Accessories included:

- An integrated on-board computer with 64-bit processor
- Impression holder
- Calibration kit

Optional modules

- Crown & Bridge
- Implant Prosthetics
- Partial Frameworks
- Model Builder
- Full Dentures
- Bite Splints
- Orthodontic Archiving
- Guided Surgery

Technical specifications	iSeries
Scanning volume	90 x 90 x 90 mm (3.54 x 3.54 x 3.54")
Optical technology	Class 1 laser product, 2 high-speed measuring cameras, 1 color video camera
Number of axes	5 (4 rotative, 1 linear)
Embedded computer & OS	Core i5, 16 GB memory, 2 GB of dedicated RAM graphic card, Windows 7, 64 bits
Accuracy[1]	15 microns
Output format	STL & supported partner formats
Scannable materials	Impression materials and plaster (for solid models)

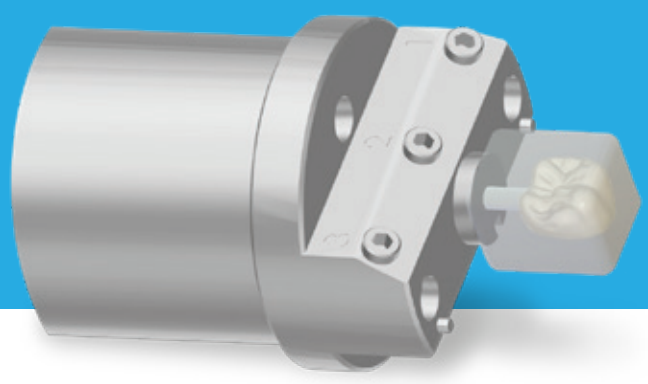
[1] Based on Dental Wings testing standards.

Integration with milling machines

Closing the loop for a complete and streamlined chairside workflow, from scan to design to mill, the Dental Wings Chairside CAD/CAM software solution offers intuitive **CAM computation**. This means that no other intermediate interface is required before milling of the restorations.

The software accepts impression data from other open intraoral scanners in STL, OBJ or PLY formats. Milling output data is compatible with the most popular open chairside milling machines.

Impression data from the Virtuo VIVO Intraoral Scanner is seamlessly transmitted to your in-office system for immediate prosthetic design and milling.



coDiagnostiX®

Implant Planning Software

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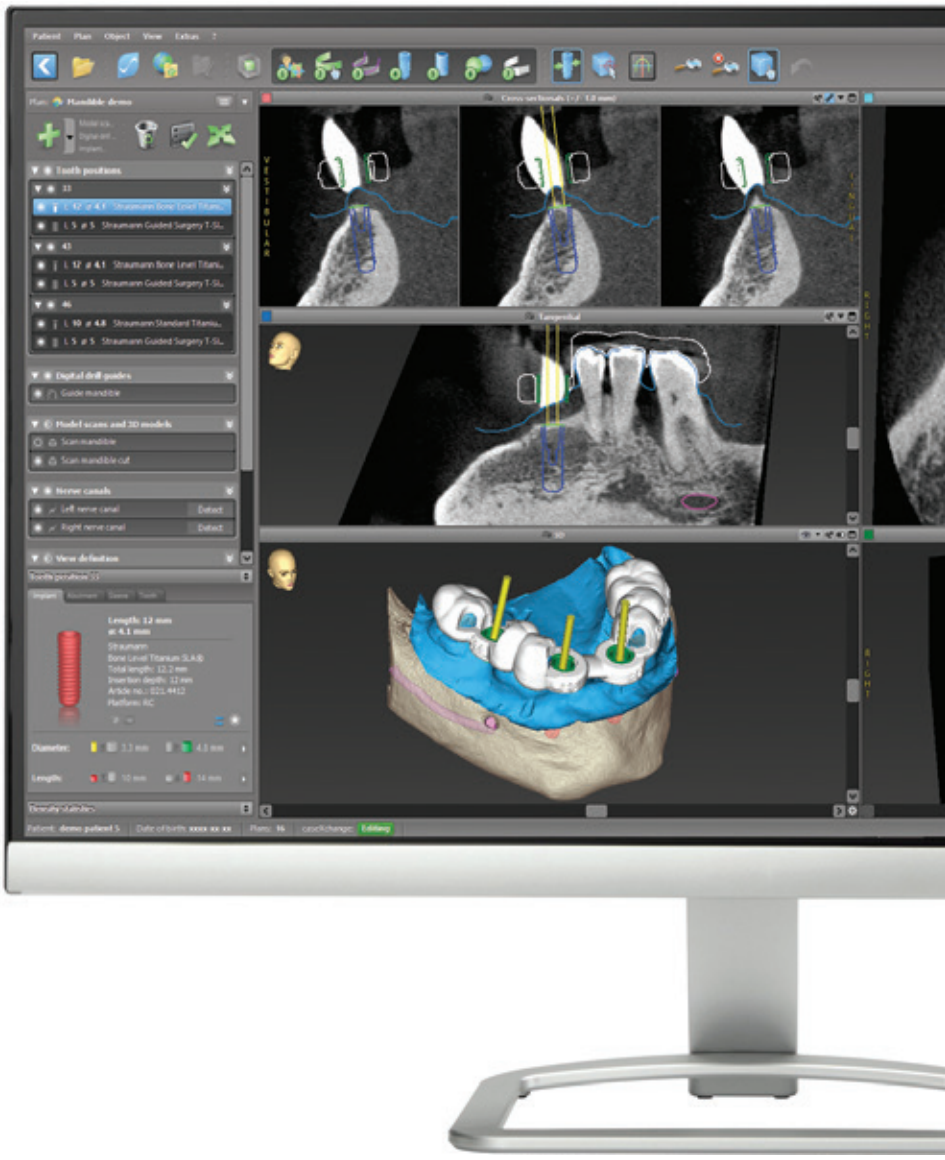
Predictable
Reliable
Consistent

