# **DIGITAL DENTURE**

THE FAST MONOLITHIC PROCESS



"Vivodent" CAD

ivoclar digital



Digital Denture is a complete manufacturing process for the rapid digital production of removable full-arch dentures. This innovative process integrates the treatment steps in the dental practice with the digital manufacturing processes in the lab. Exclusive design software and ideally coordinated materials, combined with well-designed manufacturing strategies and the cutting-edge PrograMill milling equipment platform, provide predictable and reproducible results.

### FAST

With Digital Denture, the new digital manufacturing process for dentures, you save valuable time compared to manual production methods: fewer manual working steps, fewer interruptions in production, no complex plaster models and no articulating. In addition, you benefit from faster model analysis, a quicker set-up in the software, and faster gingiva design and completion.

### MONOLITHIC

### PREDICTABLE

Industrially manufactured monolithic discs offer many processing advantages and deliver consistently high material quality:

- No polymerization shrinkage
- No thermal influence on the base materials

Predictability means certainty of results – an important aspect, in order to be able to work effectively and respond to patient needs. With Digital Denture, all steps are defined and perfectly coordinated. The users are guided through the entire process. This leads to greater processing safety, plannable and predictable results and standardized quality and ultimately satisfied patients.

### DIGITAL DENTURE

### The fast monolithic process

Mill your denture parts quickly and easily from two discs, adhesively cement these and achieve safe, predictable results.

### DIGITAL DENTURE PROFESSIONAL The premium option

Increase the quality of your digitally produced dentures with the premium option features of Digital Denture Professional. This enables you to achieve even more accurate results.

### PROCESS PATENT PENDING

### Milling the denture base / vestibular milling

Milling the dental arch

### Cementing the denture base to the dental arch



In the first milling procedure, the dental arch is milled occlusally with oversized dimensions. The basal surfaces, however, are milled exactly to their final dimension, so that the denture base fits perfectly. The oversized dental arch is adhesively cemented to the denture base. Cementation is a quick and easy procedure for the dental technician. During the fine milling process, the dental arch is milled to its final size and the excess bonder is removed.

### ADVANTAGES

- Shorter production times
- Less manual working steps
- Less interruptions in the working process
- No plaster models are required
- Articulation is no longer required
- Quicker model analysis and faster set-ups



In this working step, the cemented denture is milled to its final size.



#### ALL MATERIAL HIGHLIGHTS AT A GLANCE

- Milling customer-specific prosthetic teeth and whole tooth segments from one disc
- Quick and easy cementation of the tooth segments to the denture base; no transfer template required
- Individual design of each tooth with the aid of exclusive
- software featuring a morphing tool
- Milling all teeth which are actually required
- No cost-intensive tooth storage necessary
- Higher stability and therefore less fracturing due to the tooth segments

I never want to set-up teeth by hand again. Once you have experienced the precision and quality of Digital Denture you'll never want to go back.

> Bill Barton Master Dental Technician, USA

## TAKE IMPRESSIONS IN THE USUAL MANNER

#### ANATOMICAL IMPRESSION

With a pre-registration (squash bite registration) or using a Centric Tray

#### FUNCTIONAL IMPRESSION

With a customized tray and a conventional wax bite registration

I am so impressed at how easy the system is to use. And my patients are delighted at how comfortable and pleasant the digitally produced dentures are to wear.

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Dieter Spitzer Dental Technician, Switzerland

## **NO COMPLICATED MODEL CASTING**

Take the impression quickly and easily with a 3Shape scanner

#### **3SHAPE SCANNER INCLUDING IVOCLAR DIGITAL SCAN HOLDER AND** SOFTWARE ADD-ON SCANIT DENTAL

#### Existing scanner in the laboratory

Existing 3Shape scanners in the laboratory are suitable for the digitization of the initial situation from version D710 upwards due to the size of their recording space, the data quality and speed.

