# your talent. our technology. the perfect fit.

### Advantages of digital impressions

- superior accuracy vs conventional impressions
- unmatched onscreen visualization provides real-time feedback
- no impression mess to clean up

### Not just digital...iTero

- allows for fabrication of all types of dental restorations
- eliminates the need for coating teeth
- utilizes single-use imaging shields for maximum infection control
- allows for subgingival preparation for superior outcomes



### Cadent a pioneer in digital dentistry and orthodontics

Cadent is the leading provider of 3D digital solutions for the dental and orthodontic industries and services thousands of cases each week for a rapidly expanding customer base. Cadent's offerings improve the efficiency of orthodontic and dental treatments while increasing the revenue of dental health care providers.



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Reference: 1. Data on file, Cadent, Inc.

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The Cadent iTero<sup>™</sup> digital impression system



# The digital revolution

### Changing the face of dentistry

Digital technology ensures a more accurate impression from the start, which results in a better-fitting restoration.

Predictable, accurate impressions and bite registrations have always been one of the more difficult procedures to perform consistently. A host of variables present daily challenges, making conventional impression taking an inexact science.

- approximately 36% of dentists retake impressions three or more times per month<sup>1</sup>
- on average, 36% of dentists must reappoint patients for impression taking at least once per month
- at least 15% of cases require adjustment time of 5 minutes or more at seating<sup>1</sup>

The accuracy of crown and bridgework is determined by the accuracy of the many steps of the process, including taking and extracting the impression, pouring models, cutting and trimming dies, and the properties of the stone itself. Each of these steps decreases the accuracy of the clinician's work, which leads to expensive increases in chair time, costly lab remakes, and unhappy patients.

### Digital impressions benefit...

#### Dentists

- superior accuracy with no distortion from patient movement during set, removal of impression prior to thorough set, or disinfection following set
- onscreen visualization allows for immediate adjustment to create the ideal impression the first time
- no impression mess to clean up

#### Patients

- more comfortable impression experience
- less time in dental chair
- fewer repeat appointments
- better-fitting restoration

#### Dental labs

- a more accurate impression ensures a superior restoration
- increased productivity by reducing costly remakes



# iTero: state-of-the-art science

### Differentiated technology

Two types of digital imaging principles are currently available in the dental industry—triangulation sampling and parallel confocal. Scanners that use the triangulation sampling principle of imaging typically apply one angled cone of light to capture a single image at 15,000 microns (Fig 1).





Cadent iTero features parallel confocal imaging, which utilizes laser and optical scanning to digitally capture the surface and contours of the tooth and gum structure. The iTero scanner captures 100,000 points of laser light in perfect focus at 300 focal depths of the tooth structure. These focal depth images are spaced approximately 50 microns apart (Fig 2).



Triangulation sampling scanners require the teeth to be coated with expensive and cumbersome scanning powder (Fig 3). Parallel confocal scanning with the iTero system captures all elements and materials found in the mouth without the need for scanning powder. Because there is no tooth coating, the iTero system can operate with contact scanning techniques (Fig 4). These unique features of confocal scanning enable iTero to capture both supragingival and subgingival preparations.





# Not just digital...iTero

### The only digital impression system that...

- allows for fabrication of all types of dental restorations
- eliminates the need for coating teeth
- utilizes single-use imaging shields for maximum infection control

### And allows for subgingival preparation for superior outcomes

With the ability to scan quadrants and full arches, iTero allows the clinician to easily take digital impressions of single-unit cases as well as more complex restorative and cosmetic full-arch treatment plans. Onscreen visualization of the scan in real time ensures that preparations are perfectly completed and that there is adequate occlusal clearance to achieve the best cosmetic and restorative outcome. The result is a reduction in seating time and an increase in patient satisfaction.

#### Confidence comes with iTero

- 99% of impressions are captured perfectly the first time
- thousands of impressions are taken with iTero every week
- iTero system is easy to learn and is backed by a dedicated support staff at Cadent



"I have placed more than 700 restorations using iTero and have had no remakes. My adjustment time has been cut in half as the occlusion and interproximal contacts require minimal adjustment. More than 95 percent of my patients prefer the iTero system compared to conventional methods, as it is more comfortable and they avoid having bad-tasting, goopy impression material in their mouth."

— **Dr Bret Jacobson**, private practice, Federal Way, Wash

# The path to the perfect fit

A digital scan performed with iTero is, quite literally, digitally perfect. This type of precision virtually eliminates the need to reimpress patients and renders remakes a thing of the past. By removing the imprecision that is intrinsic to conventional impression materials, you can deliver consistently impressive work.

iTero allows for the fabrication of all types of restorations: veneers, crowns, bridges, inlays, onlays, and implant abutments, from single units to full arches. iTero models are precision milled at our state-of-the-art facility in New Jersey and are considered best in class.

















**Restoration inserted by dentist** 6



## Creating a perfect impression with iTero

#### 1. The digital prescription form

Enter patient treatment information into the digital prescription form, which is used by the partnering laboratory to fabricate the requested restoration. Prior to tooth preparation, the opposing dentition can be scanned by the dental assistant.



### 4. Assimilation

Press the foot pedal again to preview 3D virtual models of both arches on the screen. This process takes less than 1 minute. It is important to review the model with the patient present to ensure that proper retraction allowed for a clear margin and that tooth reduction was adequate.

