

# The future of dentistry is digital. Discover it now.

Latest generation 3D printers and materials  
for dental clinics and laboratories.





DWS is an Italian company that designs and manufactures systems for 3D printing, together with specific software and materials for professional use by dentists and dental technicians. DWS develops processes to help dental offices and laboratories undertake or complete digitization, effectively deploying resources, reducing costs and increasing competitiveness.

DWS hold ISO 9001:2015 and ISO 13485:2016 certification, which attests to its compliance with all regulatory and quality requirements in the medical device industry.

### **MISSION**

Our mission at DWS is to develop 3D printers and materials to produce objects of the highest quality with unparalleled characteristics, facilitating the digital transition for companies wanting to innovate and become increasingly competitive on the market.

### **ABOUT US**

Quality and continuous innovation are the distinctive features of DWS. Since 2007, the company has filed more than 250 patents for industrial property, technology and design.

DWS exports 80% of its products to more than 60 countries around the world, helping to reducing time to market and lowering operating costs, while increasing competitiveness.

## TABLE OF CONTENTS

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### COMPANY

The company .....	1
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### DFAB TECHNOLOGY

DFAB technology .....	4
-----------------------	---

### WORKFLOW

Workflow .....	6
----------------	---

### DFAB/LFAB

DFAB Chairside .....	8
DFAB Desktop .....	10
LFAB .....	12

### DCURE

DCURE .....	14
-------------	----

### DFAB/LFAB MATERIALS

Materials and cartridges .....	16
DFAB technology/software .....	17
Irix Max .....	18
Irix Plus .....	20
Temporis .....	22

**PRINTERS**

XFAB 2500PD .....	26
XFAB 3500PD .....	27
029JL2/X/XC .....	28
XPRO S .....	29
XPRO Q .....	30

**POLYMERIZERS**

UV curing unit .....	31
----------------------	----

**XFAB, 029, XPRO SERIES MATERIALS**

Digital models .....	32
Models for thermoforming aligners .....	34
Surgical guides .....	36
Medical imaging .....	38
Castable resin and pressed ceramic prostheses .....	40
Castable partial frameworks .....	42
Trays .....	44
Gingival and soft tissue masks .....	45

**TECHNICAL SHEETS**

Printer data sheets .....	46
Material data sheets .....	50



# DFAB®

A revolution in the dental industry.  
Minimally invasive restorative technique on natural teeth  
and implants.

## Advantages

- Fabrication of permanent or temporary aesthetic anatomic crowns and crowns on implants, bridges, veneers and inlays in hybrid ceramic or composites in a single visit
- Excellent translucent aesthetic results thanks to the adaptive gradient (patented technology, dedicated NAUTA PHOTOSHADE software), which allows customization of the restoration
- TSLA patented technology enabling high-speed fabrication
- Highly viscous materials, from hybrid ceramics to future zirconium oxide-based materials
- Restoration accuracy (laser additive technology, i.e. no specific insertion axes) and better management of undercuts than with subtractive technology
- Low maintenance
- Safe cementing of materials in the patient's mouth with minimal contact surface preparation
- Unique properties of permanent dental restorations with the Irix series

## Features

- Intuitive, easy-to-use interface for the best user experience
- 65 types of disposable cartridges
- Connection to a single cloud architecture for complete traceability of operations, materials, and cartridges
- NAUTA PRO software (optional) to optimize the number of restorations per cartridge
- DFAB meets the requirements of Industry 4.0
- A functional, minimal, eye-catching design awarded "Best of the Best" at RedDot Award 2018

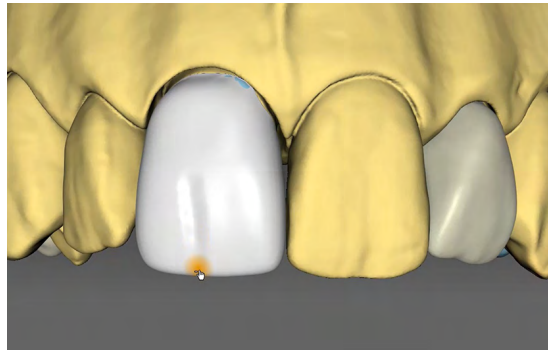
# DIGITAL WORKFLOW IN 10 SIMPLE STEPS

## Digital workflow for DFAB®.

DWS developed the technology for DFAB with the primary objective of reducing the time and steps necessary to create dental prostheses, while making the devices easy to control and within reach of operators who do not possess specific in-depth technical knowledge.



01 - Intraoral scan



02 - CAD modelling



03 - Gradient preparation



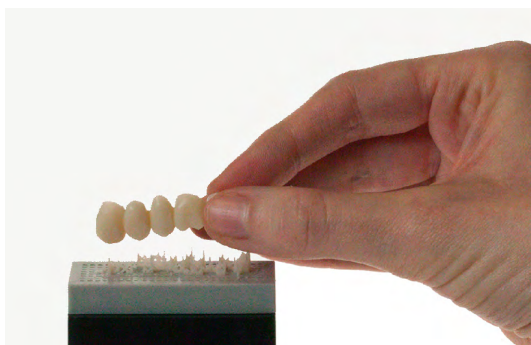
04 - Cartridge insertion



05 - Production



06 - Washing



07 - Support removal



08 - UV stabilization



09 - Finishing



10 - Restoration in the patient's mouth



## DFAB CHAIRSIDE

Conservative, Prosthetics, Implantology

# PHOTO SHADE

A TECHNOLOGY OF



DFAB®  
CHAIRSIDE



reddot award 2018  
best of the best

# DFAB<sup>®</sup> Chairside

Additive technology at your side  
for in-office restorations in a single visit.

**DFAB Chairside** is intended for dentists with an intraoral scanner and CAD design software, who work with minimally invasive conservative technique and produce at least 30 restorations per year. DFAB Chairside can produce permanent translucent anatomic and implant-supported crowns, bridges, inlays, and veneers in **hybrid ceramic** in just a few simple steps.