#### New scanners

3Shape scanners, which are purchased new, are suitable for





Functional, customized and esthetic digital set-ups and new materials help to create sensational restorations.

Sonja Ganz Master Dental Technician, Germany

# THE FAST MONOLITHIC PROCESS

EXCLUSIVELY FROM

### SOFTWARE DIGITAL DENTURE

- Comprehensive tooth data base from Ivoclar Vivadent
- Functional set-up example
- Oversize production process using SR Vivodent CAD



MATERIALS

### SR VIVODENT<sup>®</sup> CAD – THE MATERIALS FOR DIGITAL DENTURES

Single teeth and rows of teeth can be individually designed and manufactured. The tooth replacements can be individually adapted to harmonize with the patient's natural antagonist teeth. Even difficult patient cases can be solved without a problem.

As the teeth can be directly manufactured from the SR Vivodent<sup>®</sup> discs, the need for keeping prefabricated denture teeth in stock is eliminated, helping dental labs reduce costs and time in inventory management.

#### SR VIVODENT<sup>®</sup> CAD

SR Vivodent<sup>®</sup> CAD are tooth-coloured, monochromatic discs made of DCL material. They are suitable for the production of single teeth and rows of teeth for digital denture prosthetics.

The material stands out due to its translucent colouration with a lifelike fluorescence. The natural-looking, highly esthetic appearance is achieved by three main factors: low opacity in combination with the anatomical shape and a natural looking surface finish.

The 20-mm thick SR Vivodent CAD discs are available in tooth shades BL3, A1, A2, A3, A3.5, B1, B3, C2 and D2.



### SR VIVODENT<sup>®</sup> CAD MULTI

SR Vivodent<sup>®</sup> CAD Multi are multi-chromatic discs made of DCL material. They are suitable for the production of single teeth and rows of teeth for digital denture prosthetics.

With the innovative Pearl Structure Effect, an exceptionally harmonious shade gradation is achieved, which imparts the dentures with high esthetics.

The multi-chromatic discs were developed with three layers in accordance with the natural model: incisal – dentin – cervical.

Dentures made of SR Vivodent CAD Multi are ready to use; time-consuming characterizations are no longer necessary.

Patent is pending for the Pearl Structure Effect.

### "Vivodent" CAD

Multi A1 98.5 - 20 mm

> ivoclar digital:

ivodent"

### THE DENTURE BASE MATERIAL FOR DIGITAL DENTURES

### IVOBASE<sup>®</sup> CAD

The 30-mm thick IvoBase CAD discs are available in the four denture base shades of Pink, Pink-V, Preference and 34-V. These shades match the denture base materials of the Ivoclar Vivadent range and cover the most popular shade requirements.

Great esthetics can be achieved through individual characterization with SR Nexco<sup>®</sup>.

## **THE SELF-CURING TWO-COMPONENT SYSTEMT**

### **IVOBASE<sup>®</sup> CAD BOND**

The self-curing two-component system ensures a strong bond between the dental arch and the milled denture base.

- For the cementation of the milled dental arch to the milled base
- Clean handling due to predosed components
- Reliable bond between the milled dental arch and the milled base
- Universal pink colouration to match the denture base



ise® CAD Bond 270

## EASY AND FAST DENTURE MILLING DIRECTLY IN THE LABORATORY

Mill your digital dentures with the new powerful machines from the innovative PrograMill platform range or in an existing Zenotec<sup>®</sup> select system. The perfect coordination of the materials and the CAD and CAM software with the milling units, produces precise and high quality dentures.





For me, the biggest advantage is that I can still work with the well proven BPS concept and other clinical techniques. There is practically nothing that I need to change in my clinical workflow.



Arnie Jabour Master Dental Technician, Australia

# **DIGITAL DENTURE PROFESSIONAL**

#### The premium option

Of course, you can increase the quality of your denture even further. With the premium option of Digital Denture Professional you can achieve even more accurate results and greater esthetics.