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 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.

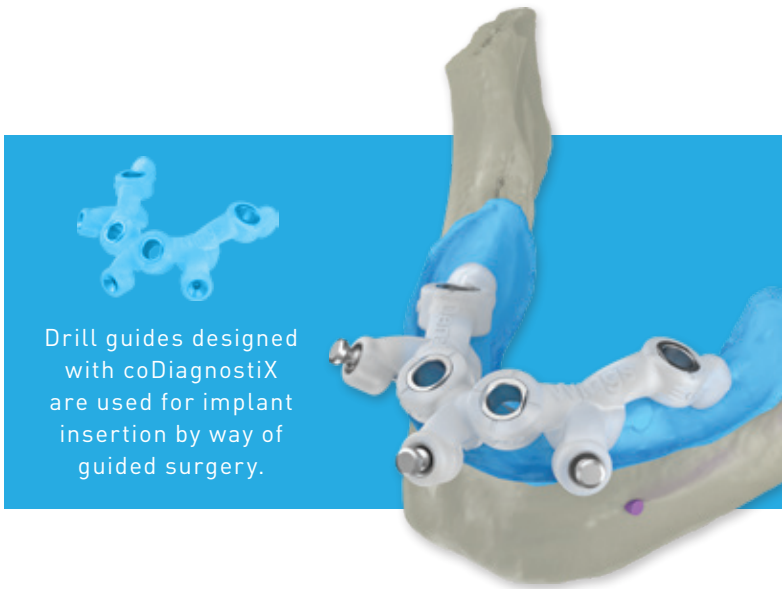
Supports a dual-scan workflow.

Includes workflows for edentulous cases.

Open system

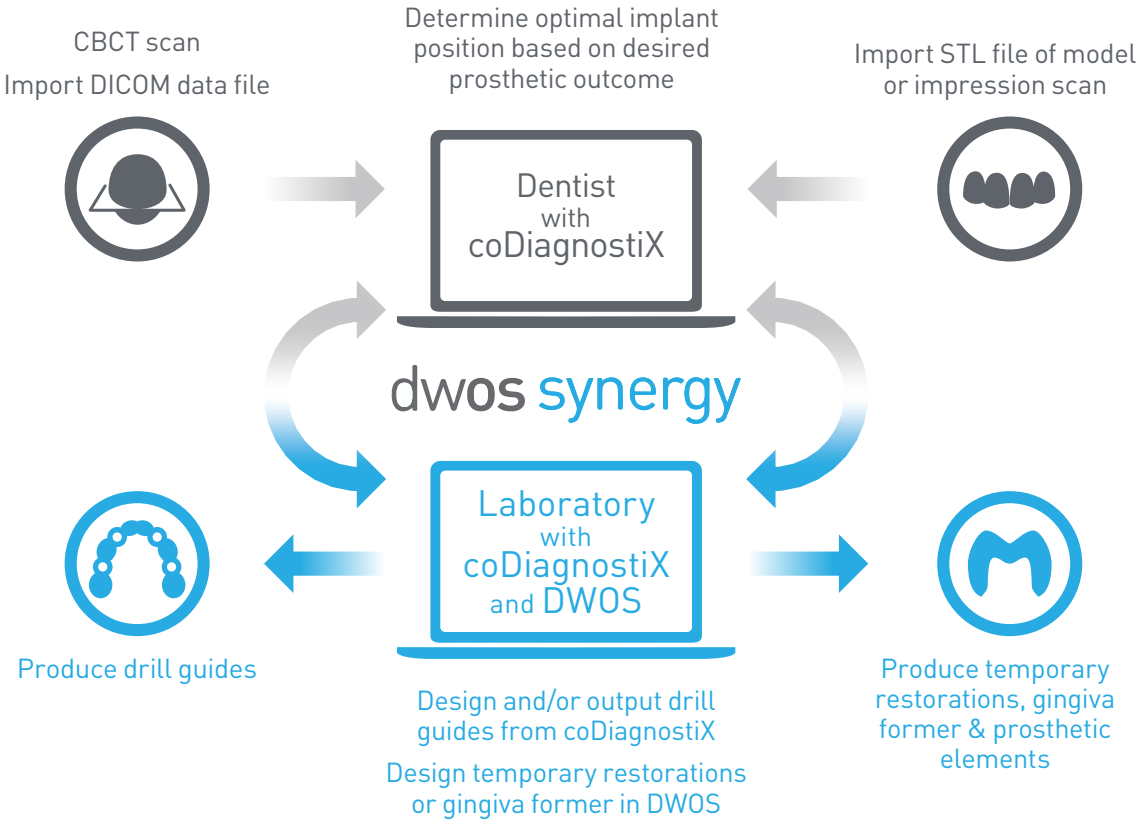
coDiagnostiX features an open architecture with interfaces that ensure compatibility with all CBCT, intraoral, model, and impression scanners, plus open CAD/CAM solutions.

