

YOUR TALENT. OUR TECHNOLOGY. THE PERFECT FIT.

iTero - exclusively distributed in Europe by





THE DIGITAL REVOLUTION

CHANGING THE FACE OF DENTISTRY

DIGITAL TECHNOLOGY ENSURES A MORE ACCURATE IMPRESSION FROM THE START, DESIGNED TO RESULT IN A BETTER-FITTING RESTORA-TION.

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.

36%

Percentage of dentists that retake impressions three or more times per month¹ Percentage of dentists that must

36%

reappoint patients for impression taking at least once per month¹

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 chairtime, costly remakes in the dental laboratory, and unhappy patients.

DIGITAL IMPRESSIONS POSSIBLY BENEFIT...

DENTISTS

- Excellent 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

Less time in dental chair

PATIENTS

- More comfortable impression experience
- Fewer repeat appointments
 - Better-fitting restoration

DENTAL LABS

- A more accurate impression is essential for a good restoration
- Increased productivity by reducing costly remakes
- Contaminate-free model provides for technician peace of mind

These unique features of confocal scanning enable iTero to capture powder-free digital impressions.





ITERO: STATE-OF-THE ART SCIENCE DIFFERENTIATED TECHNOLOGY

Figure 1 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 typically apply one angled cone of light to capture a single image at 15,000 microns. Figure 2 Cadent iTero features parallel confocal imaging, which utilizes laser and optical scanning to digitally capture the surface and contours of the tooth and gingival structures. 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. Figure 3 Triangulation sampling scanners require the teeth to be coated with expensive and cumbersome scanning powder. Figure 4 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. These unique features of confocal scanning enable iTero to capture both supragingival and subgingival preparations.

NOT JUST DIGITAL ... iTero

THE DIGITAL IMPRESSION SYSTEM THAT...

Allows for fabrication of numerous types of dental restorations

- Eliminates the need for coating teeth
- Utilizes single-use imaging shields for maximum infection control
- Allows for subgingival preparation designed for great 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 a possible increase in patient satisfaction.



CONFIDENCE COMES WITH iTero

- Not only are re-impressions eliminated, remakes by dental labs are less than one half of 1%
- Thousands of impressions are taken with iTero every week
- Fire of the system is easy to learn and is backed by a dedicated support staff at Straumann



I have placed more than 1,200 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, Washington



THE PATH TO THE PERFECT FIT

A digital scan performed with iTero is designed to be digitally perfect. This type of precision is designed to eliminate the need to reimpress patients and to significantly reduce remakes. By removing the imprecision that is intrinsic to conventional impression materials, you can deliver consistently good work.

iTero allows for the fabrication of numerous types of restorations: veneers, crowns, bridges, inlays, onlays, and implant abutments, from single units to full arches. iTero models are precision milled at Straumann's state-of-the-art facility in Leipzig.

Step 1 Digital scan by dentist
Step 2 Real-time chairside feedback
Step 3 CAD model created by laboratory
Step 4 CAM model created by Straumann
Step 5 Final restoration created by laboratory
Step 6 Restoration inserted by dentist

Figures courtesy of **Dr. JJ Salehieh** Private Practice, Cupertino, California



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.

2. TOOTH PREPARATION AND TISSUE MANAGEMENT

As with any restorative procedure, tooth preparation and tissue management with Cadent iTero depends on sound biomechanical and macromechanical principles. The iTero scanner will precisely capture any preparation design of the clinician's choice. Digital impressions with iTero begin with a single-use imaging shield to ensure maximum infection control for the patient and the office staff. The system will identify the tooth to be scanned and the angle at which to scan through voice and visual commands. Each individual scan is presented in color.

3. SCANNING





The 3D virtual models of both arches are then

previewed on the screen. This process takes

less than 30 seconds. It is important to review the model with the patient present to ensure

proper retraction allowed for a clear margin

and the tooth reduction was adequate.





4. ASSIMILATION

5. REVIEW

The scan can be evaluated 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 dental laboratory has the appropriate reduction to deliver optimal aesthetics for the restoration type you prescribe.

6. TRANSMIT

The iTero digital impression system features a dedicated wireless internet connection. A simple mouse click sends 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.