### **1. IMPRESSION TAKING**

Increase the quality of your impression: easy occlusal position determination in the digital complete denture technique.

- Impression taking using the 3D Bite Plate (functional impression and needle point registration in one) and the reference planes (Camper's / Bipupillary) using the UTS CAD
- Existing upper and/or lower complete dentures are used as a base for the functional impression and occlusal registration

### UTS CAD

- Easy and fast CP and BP angle determination
- and transfer into the design software
- Patient-specific dental restoration in terms of esthetics,

occlusal plane and functionality – Time-saving due to easy handling

### **2. DESIGNING**

#### EXCLUSIVELY FROM IVOCLAR DIGITAL

### SOFTWARE DIGITAL DENTURE PROFESSIONAL

### The premium option

- Easy transfer of the correct occlusal plane using UTS CAD<sup>1</sup>
- Time-saving design of 3D Bite Plates according to Gnathometer CAD needle point registration
- Automated production of a transfer template<sup>1</sup> for the safe transfer of prefabricated teeth into the denture base





<sup>1</sup>Patent pending

The similarity to the analogue concept allows us to enjoy the advantages of the Digital Denture in our everyday laboratory routine.

> Marco Zanderigo Master Dental Technician, Italy

### **Gnathometer CAD**

- Easy and fast determination of the occlusal position
- Simple, stress-free insertion into the CAD/CAM produced 3D Bite Plate – For multiple use

### **Centric Tray**

- Easy pre-registration
  UTS CAD compatible
- Universal shape

#### **3. MATERIAL SELECTION**

For sophisticated esthetic results it is advisable to use selected tooth lines from Ivoclar Vivadent:

SR Phonares<sup>®</sup> II, SR Phonares<sup>®</sup> II Typ, SR Phonares<sup>®</sup> II Lingual SR Vivodent<sup>®</sup> S PE, SR Orthotyp<sup>®</sup> S PE SR Vivodent<sup>®</sup> S DCL, SR Orthotyp<sup>®</sup> S DCL SR Vivodent<sup>®</sup> DCL, SR Orthotyp<sup>®</sup> DCL, SR Ortholingual DCL

ProArt CAD Try-In Milky white PMMA discs for the production of custom trays, 3D Bite Plates, functional try-ins

ProArt CAD Transfer Discs made from POM (polyoxymethylene) for the production of transfer templates

ProArt CAD Wax pink Pink-coloured wax discs for the production of wax try-ins and individual wax bite rims

### 4. FINISHING



### FINAL POLISHING OF THE FINISHED, MILLED DENTURES

The finished dentures have a good surface quality. Excess material from IvoBase CAD Bond has been cleanly removed and the gingival margin has been appropriately trimmed. A quick polish is sufficient to achieve an esthetic result.



At last, with Digital Denture, I can combine my analogue skills with the CAD/CAM workflow in the laboratory.



Pasquale Lacasella Master Dental Technician, Italy

# DIGITAL EXPERTISE UNDER ONE ROOF

Ivoclar Digital is a competent digital partner, which supports dentists and dental technicians along the entire digital process chain. A great deal of importance is placed on simple and understandable procedures. The portfolio for the digital work process is divided into four areas:

#### CONSULT

IvoSmile<sup>1</sup>, the innovative software application based on Augmented Reality, supports the dialogue between dental professionals and their patients DESIGN

#### Versatile scanners, intuitive design software from our partners and exclusive add-ons

High-performance materials such as IPS e.max<sup>®</sup> – the world's most used all-ceramic system<sup>2</sup>

DECIDE

Technologically high-quality equipment for the production of esthetic restorations

PRODUCE

### SERVICE+

**Service+** The offer is complete with Service+. The service provision makes your entry into digital production easier and serves as a back-up partner for dental laboratories.\*

\* Service+ is available in the following countries: Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Holland, Hungary, Ireland, Italy, Liechtenstein, Luxembourg, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, and United Kingdom.

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