## Advantages

- Permanent hybrid ceramic restorations in a single visit
- Restoration precision and fit, process repeatability
- Produces bridges of up to 3 elements in less than 20 minutes
- Minimally invasive technology for natural teeth and implants
- Restoration may be customized during fabrication
- Disposable cartridges in 3 formats for safety, hygiene and a better user experience
- It is silent, does not produce dust and requires no maintenance, equipment or tool changes
- Ready for future zirconium oxide-based materials

## Features

- Compatible with all intraoral scanners and dental CAD/CAM systems
- Connection to the cloud to ensure material traceability
- Produces up to 10 individual units with the L cartridge
- All-in-one device with practical and intuitive user-friendly touch-screen controls
- High-speed additive manufacturing system (TSLA, Tilting Stereolithography) with software NAUTA PHOTOSHADE permits photo-reproduction of the natural tooth

PHOTOSHADE<sup>®</sup>  
ADAPTIVE GRADIENT

BUILT-IN PC  
TOUCH SCREEN

## DFAB DESKTOP

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Conservative, Prosthetics, Implantology

# PHOTO SHADE

A TECHNOLOGY OF



DFAB®  
DESKTOP



# DFAB<sup>®</sup> Desktop

## Compact tabletop version.

**DFAB Desktop** is DWS's 3D solution for dental offices, dental clinics with at least one intraoral scanner and CAD design software, and dental laboratories that produce at least 20 crowns per year.

### Advantages

- Permanent translucent hybrid ceramic restorations in a single visit
- Permanent composite restorations in a single visit
- Produces bridges of up to 3 elements in less than 20 minutes
- PHOTOSHADE technology: reproduction of tooth colour patterns, from incisal to cervical areas
- Ready for future zirconium oxide-based materials

### Features

- Connects to your computer and starts easily with proprietary NAUTA PHOTOSHADE software
- Quickly and repeatably produces dental prostheses, even translucent ones with a natural appearance
- Produces up to 10 individual units with the L cartridge
- Reduces the number of required steps compared to traditional methods
- All devices in the DFAB family are connected to a single cloud architecture, allowing for absolute traceability of the interventions and cartridge materials

PHOTOSHADE<sup>®</sup>  
ADAPTIVE GRADIENT

COMPACT FORMAT  
TABLETOP

LFAB

Conservative, Prosthetics, Implantology



LFAB®

# LFAB®

## Entry level monochrome tabletop version.

With an excellent quality/price ratio, **LFAB** is aimed at dental laboratories, offices and clinics already working with an intraoral scanner and CAD design software, with a production of at least 50 crowns per year.

### Advantages

- Permanent restorations, even translucent monochrome ones, in less than 20 minutes
- Complete range of restorative materials, including hybrid ceramic and hybrid composites
- Disposable monochrome cartridges
- Ideal for quickly producing permanent elements for further customization
- Ready for future zirconium oxide-based materials

### Features

- LFAB produces monochrome dental restorations in less than 20 minutes
- It has a safe material handling system with easy-to-use disposable cartridges
- Quickly and repeatably produces dental prostheses
- Produces up to 10 individual units with the L cartridge
- Reduces the number of required steps compared to traditional methods
- Ideally combined with XFAB 2500PD for studying, designing, and fabricating dental models, surgical guides, and more

**TONALITY**  
**MONOCHROME, FOR EXAMPLE**  
**A1, A2, A3, A3.5, B1, N**

**PRECISION**  
**PRINTING**

## PHOTOPOLYMERIZATION

For DFAB Chairside, DFAB Desktop and LFAB



### TECHNICAL SHEET

	<b>DCURE®</b>
Ventilation	Internal forced ventilation
User commands	Button with coloured light Preset polymerization programs Open door safety feature
Polymerization area dimensions	Ø 70 mm x 40 mm
Machine size	150 mm x 150 mm x 153 mm
Weight	2.2 kg
Power consumption	60 W
Input voltage	24 VDC with external power supply included 110-240 VAC, 50-60 Hz

Technical specifications subject to change without notice.

# DCURE<sup>®</sup>

Photopolymerization unit combining UV light and heat for post-treatment of the restoration.

**DCURE** is a post-treatment device using **hybrid technology** designed for curing Irix Max, Irix Plus and Temporis materials. The evenly distributed UV light and heat inside the polymerization chamber ensure that objects are hardened perfectly while preserving their appearance.

## Advantages

- Optimal curing of Irix and Temporis materials
- Compact, ergonomic design
- UV and heat treatment in single device
- Easy to use and maintain

## Features

- 7-minute fully automatic stabilization cycle
- Treatment program operated with the simple click of a button. Program can be updated via USB
- Restoration placed in a Pyrex glass container that can be easily washed and sterilized
- Timed settings
- Door opens automatically at the end of the cycle
- The DCURE device is recommended for restorations produced with DFAB Chairside, DFAB Desktop and LFAB printers



# MATERIALS AND CARTRIDGES

An extended range of materials  
in convenient disposable cartridges.

DWS offers the **widest range of materials in the industry**, in **65 types of innovative disposable cartridges** for unprecedented flexibility and a better user experience.

- Certified materials designed for permanent restorations made of **hybrid ceramic** and **hybrid composites**
- Disposable monochrome cartridges in "S" (1-2 elements), "M" (3-4 elements), and "L" (5-6 elements) sizes
- Disposable Photoshade cartridges in "S" (1-2 elements), "M" (3-4 elements), and "L" (5-6 elements) sizes
- Great ergonomics and simple management
- No maintenance or cleaning of the printing area

Restorations can be customized with biocompatible composites and/or supercolors.

