

## bench**MASTERY**

### ●●● **STEP-BY-STEP CEREC CONNECT**

# Make a connection

Web-based digital impression transmission from the office to the lab

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Information provided by Sirona Dental Systems LLC.*



### CEREC Connect

#### Features

- Web portal allows CEREC dentists to send digital case data to registered inLab laboratories
- Eliminates the need for physical impressions
- Indicated for single-unit crowns and veneers or long-term temporary bridges
- No registration charge or dongle fee to dentist or lab
- Available 24/7
- Wide selection of available millable materials

#### Sirona Dental Systems LLC

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Select 101.

Using the **CEREC Connect** Web portal ([www.cerec-connect.com](http://www.cerec-connect.com)), dental offices equipped with a CEREC chairside CAD/CAM restoration system can now digitally send cases to the laboratory without the need to fabricate a physical impression.

Dentists can use CEREC Connect for cases involving full-contour anterior and posterior single crowns, veneers, or long-term temporary bridges made of polymer materials (e.g., VITA CAD-Temp). Dentists without a glazing furnace expand options by sending restorations requiring greater esthetics to their laboratory and still utilize the same technology to receive highly esthetic restorations.

The following case demonstrates the fabrication of a single-unit anterior crown using the CEREC Connect Web portal. A 65-year-old male required a series of single-unit crowns to replace existing failing PFM crowns on teeth Nos. 7 through 10. For this case, only the restoration of tooth No. 8, which had a broken crown with an exposed cast post (**Fig. A**) is shown.

The dentist prepared the tooth as usual, took a digital impression of both the post (**Fig. B**) and the antagonist, and saved the data in the patient's case file. The patient was provided with a temporary and sent home. The dentist logged onto the CEREC Connect web portal and exported the digital impressions to the registered lab of his choice, then completed an online prescription form with patient data, tooth shades, preferred materials, and turnaround time required. Immediately, an e-mail was sent to the lab notifying them of the restoration order.

**01** Log into the CEREC Connect site (**Fig. C**) to view the order, download the digital impressions into the inLab system, and inspect the images from all angles.

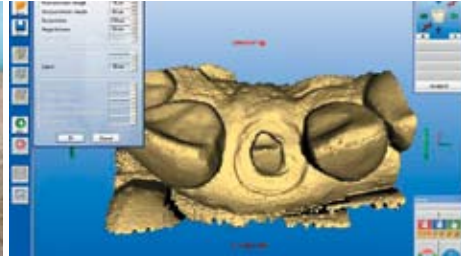
**02** Once the digital impressions have been verified as workable, submit an Order Review screen to notify the dentist that the case has been accepted.

**03** Begin the restoration design process by defining the margins as well as the path of insertion (**Fig. D**).

**04** Using the inLab software's built-in design tools, trim and refine the crown design and determine sprue location, which is displayed on-screen along with neighboring dentition (**Fig. E**). *Note:* The final crown design also can be viewed and inspected separately in the Milling Preview



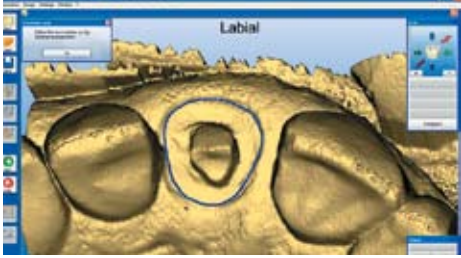
**Fig. A** Post and core to receive tooth No. 8 is prepared at the dental office.



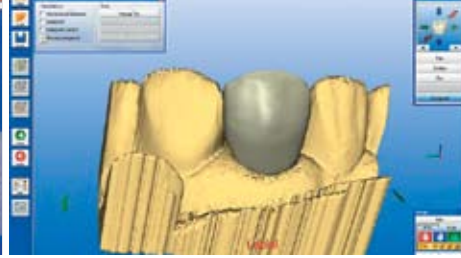
**Fig. B** Digital impression of the preparation is taken at the dental office and uploaded to the dentist's lab of choice.



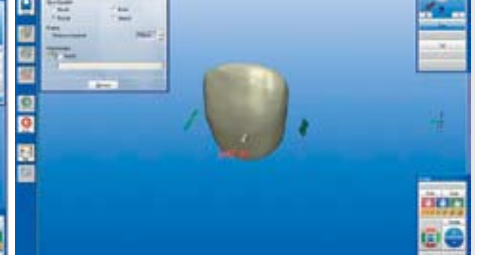
**Fig. C** The digital impression and case orders are reviewed at the lab.



**Fig. D** The restoration design process begins by delineating the margins.



**Fig. E** The technician trims and refines the crown in relation to neighboring and opposing (occlusal) dentition.



**Fig. F** The final crown design can be inspected separately from any angle.



**Fig. G** The material block is selected from among a list of available materials



**Fig. H** The material block is secured into the milling chamber, and milling is commenced.



**Fig. I** After milling, the crown coping is attached to the remaining block by a sprue.



**Fig. J** A dry fine diamond at low speed refines the surface and final anatomy.



**Fig. K** IPS e.max Crystall Shades are applied with a sable brush, and the restoration is then fired.



**Fig. L** The finished crown, ready to be sent to the dentist for final cementation.

screen from any angle (**Fig. F**).

**05** When satisfied with the crown design, choose the proper material block (**Fig. G**). *Note:* In this case, IPS e.max CAD LT (Ivoclar Vivadent) is used.

**06** Secure the material block into the inLab system's milling chamber, and commence milling (**Fig. H**). *Note:* Milling takes approximately 7 minutes (**Fig. I**).

**07** Use a medium diamond bur at high speed with water spray (to prevent overheating) to do the bulk sprue removal.

**08** Use a dry fine diamond bur at low speed to refine the surface texture and anatomy in preparation for staining and glazing (**Fig. J**).

**09** Apply shades, stains, and glaze with a brush of choice (**Fig. K**). *Note:* In this

case, IPS e.max CAD Crystall Shades (Ivoclar Vivadent) are used.

**10** Fire the crown to a crystallization cycle for about 35 minutes according to manufacturer's instructions at a temperature of approximately 840°C.

**11** The finished crown is ready to be sent to the dentist for final cementation (**Fig. L**).