Digital Dentures

Reimagine dentures. Revitalize your lab.
There has never been a better time to go digital.

The demand for dentures is growing, while the overall number of labs continues to decline. This represents an enormous opportunity for lab owners to go digital, especially since they’re already equipped for a seamless integration into current workflows. Don’t miss out on this great opportunity for your lab and your business.

Production is growing at over 225k new dentures a year

- The USA produces 9 million denture arches a year
- Demand is growing at 2.5% annually

Labs are at 80% full capacity for denture production

- Number of dental labs are declining (approaching 7k labs)
- Trained removable technicians are a disappearing resource limiting a lab’s ability to meet growing customer demand

Of larger labs surveyed 80% are fully equipped for Digital Dentures

- 68% of dental labs have a scanner
- 46% have a milling system
Introducing Digital Dentures from Dentsply Sirona.

Dentsply Sirona has partnered with AvaDent to bring you an excellent-fitting denture and a cleaner, simplified denture workflow. The choice is yours: either scan and mill in your lab, or scan and let us take care of the rest. Either way, you can count on the same premium Dentsply Sirona teeth and denture base materials.
Superior dentures begin with superior materials.

Dentsply Sirona Digital Dentures are made with materials that combine proven results with the latest technology.
An unbeatable combination.

By combining superior denture materials, Denstply Sirona delivers the highest-quality final appliance. Lucitone 199 Denture Base Discs and Portrait IPN Denture Teeth are joined together using Lucitone High Impact Pour Acrylic (HIPA), the first pour acrylic to meet ISO standards for improved impact resistance¹ that delivers both high strength and color stability to each tooth in the denture.

**Lucitone 199®**
Denture Base Discs

• Denture base acrylic with over 40 years of clinical success
• Industry benchmark for high strength and impact resistance
• Lifelike aesthetics with special fibers and balanced translucency to replicate natural gingiva
• Low residual monomer
• Low porosity
• Available in 20mm, 25mm, and 30mm heights, and in the four Lucitone 199 shades of original, light, light reddish pink, and dark pink

**Portrait® IPN®**
Denture Teeth

• IPN highly cross-linked co-polymers free from inorganic fillers provide excellent abrasion resistance
• Five distinct aesthetic zones are created by three monolithic shade layers
• Over 30 years of proven performance
• 42 upper and 20 lower anterior moulds plus 22 upper and lower posterior moulds for unmatched tooth variety and selection
• Available in 16 VITA² classical shades (A1–D4), 8 Bioform shades, and 3 bleach shades

**Lucitone® HIPA**
High Impact Pour Acrylic

• Proven compatibility with Lucitone 199 Denture Base Discs and Portrait IPN Denture Teeth
• Optimal strength for fewer fractures
• Shade match to Lucitone 199 shades with no telltale integration
• A more efficient process

1. ISO is an independent, nongovernmental international organization with a membership of 163 national standards bodies. Through its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market-relevant international standards that support innovation and provide solutions to global challenges. Figures shown represent averages determined by Denstply Sirona testing (Lucitone® HIPA n=54, Competitor B n=20, Competitor A n=20).
2. VITA A-D is a registered trademark of Vita Zahnfabrik H. Rauter GmbH & Co.
Smarter software for better dentures.

Dentsply Sirona Digital Dentures combine our time-tested and trusted materials with AvaDent’s unmatched design expertise and intelligent software. Continuously optimized by computer-aided engineering, these dentures are designed and produced through a sophisticated set of algorithms based on tens of thousands of real cases generating a truly Digital Denture.

Avadent Design Software

**Powerful Software**
Intelligent software capable of converting traditional inputs into an accurately fitting denture customized for appearance and optimal performance.

**Monitoring in Real Time**
A dynamic 3D preview function allows the dental professional to review the digital setup and request any adjustments prior to fabrication, ensuring better-looking and better-fitting dentures for the patient.

**A Lasting Record**
Should the patient desire a duplicate or replacement denture at any time, the dentist can order an identical denture to be produced from the patient’s unique Digital Denture record. The Teeth Forever® Card contains the essential case information to reorder duplicate dentures.
The Choice is yours!
Let Dentsply Sirona Be Your Guide.

SCAN + OUTSOURCE
Workflow begins with a scan image of an impression or model from any open scanner that can output an .STL file.

1. Preliminary Impression
   - Lab creates model
   - Lab makes custom tray & wax rims

2. Final Impression & Records
   - Lab scans & sends file
   - Lab sends try-in

3. Try-In (optional)
   - Lab sends final denture
   - Technician / Clinician Approves Design

4. Final Denture
   - Lab sends final denture
   - Lab makes custom tray & wax rims

It’s easy to get started.
Regardless of the technique you use, getting started is simple.