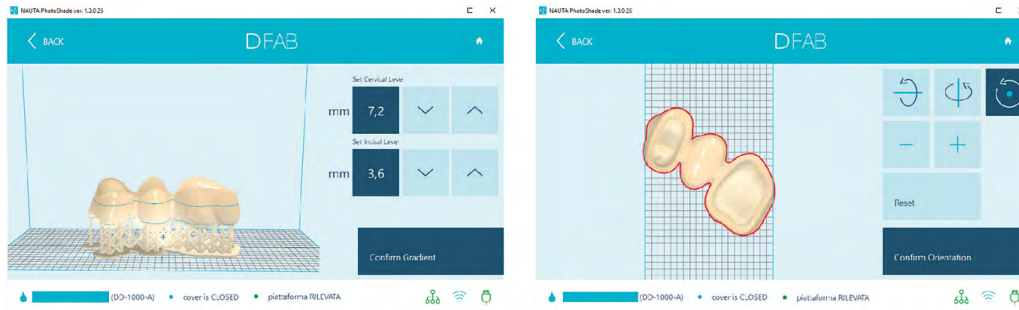
With the NAUTA Pro software (optional), multiple files can be positioned on the virtual printing platform, optimizing cartridge's material consumption.



# PHOTOSHADE<sup>®</sup>, AUTOMATED AESTHETICS

Beyond the limit of multilayer restorations.

**PHOTOSHADE**, the system used in DFAB, reproduces the specific colour of patient's teeth in terms of pigmentation and shading, giving the prosthesis an aesthetically realistic appearance. The operator selects the extremes of the required shade by using colour codes, for example, from A1 to A3.5, along with the **exact position and width of the gradient** meant in the custom restoration. This process makes the DFAB method unique. The software handles undercuts in the best possible way, since there are no specific insertion axes as with CAD/CAM milling systems.



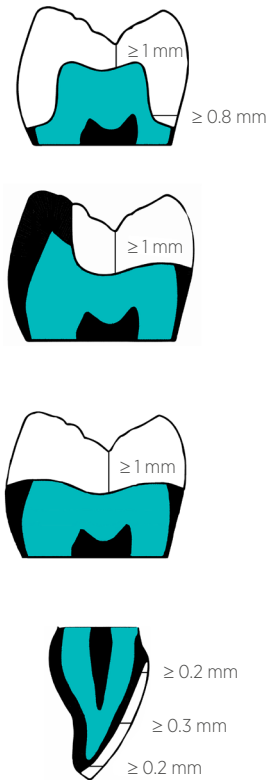
NAUTA PHOTOSHADE presents **the restoration preview in real time**. It sends the file to the printer and uses TSLA (Tilting Stereolithography) technology to produce the most realistic result possible in less than 20 minutes. This technology, protected by more than 120 patents, creates a continuous flow of material and enables the use of highly viscous materials such as ceramic.

- It can be easily used even by minimally trained operators thanks to the step-by-step workflow, which intuitively guides users through the printing process
- Fully visual selection system, from gradient to shade position

The resulting prosthesis is ready for insertion in the patient's mouth after a few final procedures: easy removal of the supports, washing in alcohol, a short stabilization cycle in the DCURE device and finishing.

## MATERIALS

### Conservative, Prosthetics, Implantology



With Irix Max, TSLA printing technology and PHOTOSHADE software, permanent translucent ceramic restorations can be produced quickly with the highest aesthetic quality.

# IRIX<sup>®</sup> MAX

## HYBRID CERAMICS FOR PERMANENT TRANSLUCENT RESTORATIONS



Irix Max is a revolutionary biocompatible material used to produce aesthetically pleasant permanent restorations that stand out for their translucency, high strength and precise fit.

This material has excellent **mechanical resistance to fracture and wear in occlusion**.

Irix Max allows minimally invasive restorations on natural teeth and implants.

### Advantages

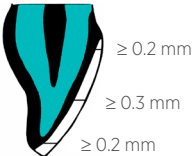
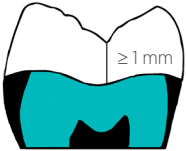
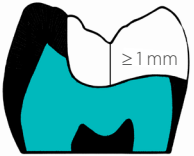
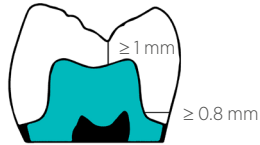
- Superior aesthetics
- High mechanical fracture resistance, enabling reliable and repeatable restorations
- High wear resistance in occlusion
- Direct production of individual and/or implant-supported crowns, bridges, inlays and veneers, even with reduced thicknesses
- PHOTOSHADE technology makes it possible to faithfully reproduce the appearance of natural teeth
- Cost-effective restorations thanks to fast production and effective finishing with DCURE
- Accurate restorations - detailed, precise and thin - thanks to a mixed-structure material similar to natural teeth

### Features

- Available in monochrome colours e.g. A1, A2, A3, A3.5, B1, N, and - only on DFAB - with multicolour PHOTOSHADE technology
- Class IIa medical device with CE marking
- Total-etch or selective etching adhesive cementation are recommended (e.g. 3M™ RelyX™ universal composite cement)

## MATERIALS

### Conservative, Prosthetics, Implantology



With Irix Plus, permanent restorations have a natural appearance thanks to different chromatic shades and possible further customization.

# IRIX<sup>®</sup> PLUS

## HYBRID COMPOSITES FOR PERMANENT RESTORATIONS



**Irix Plus** is a biocompatible **hybrid composite material** with **high elasticity**.

It can be used to produce permanent restorations in different monochromatic shades thanks to the unique PHOTOSHADE adaptive gradient.

Restorations made with Irix Plus stand out for their **aesthetics** and superior **compressive strength values**.

It is an ideal material for clinicians, who want to furtherly characterize it with biocompatible products (lacquer, glaze, etc.) and/or commercially available colour stains.