CADENT iTero MODELS

COMBINING ACCURACY AND UTILITY

The iTero model, made of a stable polyurethane material, presents numerous advantages when used in the Cadent process. As a single model that functions as both a working model AND a soft tissue model, it supports accurate and efficient laboratory fabrication of all restorations. Advantages of the Cadent iTero polyurethane model include:

- Resistance to wear when used in the dental laboratory;
- The resulting model is designed for lower risk of breakage if accidentally dropped;
- Plaster-like color similar to conventionally poured models;
- Occlusal relation is scanned directly and efficiently transferred to the unique iTero articulator;
- Used with the sophisticated and easy-to-use articulator with a very accurate fixed "zero" point;
- Straumann's milling machines can replicate the model repeatedly with the same quality;
- Ditching is performed on a virtual model and accurately produced by the milling machine; and
- One model serves as a working model and a master model where the soft tissue structures can be visualized during laboratory fabrication.



A CASE FOR THE PERFECT FIT

CADEN

PREDICTABLE TIME SAVINGS

The scanning process with iTero is intuitive and easy. In fact, over 90% of iTero dentists delegate all or part of the scanning to assistants. 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 impressions trays or cleaning up, the time savings are predictable. Better still, the accuracy of impressions made with iTero means that restorations 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
- Seating Appointment: Total seating time required = 5 min. Number of adjustments required = none
- Laboratory Prescription: Porcelain-fused-to-metal crown



- 1. Featured tooth prior to preparation
- 2. 3D virtual model of scanned quadrant
- 3. Definitive restoration in place



iTero: AN IDEAL COMPLEMENT TO YOUR PRACTICE

ITERO HELPS BUILD

- Increases patient satisfaction by eliminating the "goop" of traditional impressions and by delivering an outstanding 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.

– Virginia Plaisted,

Private Practice, Albany, New York

PATIENTS MIGHT 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:



Reported that iTero was more comfortable¹



Believe iTero is "interesting technology"¹



perceived that iTero was faster¹



think it is "great that my dentist has the technology"¹

71%

preferred or strongly preferred iTero¹



"will tell others about this technology"¹

IMPRESSIVE ON YOUR BOTTOM LINE

A CASE STUDY ON ITero OFFICE ECONOMICS

Managing your practice requires more than just clinical expertise—it also takes sound business practices. Cadent has been helping orthodontists and dentists integrate technology into their practices for over 10 years. With more than 2 million cases completed so far, you can be assured that we understand your business.

That's why iTero not only offers extensive clinical benefits, but also provides an excellent return on your investment. Over the past two years, Cadent has tracked the progress of many iTero Users. They consistently report that the outstanding clinical results achieved by iTero allow them to decrease chairtime for each patient and increase practice productivity and profitability. The following case study from Dr. Curtis Mitchem is just one example of how iTero can impact your practice from day one.

Practice Profile:

- Dr. Curtis Mitchem
- Champaign, US
- 20 Years in Practice
- ~3,500 Active Patients in Practice
- Purchased iTero in 2006
- Completed 550 Cases with iTero in the last 12 months
- 1. During the year 2007, tracking of cases indicated the **iTero saved approxi**mately 32 minutes of chairtime per patient.
- 2. Production rate is \$500 per hour.
- 3. Over one year, the practice **increased production capacity by \$146,850** by reducing chairtime with iTero.
- 4. During this same time period, Dr. Mitchem's laboratory work increased more than 15%.
- 5. The remake rate at the laboratory went from 3.5% to **less than 0.03%** since using iTero.

CADENT **iTero** creating the perfect byte.

YOUR TALENT. OUR TECHNOLOGY.

THE PERFECT FIT.

Advantages of digital impressions...

- Excellent accuracy vs conventional impressions
- Excellent onscreen visualization provides real-time feedback
- No impression mess to clean up

Not just digital — iTero...

- Allows for fabrication of numberous types of dental restorations
- Eliminates the need for coating teeth
- Utilizes single-use imaging shields for maximum infection control
- Allows for subgingival preparation designed for superior outcomes



A pioneer in digital dentistry and orthodontics

Headquartered in CardIstadt, New Jersey, and with a development center in Tel Aviv, Israel, Cadent is the leading provider of 3-D digital solutions for the dental and orthodontic industries.

The company 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 healthcare providers.

© 2010 Cadent Inc., 04/10EU V1

Reference: 1. Study performed in the USA data on file, Cadent, Inc.

iTero is a U.S. trademark and OrthoCAD is a U.S. registered trademark of Cadent, Ltd., protected by one or more pending and granted U.S. patents, a list of which is available upon request.