Types of Records:
- Reference Denture
- Wax Rim
- Wagner Try-in

Technician / Clinician Approves Design
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Our Digital Dentures adapt to your needs and your lab’s workflow. Whether you choose to mill in-house or scan and outsource the entire process, Dentsply Sirona, in partnership with AvaDent, offers flexible solutions to meet your business’s specific requirements. It’s easy to customize the Digital Denture workflow for your current needs.

**SCAN + MILL***

Workflow adapts to most popular open 5-axis milling machines.

1. **Preliminary Impression**
   - Lab creates model
   - Lab makes custom tray & wax rims

2. **Final Impression & Records**
   - Lab scans & sends file
   - Lab mills try-in (Optional)

3. **Try-In (optional)**
   - Technician / Clinician Approves Design
   - Lab scans try-in

4. **Final Denture**
   - Lab mills & completes denture
   - Lab makes custom tray & wax rims

No special tray is required as long as the input includes a good impression scan and the six key measurements.

6 Key Measurements:

1. OVD (occlusal vertical dimension)
2. Centric relation
3. Lip support
4. Midline
5. Incisal edge/horizontal plane of occlusion
6. Tooth size and shade

* Supporting machines include:
  - inLab® MC X5
  - Roland DWX-50, DWX-51D, and DWX-52DC
  - imes-icore CORiTEC 350i and imes-icore CORiTEC 450i

*Roland and imes-icore CORiTIRc are not registered trademarks of Dentsply Sirona.
Great results, whichever production method you choose.

**Portrait Digital Dentures**

The Portrait bonded denture uses Lucitone 199 denture base discs and Portrait IPN denture teeth for a premium denture solution. Produce them in-lab, or order from AvaDent.

- Provides the ultimate in Dentsply Sirona materials and aesthetics.
- The Dentsply Sirona Digital Dentures are designed by AvaDent to your specifications.
- In-lab-milled dentures require a 5-axis milling machine. Dentsply Sirona promotes open solutions and has prepared user guides for a variety of scanners and 5-axis milling machines to assist you in getting started with in-lab-milled dentures.
- Each denture also comes with a Teeth Forever® Card. This provides access to a permanent record of the final denture case design.

**Monolithic Dentures**

AvaDent’s proprietary monolithic dentures are produced from a unique disc of Lucitone 199 and IPN material. A great option that can be ordered directly from AvaDent.

- A unique process generates a very strong bond between the tooth and denture base materials.
- Available in A1, A2, A3, B1, B2, and PW2 shades.
- Available in two formats: IPN-L2, ideal for hybrid denture cases; and IPN-L1, ideal for immediate denture cases.
- Each denture also comes with a Teeth Forever® Card. This provides access to a permanent record of the final denture case design.
Our Digital Dentures were designed to be flexible, offering wide-ranging benefits to all types of labs. While our denture materials have been optimized to work with Dentsply Sirona scanning and milling machines, they can be used successfully with a wide range of equipment from other manufacturers.

**Breathe new life into your lab.**

**BENEFITS FOR ALL LABS**

- Cleaner, safer process
- New services
- Less workspace needed
- Flexible capacity
- Increased efficiency with fewer steps

**ADDITIONAL BENEFITS FOR**

**SCAN-ONLY LABS**

- Easily add denture services by just scanning the impression and ordering.
- Digital Dentures mean new business growth with minimal change in your operations.
- Digital design files are delivered within 24 hours of receiving an impression scan.
- Digital Denture cases are shipped within four days after design is approved.

**SCAN-AND-MILL LABS**

- Expand your services by using your scanner and milling equipment, or complement your existing operations when increased capacity is needed.
- Digital design files are delivered within 24 hours of receiving an impression scan.
- With your approved file, you can mill the denture, bond it with Portrait IPN teeth, and finish in-house.

**REMOVABLES-ONLY LABS**

- Digital Dentures can complement your lab operations when increased capacity is needed or when complex hybrid cases demand the accuracy of Digital Dentures.
- Send in a model and a prescription, or submit a digital scan file.
- The finished denture from your approved design is ready in approximately five days.
Dentsply Sirona Digital Dentures aren’t just revitalizing labs. The benefits extend to dental practices and patients as well.

**DENTISTS: REDEFINE YOUR PRACTICE**

Our Digital Dentures bring a number of immediate benefits that result in greater efficiency and higher profitability.

- Save chair time and simplify your denture workflow
- Attract new patients
- Provide a permanent digital record
- Minimize post-insertion adjustments

**PATIENTS: RENEW YOUR SMILE**

Digital Dentures from Dentsply Sirona were designed to offer a greatly improved patient experience, from the first office visit through the life of their dentures.

- Fewer appointments
- A more comfortable fit
- Easy replacement without repeating entire process
- Excellent aesthetics
- Lasting durability