### Advantages

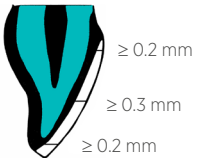
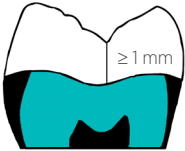
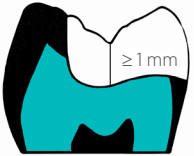
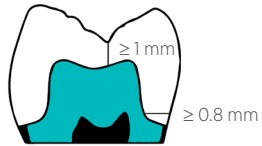
- Hybrid composite with high elasticity for aesthetic solutions
- High dimensional stability
- Superior surface quality
- Precise fit
- Direct production of individual and/or implant-supported crowns, bridges, inlays

### Features

- Available in monochrome colours e.g. A1, A2, A3, A3.5, B1, N, and - only on DFAB - with multicolour PHOTOSHADE technology
- Class IIa medical device with CE marking
- Total-etch or selective etching adhesive cementation are recommended (e.g. 3M™ RelyX™ universal composite cement)

## MATERIALS

### Conservative, Prosthetics, Implantology



Long term, natural-looking temporary restorations.

# TEMPORIS® COMPOSITES FOR LONG TERM RESTORATIONS



Natural-looking long term temporary crowns and bridges **produced directly**.

The aesthetic qualities of **Temporis** composites imitate the true colour of teeth. The exclusive **PHOTOSHADE** system available for DFAB also allows to set the adaptive gradient.

## Advantages

- Direct production of crowns, bridges, inlays and veneers
- Fewer steps than traditional methods
- Quick fabrication and low operating costs

## Features

- Available in monochrome colours e.g. A1, A2, A3, A3.5, B1, N, and – only on DFAB - with PHOTOSHADE technology for exact reproduction of the adaptive gradient
- Class IIa medical device with CE marking
- Total-etch or selective etching adhesive cementation are recommended (e.g. 3M™ RelyX™ universal composite cement)

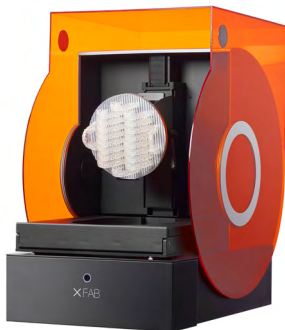






## PRINTERS

Conservative, Prosthetics, Implantology, Orthodontics, Guided Surgery, Maxillofacial Surgery



### XFAB® 2500PD

#### Applications

Permanent and temporary restorations, dental models, models with removable dies, models for implants with analogs, models for thermoforming aligners, surgical guides, castable models, castable partial frameworks, medical imaging, gingival masks/soft tissue models.

# X FAB 2500PD

Premium printing quality  
for small and medium-sized labs.

Equipped with very high resolution, **XFAB 2500PD** is **ideal for small and medium-sized dental laboratories** that demand **premium quality**.

#### Advantages

- "Plug & Play" system
- Excellent productivity and precision with a great quality/price ratio
- Validated digital workflow from scanning to finishing
- Designed for the needs of small and medium-sized dental and orthodontic laboratories
- Full range of materials specifically developed for the dental sector, including Temporis and Irix Plus
- Quick and easy production of permanent prostheses made of hybrid composites
- Excellent surface quality of the models

#### Features

- TTT (Tank Translation Technology) system to optimize consumption of the resin
- Ideal in combination with DFAB for the study phases and fabrication of clinical cases

**SOFTWARE**  
**NAUTA® AND FACTOR® INCLUDED**

**Ø 180x180**  
**WORKING AREA X, Y, Z (mm)**

# X FAB 3500PD

High productivity and precision,  
zero compromises.

**XFAB 3500PD** combines **great precision** and high performances in terms of **productivity**. It is the perfect choice for large dental laboratories and milling centres.

## Advantages

- Validated digital workflow from scanning to finishing
- Reliable, high-speed and precise stereolithographic printer for repeatable, high-quality results
- Full range of materials specifically developed for the dental sector, including Temporis and Irix Plus
- "Plug & Play" system

## Features

- Integrated PC with retractable touch screen monitor
- TTT (Tank Translation Technology) system to optimize consumption of the resin



XFAB® **3500PD**

## Applications

Permanent and temporary restorations, dental models, models with removable dies, models for implants with analogs, models for thermoforming aligners, surgical guides, castable models, castable partial frameworks, medical imaging, gingival masks/soft tissue models.

**BUILT-IN PC**  
**WIDE RANGE OF MATERIALS**

**160x160x180\***  
**WORKING AREA X, Y, Z (mm)**  
\* with chamfered corners

# 029JL2/X/XC



029JL2/029X/029XC

### Applications

Dental models,  
models with  
removable dies,  
models for implants  
with analogs,  
models for  
thermoforming  
aligners,  
surgical guides,  
castable models,  
castable partial  
frameworks,  
medical imaging,  
gingival masks/soft  
tissue models.

High-end stereolithography for  
large laboratories and milling centres.

029JL2/029X/029XC is a system for **quick, precise production**. It is versatile and suitable for all production needs, thanks to the different platform's printing sizes.

### Advantages

- High-end professional printers
- Minimal operating and maintenance costs
- Ideal for producing large quantities of models
- Reduced production time

### Features

- The electromechanical TTT (Tank Translation Technology) system increases the life of the tank and reduces management costs

HIGH PRODUCTIVITY  
BEST RESOLUTION

110x110x200/150x150x200/  
170x170x200

WORKING AREA X, Y, Z (mm)

# XPRO<sup>®</sup> S

## Orthodontic applications for large laboratories.

DWS's innovative 3D printer for manufacturing.

**XPRO S** is the ideal choice for **large laboratories** that need to produce large quantities of models in a short period of time.

High productivity, great precision and a wide selection of materials make it a versatile printer suitable for all types of **orthodontic applications** and **medical imaging**, including **anatomical replicas**.