#### 2. Tooth preparation and tissue management

Prepare the tooth area in your preferred manner. Once the tooth is prepared, use a traditional two-cord tissue retraction method. Recommended cord sizes are "00," "0," "1," and "2." The sulcus architecture determines the cord selection. Typically, you would begin with a "00" (thinnest) or "0." Pack the cord and then review the preparation. Refine as needed. Next, pack a "1" or "2" to reflect the tissue. Wait 5 minutes and review again after removing the second cord. ViscoStat<sup>®</sup> Clear works well to control bleeding, if needed.



#### 5. Review

Evaluate the scan from any desired viewing position using the software tools. The digital articulator allows you to review the occlusal clearance and make any modifications necessary on the prepared tooth or opposing arch. This simple step ensures that the laboratory has the appropriate reduction to deliver optimal aesthetics for the restoration type you prescribe.

#### 3. Scanning

Digital impressions with iTero begin with a single-use imaging shield to ensure maximum infection control for the patient and the office staff. Clicking "Scan Now" activates the scanning process. The system will identify the tooth to be scanned and the angle at which to scan through voice and visual prompts.

View the upper-left window to review the tooth number to be scanned and the angle that the system is requesting. Press the foot pedal and follow the software prompts that will guide you through the necessary scans.



#### 6. Transmit

The iTero digital impression system features a dedicated wireless connection. Click the mouse to send the patient's scan data to the dental laboratory of your choice and to Cadent. This wireless connection also enables you to contact live customer support when needed.









## A case for the perfect fit

#### **Predictable results**

The scanning process with iTero is intuitive and easy. The software guides you every step of the way with voice and visual prompts. A complete scan takes just 3 to 5 minutes—about the time required for conventional impression materials to set. Plus, with no time devoted to preparing impression trays or cleaning up, the time savings are predictable. Better still, the unmatched accuracy of impressions taken with iTero means that crowns require minimal adjustment, which delivers another source of predictable time savings.

#### Dentist

Dr Bret Jacobson

#### Patient treatment plan

Fractured DL cusp on tooth #14 requiring a full-coverage crown

#### Scanning time

Opposing arch scanned by dental assistant: 2 min Prepared tooth scanned by dentist: 1 min 30 sec



Featured tooth prior to preparation



Seating appointment

Laboratory prescription

Total seating time required: 5 min Number of adjustments required: none

Type of crown: porcelain fused to metal

**3D virtual model of scanned quadrant** 



Final restoration in place

## iTero: an ideal complement to your practice

#### iTero helps build your practice

- a superior restoration
- enhances your reputation as a state-of-the-art practice
- reduces consumable expenses
- makes seating appointments more predictable

"The quality of restorative work I am providing to my patients is clinically superior. Because of the precision achieved with digital impressions, my chairside adjustments have been reduced significantly, if not all but eliminated. Moreover, the efficiency of a 10- to 15-minute single crown seating appointment is good news for my bottom line and my patients." — Dr Virginia Plaisted, private practice, Albany, NY

#### Patients will be impressed

Patients will appreciate that digital impressions with iTero are more comfortable than the traditional impression method. In fact, patients preferred iTero to conventional impressions across a range of parameters<sup>1</sup>:

- 65% reported that iTero was more comfortable
- 61% perceived that iTero was faster
- 71% preferred or strongly preferred iTero
- 88% believed iTero is "interesting technology," and 74% thought it is "great that my dentist has the technology"
- 85% "will tell others about this technology"

• increases patient satisfaction by eliminating the "goop" of traditional impressions and by delivering





# Impressive on your bottom line

Managing your practice requires more than just clinical expertise, it also takes sound business practices. Cadent has been helping dentists integrate technology into their practices for over 10 years. With more than 1 million OrthoCAD® cases and 35,000 iTero cases already in the market, you can be assured that we understand your business.

That's why iTero not only offers clinical benefits, but also provides an excellent return on your investment. With iTero, you can save an average of \$59 per patient.

#### iTero saves money through time and materials efficiencies

	Traditional method	CADENT iTero	\$ Saved/pt*
First visit			
Time (min)	45	40	\$21
Impression materials (\$)	\$9	\$0	\$9
Retakes			
Time (min)	1.5	0	\$6
Impression materials (\$)	\$1	\$0	\$1
Second visit			
Fitting time (min)	30	20	\$42
Reworks			
Fitting time (min)	1.5	0.3	\$5
Totals	78 min \$10 materials	60.3 min \$25 Cadent fee	\$84–\$25= <b>\$59</b>

\*Savings based on rate of \$4.17/min.

Practice efficiencies and positive cash flow begin right from the start with your investment in iTero.

Monthly savings per dentist		
CADENT	Savings per case	\$59
i Tero"	Cases per month	25
	Utilization	75%
	Total savings per month	\$1,106
	Lease expense	(\$500)
	Monthly savings	\$606
	Annual savings per dentist with iTero scanner lease	\$7,272
	Annual savings per dentist without iTero scanner lease	\$13,272

Average increase in pretax incomet per dentist with iTero scanner leaset 4% Average increase in pretax incomet per dentist without iTero scanner lease 8%

Based on pretax income of \$166,000.