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™

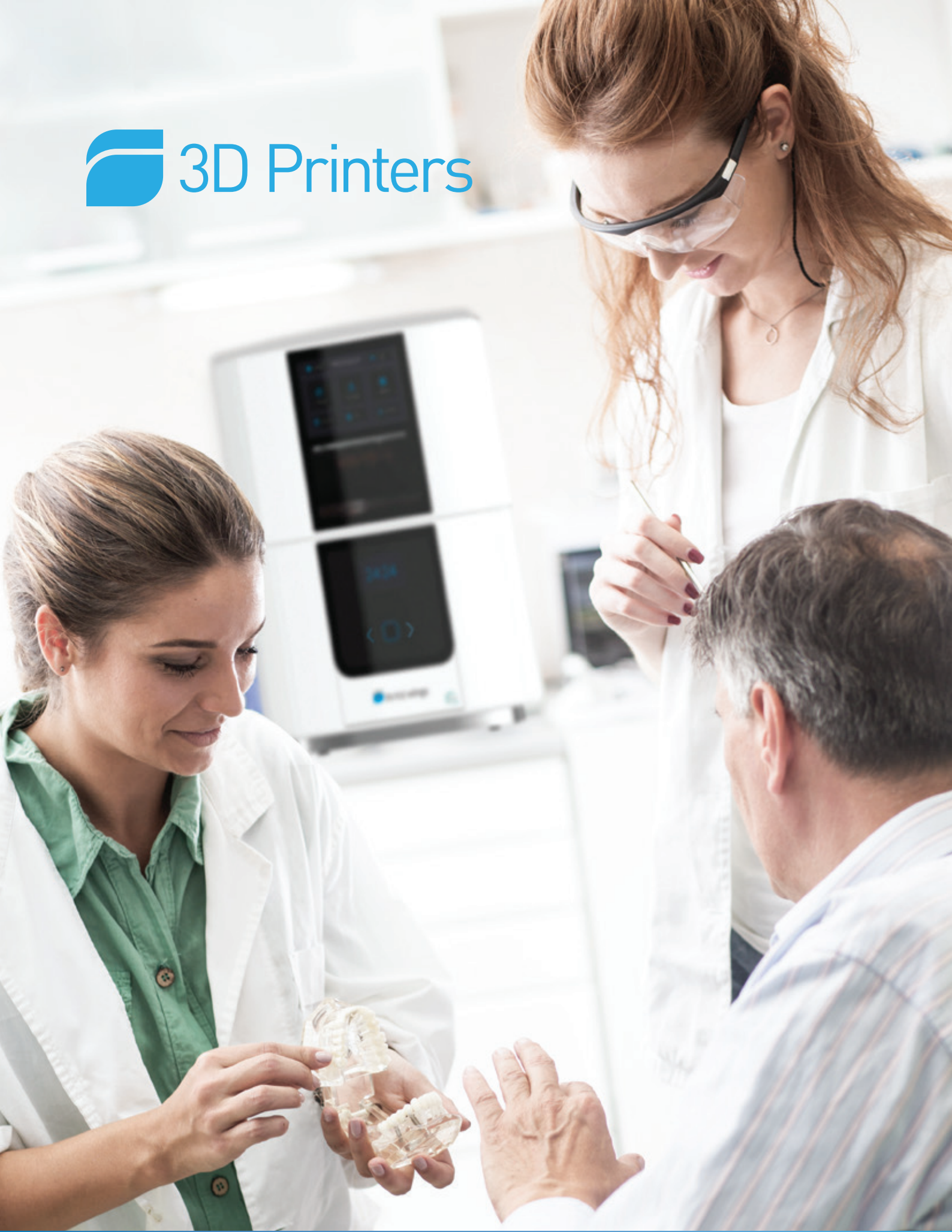
Interactive communications platform that allows collaboration among users

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.