The printer was specifically designed around DWS material formulas to ensure optimal results.

### Advantages

- Low operating and maintenance costs
- Excellent quality/price ratio

### Features

- Equipped with PC and integrated touch screen monitor
- TTT (Tank Translation Technology) system to optimize consumption of the resin tank
- Bridge structure for the utmost rigidity and repeatability



### XPRO<sup>®</sup> S

#### Applications

Dental models,  
models for  
thermoforming  
aligners,  
surgical guides,  
medical imaging,  
anatomical  
replicas.

LARGE AREA  
HIGH PRODUCTIVITY

300x300x300  
WORKING AREA X, Y, Z (mm)

## PRINTERS

Prosthetics, Implantology, Guided Surgery

# XPRO<sup>®</sup> Q



XPRO<sup>®</sup> Q

### Applications

Dental models,  
models with  
removable dies,  
models for implants  
with analogs,  
models for  
thermoforming  
aligners,  
surgical guides,  
castable models,  
castable partial  
frameworks,  
medical imaging,  
gingival masks/soft  
tissue models.

Large printing area and top resolution thanks to the proprietary QUAD Laser technology.

This 3D printing system is designed for **large production volumes** requiring the **highest resolution and accuracy**.

**XPRO Q** is dedicated to large laboratories, ensuring high productivity with its 300 x 300 mm working area.

With the wide range of materials developed by DWS, it produces dental applications both accurately and quickly at the same time.

### Advantages

- 4 Solid State BlueEdge laser sources that work simultaneously, ensuring reduced production times despite the very high resolution

### Features

- TTT (Tank Translation Technology) system to optimize consumption of the resin tank
- Equipped with PC and integrated touch screen monitor
- Bridge structure for the utmost rigidity and repeatability

4 LASERS  
BEST RESOLUTION

300x300x300  
WORKING AREA X, Y, Z (mm)

# UV Curing Units

UV polymerization devices to complete the secondary solidification.

Although perfectly formed, models built with DWS 3D printers still require a further exposure to a UV source to complete polymerization and stabilize their structure.

## Advantages

- Highly uniform exposure
- Easy to use and maintain
- Timed settings



## TECHNICAL SHEET

	UV curing unit "S2"	UV curing unit "M"	UV curing unit "L"
Suitable for polymerization of	Individual models	Full platform of XFab and 029 series printers	Full platform of XPRO Q and XPRO S
Ventilation	Internal forced ventilation	Internal forced ventilation	Internal forced ventilation
User commands	On/Off button Timer Open door safety device	On/Off button Timer Open door safety device	On/Off button Timer Open door safety device
Timer setting	0 to 30 minutes	0 to 30 minutes	0 to 30 minutes
Curing volume	160 x 160 x 160 mm	225 x 250 x 225 mm	300 x 300 x 300 mm
Machine size	265 x 300 x 330 mm	370 x 330 x 480 mm	570 x 520 x 518 mm
Weight	11.8 kg	20.5 kg	26 kg
Power consumption	35 W	120 W	70 W
Power supply	90-264 V / 50-60 Hz	220 V / 50-60 Hz	90-264 V / 50-60 HZ



## MATERIALS

Conservative, Prosthetics, Implantology, Guided Surgery



The use of Precisa and Invicta materials enables the production of precise, perfectly smooth models.

# DIGITAL MODELS

Perfect, extremely precise reproductions for an incomparable fit and unique surface quality.

DWS digital workflow, that can be integrated with major CAD software and third-party scanners, enables the production of **accurate, solid and precise models**.

DWS dental models are reliable and appropriate tools, the result of an innovative workflow chosen today by top professionals and made possible by the advanced characteristics of **Precisa** and **Invicta** exclusive materials developed and produced by the company.

## Advantages

- Detailed reproduction at the highest resolution for a precise fit
- Perfect accuracy for rigorous testing, such as analogs positioning
- Reduced cost and fabrication time

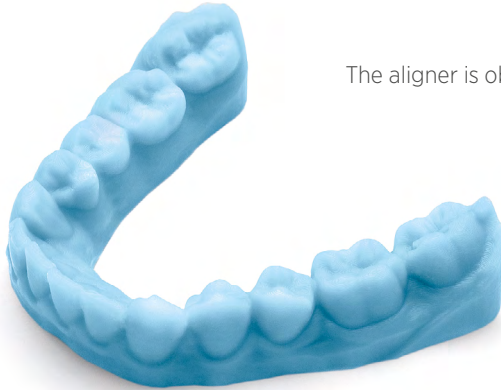
## Features

- Models with removable dies for a perfect fit
- Excellent bases for the correct positioning of any type of analog and/or implant, even the most complex
- Perfect dimensional stability over time
- Wide choice of colours and functional features

## MATERIALS

### Orthodontics

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3D models using DWS printers.  
The aligner is obtained after subsequent thermoforming and trimming .



The resolution allows for countless applications in this field.

# MODELS FOR THERMOFORMING ALIGNERS

Perfect 3D bases for producing effective, lightweight, invisible aligners.

In an efficient, open system in which DWS solutions are integrated with the most common software and devices, **Therma and Invicta** materials enable the quick, low-cost production of **3D dental arches** and **orthodontic models**.

The materials are non-deformable and have a high resistance to thermoforming: they are also easy to trim on the marginal contact areas and interproximal spaces.

With this thorough basis, the professional can produce transparent polycarbonate aligners that are perfectly adhering to the patient's dental conformation.

## Advantages

- Quick fabrication
- Low cost
- Accuracy and versatility: high-quality reproduction in all treatment steps

## Features

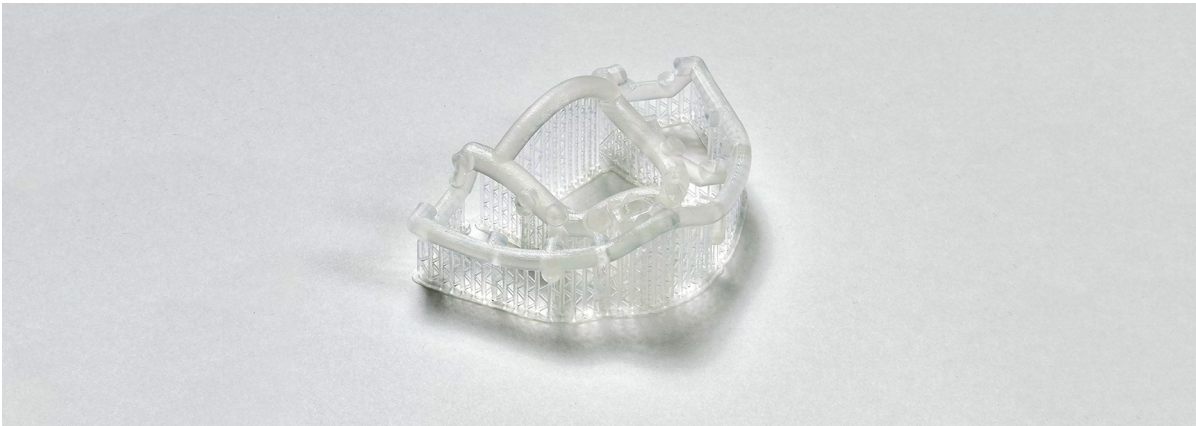
- Non-deformable, highly resistant orthodontic arches

## MATERIALS

Guided Surgery, Implantology, Prosthetics, Gnathology



The anatomical correspondence guaranteed by DS3000 favours the highest precision, even when inserting sleeves.



# SURGICAL GUIDES



Transparency, precision and fit  
for fully safe surgeries.

The advanced 3D technology of DWS devices allows the production of high-precision surgical guides in biocompatible **DS3000\*** for implant surgery.

Once the sleeves have been inserted, the guides, **ready for use** after disinfection (with peracetic acid), are stable and non-deformable. This guarantees an impeccable fit with the patient's anatomy, an optimal condition for safe and effective surgery.

## Advantages

- Highly precise and optimal fit
- Great transparency
- Design, analysis and development can be conducted on models

## Features

- Stable, non-deformable material
- Biocompatible material

\* Class I medical device with CE marking (ref. Annex VIII Regulation MDR 2017/745)

## MATERIALS

### Medical Imaging, Maxillofacial Surgery, Guided Surgery



The 3D reproduction of a skull in which size, precision and transparency can be observed. Study models provide a view of the position of the patient's nerves, which is fundamental when studying and planning surgical actions.

# MEDICAL IMAGING

Maximum accuracy and transparency,  
large size, minimal cost.

**Large volumes** in extremely short timescales. The entry level printers in the DWS range are capable of **great precision** when reproducing the smallest details, thanks to the transparency of **Vitra 430** and **DS2000**.

They perfectly replicate the patient's anatomical structure as obtained via CBCT (CT) and converted into STL files.

These materials are ideal for creating pre-operative anatomical replicas for maxillofacial surgery and gnathology.

## Advantages

- Large anatomical reproductions
- The transparent material provides a view of the anatomical structure and position of the patient's nerves to study and plan surgical actions
- Short production time

## Features

- High surface quality
- Resolution and accuracy





The right combination of materials and technology for maximum results in castable dental models and for pressed ceramics.

# CASTABLE AND FOR PRESSED CERAMIC PROSTHESES

Detailed and economic to produce,  
for slim and strong prostheses.

With the exclusive **resins in the Fusia series**, that do not require any additional manual work, DWS 3D printing devices produce accurate castable dental models and for pressed ceramics that meet all process requirements, enabling the production of **thin, strong and detailed** structures.

## Advantages

- Optimal accuracy
- Starting from the models, Fusia series allows to produce thin, detailed structures such as veneers
- Quick and inexpensive

## Features

- Not subject to deformation or shrinkage
- High resolution and accuracy

## MATERIALS

### Removable prosthetics

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Stable, accurate, non-deformable. Ideal for casting procedures.

# CASTABLE PARTIAL FRAMEWORKS

The ideal way to achieve thinness, accuracy and excellent mechanical properties.

Castable partial frameworks produced using digital technology and advanced **Fusia** materials are highly stable, anatomically accurate and non-deformable, while offering a certain flexibility that facilitates hooking onto the natural teeth without breaking.

They, therefore, guarantee the final products with exceptional **physical and mechanical performances**, satisfying the most stringent requirements for each type of application.

## Advantages

- Optimal accuracy
- Excellent non-deformability and fit

## Features

- Optimal mechanical properties for casting procedures
- Fusia series enables the construction of detailed parts with high resolution and accuracy

# STABLE, STRONG, NON-DEFORMABLE IMPRESSION TRAYS



DS3500 printing material ensures the highest level of performance.

**DS3500\*** is a **biocompatible material**, ideal for printing **custom-made impression trays**.

Precise and polished 3D printed trays are suitable for any specific impression material and have an excellent fit. Their slight transparency is useful in taking the impression in partial and/or total edentulism cases, as it helps to check the adhesion of the material to the mucosa.

**Custom-made** impression trays are rigid, stable and **deformation-free** and may be printed in blue and purple.

## Advantages

- Dimensional stability and high strength
- Compatible with all impression materials
- Precise and distortion-free impression tray

## Features

- Biocompatible material

\* Class I medical device with CE marking (ref. Annex VIII of Regulation MDR 2017/745)



# GINGIVAL AND SOFT TISSUE MASKS

Complete reproductions of the appearance, functional properties and anatomy of the gingivas.

DWS 3D printing realistically replicates the colour, consistency and structure of **gingiva** and **soft tissues**. With the high resolution and precision of the printers, the result is also due to the specific **GL4000** advanced material.