3D Printers



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The compact solution for use in clinics and chairside

Developed specifically to generate optimal results quickly, the short production time of the 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 you 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

Seamless integration between products

Integrated with other Dental Wings products for complete end-to-end solutions, the D20 printer is also open to third-party design software and materials.

Features:

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.

Meet and exceed patient needs with fast, esthetic restorations.

All-around versatility

Bite splints

Casts and partials

Impression trays

Ortho models

Stump or implant models/Gingiva masks

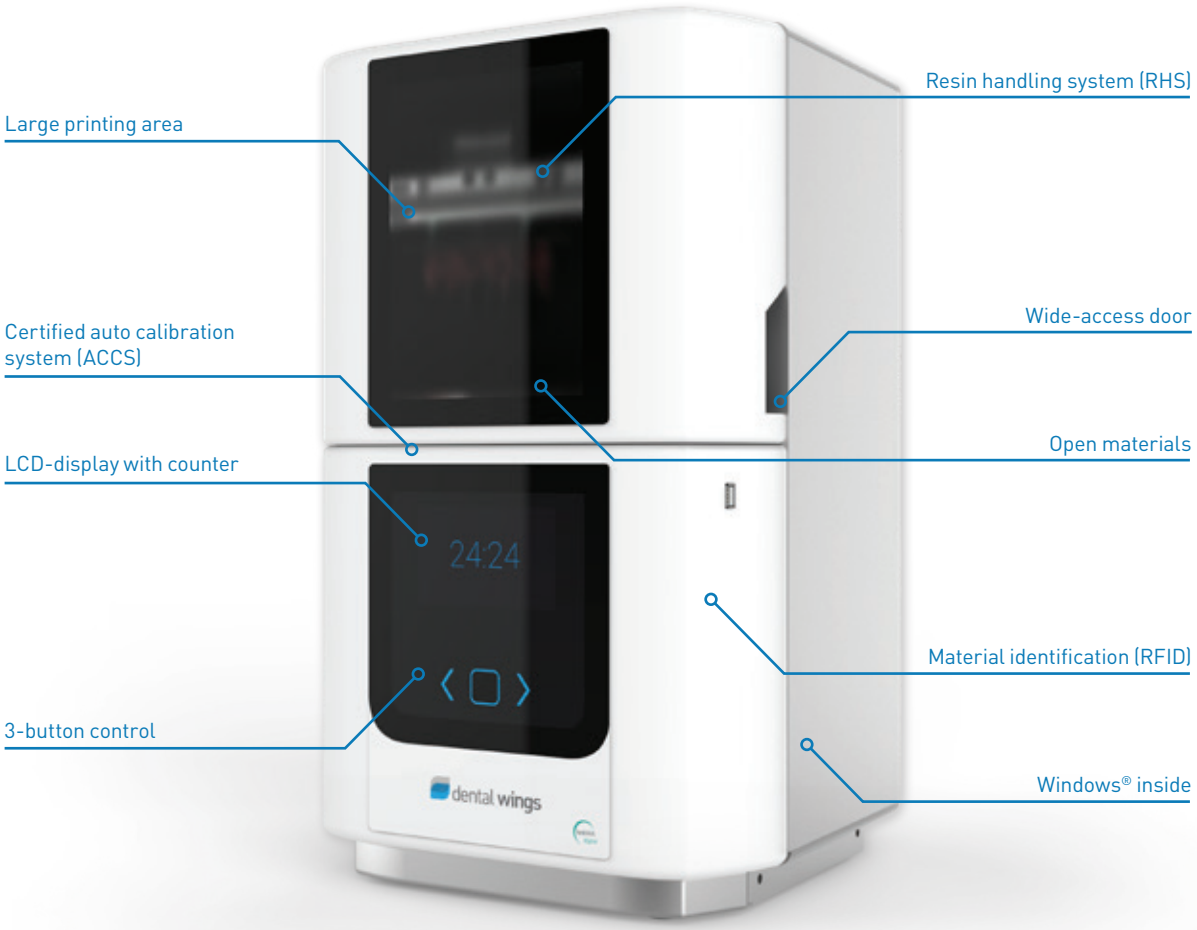
Surgical guides

Temporary crowns & bridges

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

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

D20
3D Printer



Performance parameters	D20
Building area	130 x 75 mm (5.1 x 2.9")
Native pixel	+/- 34 um
Max. part height	90 mm (3.5")
Light source	385 nm UV LED
Resolution	HD 1920 x 1080 px
Dimensions (W x H x D)	335 x 541 x 349 mm (13.2 x 21.3 x 13.7")
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.

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