## Advantages

- Material's lifelike effects and functional properties
- Effective anatomical reproduction

## Features

- Excellent surface quality
- High resolution and definition



## TECHNICAL SHEETS



	<b>DFAB® Desktop</b>	<b>DFAB® Chairside</b>	<b>LFAB®</b>
Printing method	Laser – TSLA	Laser – TSLA	Laser – TSLA
Working area	50 mm x 20 mm x 40 mm	50 mm x 20 mm x 40 mm	50 mm x 20 mm x 40 mm
Laser source	Solid State BlueEdge®	Solid State BlueEdge®	Solid State BlueEdge®
Layer thickness	10-100 microns (depending on the type of material used)	10-100 microns (depending on the type of material used)	10-100 microns (depending on the type of material used)
Scanning method	Galvanometer	Galvanometer	Galvanometer
Software	NAUTA® PHOTOSHADE®	NAUTA® PHOTOSHADE®	NAUTA® LFAB Edition
Input file formats	.stl, .nauta, .factor,	.stl, .nauta, .factor,	.stl, .nauta, .factor,
Machine size	300 mm x 300 mm x 307 mm	480 mm x 480 mm x 1142 mm	300 mm x 300 mm x 307 mm
Weight	15 kg	40 kg	15 kg
Operating temperature and humidity	15°-25°C / 60%	15°-25°C / 60%	15°-25°C / 60%
Power supply	24 VDC with 240/100 VAC / 50-60 Hz External power supply included	24 VDC with 240/100 VAC / 50-60 Hz External power supply included	24 VDC with 240/100 VAC / 50-60 Hz External power supply included
Power consumption	160 W	220 W	160 W
PC minimum requirements	Windows 8 or higher*1	Windows 8 or higher*1	Windows 8 or higher*1
Memory	4 GB RAM*1	4 GB RAM*1	4 GB RAM*1
Graphics card	OpenGL 2.0 or higher*1	OpenGL 2.0 or higher*1	OpenGL 2.0 or higher*1
I/O Interface	1 USB port	1 USB port	1 USB port
Connectivity	1 active internet connection	1 active internet connection	1 active internet connection

\*1 Recommended minimum requirements may vary depending on the complexity of the file to be printed.

Technical specifications subject to change without notice.



**XFAB® 2500PD**

**XFAB® 3500PD**

Printing method	Laser – Stereolithography	Laser – Stereolithography
Working area	Ø 180 mm x 180 mm	160 mm x 160 mm x 180 mm with rounded corners
Laser source	Solid State BlueEdge®	Solid State BlueEdge®
Layer thickness	10-100 microns (depending on the type of material used)	10-100 microns (depending on the type of material used)
Scanning method	Galvanometer	Galvanometer
Software	FICTOR® XFAB® Edition and NAUTA®+ included	FICTOR® XFAB® Edition and NAUTA®+ included
Input file formats	.stl, .slc, .nauta, .factor, .mkr, .3dm, .3ds, .ply, .obj, .lwo, .x	.stl, .slc, .nauta, .factor, .mkr, .3dm, .3ds, .ply, .obj, .lwo, .x
Machine size	400 mm x 606 mm x 642 mm	400 mm x 606 mm x 880 mm
Weight	31 kg	42 kg
Operating temperature and humidity	20°-25°C / 60%	20°-25°C / 60%
Power supply	24 VDC with 240/100 VAC / 50-60 Hz External power supply included	24 VDC with 240/100 VAC / 50-60 Hz external power supply included
Power consumption	160 W	160 W
PC minimum requirements	Windows 8 or higher*	Windows 8 or higher* <sup>1</sup>
Memory	4 GB RAM*	4 GB RAM* <sup>1</sup>
Graphics card	OpenGL 2.0 or higher* <sup>1</sup>	OpenGL 2.0 or higher* <sup>1</sup>
I/O Interface	1 USB port	1 USB port, 1 Ethernet TCP/IP port
Connectivity	1 active internet connection	1 active internet connection

\* Recommended minimum requirements may vary depending on the complexity of the file to be printed.

<sup>1</sup> integrated PC. The minimum requirements are intended for the use of NAUTA®+ on an external PC (not included).

Technical specifications subject to change without notice.



## TECHNICAL SHEETS



### 029JL2

### 029X

### 029XC

Printing method	Laser – Stereolithography	Laser – Stereolithography	Laser – Stereolithography
Working area	110 mm x 110 mm x 200 mm	150 mm x 150 mm x 200 mm	170 mm x 170 mm x 200 mm
Laser source	Solid State BlueEdge®	Solid State BlueEdge®	Solid State BlueEdge®
Layer thickness	10–100 microns (depending on the type of material used)	10–100 microns (depending on the type of material used)	10–100 microns (depending on the type of material used)
Scanning method	Galvanometer	Galvanometer	Galvanometer
Software	FICTOR® and NAUTA®+ included	FICTOR® and NAUTA®+ included	FICTOR® and NAUTA®+ included
Input file formats	stl, .slc, .nauta, .fictor, .mkr, .3dm, .3ds, .ply, .obj, .lwo, .x	stl, .slc, .nauta, .fictor, .mkr, .3dm, .3ds, .ply, .obj, .lwo, .x	stl, .slc, .nauta, .fictor, .mkr, .3dm, .3ds, .ply, .obj, .lwo, .x
Machine size	610 mm x 660 mm x 1400 mm	610 mm x 660 mm x 1400 mm	610 mm x 660 mm x 1400 mm
Weight	150 kg	150 kg	150 kg
Operating temperature and humidity	20°–25°C / 60%	20°–25°C / 60%	20°–25°C / 60%
Power supply	230 VAC / 50 Hz	230 VAC / 50 Hz	230 VAC / 50 Hz
Power consumption	500 W	500 W	500 W
PC minimum requirements	External PC included	External PC included	External PC included
Memory	-	-	-
Graphics card	-	-	-
I/O Interface	1 USB port, 1 Ethernet TCP/IP port	1 USB port, 1 Ethernet TCP/IP port	1 USB port, 1 Ethernet TCP/IP port
Connectivity	1 active internet connection	1 active internet connection	1 active internet connection

Technical specifications subject to change without notice.



**XPRO® S**

**XPRO® Q**

Printing method	Laser - Stereolithography	QUAD Laser - Stereolithography
Working area	300 mm x 300 mm x 300 mm	300 mm x 300 mm x 300 mm
Laser source	Solid State BlueEdge®	Solid State BlueEdge®
Layer thickness	10-100 microns (depending on the type of material used)	10-100 microns (depending on the type of material used)
Scanning method	Galvanometer	Quadrant galvanometer
Software	FICTOR® and NAUTA®+ included	FICTOR® and NAUTA®+ included
Input file formats	.stl, .slc, .nauta, .factor, .mkr, .3dm, .3ds, .ply, .obj, .lwo, .x	.stl, .slc, .nauta, .factor, .mkr, .3dm, .3ds, .ply, .obj, .lwo, .x
Machine size	704 mm x 1446 mm x 2048 mm	704 mm x 1446 mm x 2048 mm
Weight	500 kg	500 kg
Operating temperature and humidity	20°-25°C / 60%	20°-25°C / 60%
Power supply	230 VAC / 50 Hz	230 VAC / 50 Hz
Power consumption	500 W	500 W
PC minimum requirements	Windows 8 or higher* <sup>1</sup>	Windows 8 or higher* <sup>1</sup>
Memory	4 GB RAM* <sup>1</sup>	4 GB RAM* <sup>1</sup>
Graphics card	OpenGL 2.0 or higher* <sup>1</sup>	OpenGL 2.0 or higher* <sup>1</sup>
I/O Interface	1 USB port, 1 Ethernet TCP/IP port	1 USB port, 1 Ethernet TCP/IP port
Connectivity	1 active internet connection	1 active internet connection

\* Recommended minimum requirements may vary depending on the complexity of the file to be printed.

<sup>1</sup> integrated PC. The minimum requirements are intended for the use of NAUTA®+ on an external PC (not included).

Technical specifications subject to change without notice.

## TECHNICAL SHEETS

Material	Indication	Page	LFAB	DFAB	XFAB 2500PD	XFAB 3500PD	029JL2/X/XC	XPRO S	XPRO Q
<b>Irix Max</b>	Permanent restorations	19	▲	▲	—	—	—	—	—
<b>Irix Max PHOTOSHADE</b>	Permanent restorations	19	—	▲	—	—	—	—	—
<b>Irix Plus</b>	Permanent restorations	21	▲	▲	▲	▲	—	—	—
<b>Irix Plus PHOTOSHADE</b>	Permanent restorations	21	—	▲	—	—	—	—	—
<b>Temporis</b>	Temporary restorations	23	▲	▲	▲	▲	—	—	—
<b>Temporis PHOTOSHADE</b>	Temporary restorations	23	—	▲	—	—	—	—	—
<b>Precisa RD096B</b>	Digital models	33	—	—	—	▲	▲	—	▲
<b>Precisa RD096GY</b>	Digital models	33	▲	▲	▲	▲	▲	—	▲
<b>Precisa RD096GR</b>	Digital models	33	—	—	—	▲	▲	—	▲
<b>Precisa RD096P</b>	Digital models	33	—	—	—	▲	▲	—	▲
<b>Precisa RD096W</b>	Digital models	33	—	—	—	▲	▲	—	▲
<b>Precisa RD096Y</b>	Digital models	33	—	—	—	▲	▲	—	▲
<b>Precisa RD096IV</b>	Digital models	33	—	—	—	▲	▲	—	▲
<b>Precisa RD097</b>	Digital models	33	—	—	▲	▲	▲	—	▲
<b>Precisa RD-ECO2</b>	Digital models	33	—	—	—	▲	▲	—	▲
<b>Invicta 907</b>	Digital models	33	—	—	▲	—	—	—	—
<b>Invicta 915</b>	Digital models	33	—	—	▲	—	—	▲	—
<b>Invicta 917</b>	Digital models	33	—	—	▲	—	—	▲	—
<b>Therma 294</b>	Thermoforming models	35	—	—	▲	—	—	—	—
<b>Therma RD095</b>	Thermoforming models	35	—	—	—	▲	▲	▲	▲
<b>DS3000</b>	Surgical guides	37	▲	▲	▲	▲	▲	▲	▲
<b>Vitra 430</b>	Medical imaging	39	—	—	▲	—	—	—	—
<b>DS2000</b>	Medical imaging	39	—	—	—	▲	▲	▲	▲
<b>Fusia RF080</b>	Castable resin, pressed ceramic	41, 43	—	—	—	▲	▲	—	▲
<b>Fusia DC710</b>	Castable resin, pressed ceramic	41, 43	—	—	▲	—	—	—	—
<b>DS3500</b>	Trays	44	—	—	▲	▲	▲	▲	▲
<b>GL4000</b>	Gingiva-like, soft tissue	45	—	—	▲	▲	▲	—	▲

Technical specifications subject to change without notice.





## DWS

Via della Meccanica, 21  
36016 Thiene (VI) - Italy  
T +39 0445 810810  
info@dwssystems.com

[www.dwssystems.com](http://www.dwssystems.com)

MADE IN ITALY



Company certified according to ISO 9001:2015 and ISO 13485:2016, which attest to compliance with the highest standards in medical devices.

## Information

This document is reserved for healthcare professionals as it contains information on medical devices that may create situations of danger to the health and safety of the patient if not correctly read, understood and applied by a professional. Technical specifications subject to change without notice.



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