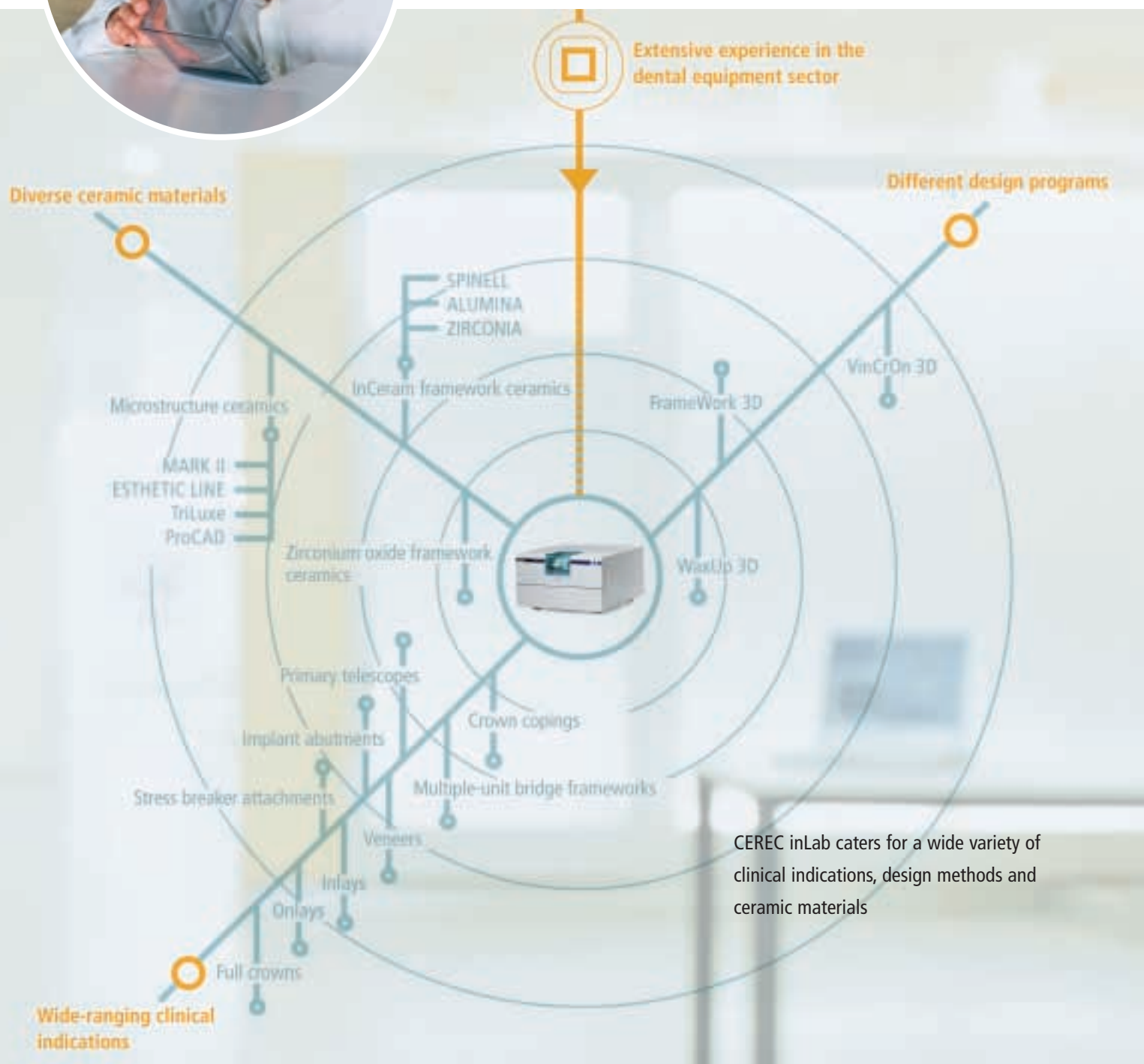




**CEREC inLab –  
the multifunctional  
CAD/CAM system  
for modern dental  
restorations.**



CEREC inLab – progress coupled with experience:  
Sirona's leading-edge CAD/CAM system.



*Sirona: a leading force in dental technology.* Sirona has been designing and manufacturing dental equipment for more than a century. Building on this strong foundation the company has devoted increasing attention to ceramic restorations in recent years. In particular, Sirona is firmly dedicated to enhancing the working relationship between dentists and dental laboratories wherever possible.

*Virtually unparalleled.* CEREC inLab embodies all the technical know-how of the 10,000 CEREC systems that have been sold worldwide, plus the proven clinical performance of more than seven million ceramic restorations. By harnessing its considerable software and hardware expertise Sirona has geared CEREC inLab precisely to the technical and business needs of dental laboratories. The system offers all the functions that laboratories could possibly need – both now and in the future – as well as unparalleled flexibility and versatility.

*A top performer.* Flexibility is a prerequisite for success. This applies to dental laboratories in particular. CEREC inLab opens up a whole new dimension in the ceramic restoration market. Standardized and automated processing steps save valuable time. The latest technology has been deployed in order to ensure that the system is easy to learn and operate. The high precision milling system ensures constant and reproducible results every time – regardless of the design method, the type of restoration and the ceramic material you choose.



# CEREC inLab – technology for precise all-ceramic restorations.



**Controlled scanning.** CEREC inLab consists of a compact milling unit with a built-in laser scanner controlled by a standard commercially available PC (Windows 2000 or XP). The non-contact scanning system ascertains the dimensions of the model in fine 5-µm steps, thus ensuring the highest level of precision. If zirconium oxide blocks are used CEREC inLab automatically detects the change parameters (printed in the form of a barcode) and adjusts the dimensions to take account of the sintering process.

**Controlled design.** To deploy CEREC inLab technology all you need is a standard available PC. The design and processing steps are performed with the help of sophisticated software programmes geared to the specific requirements of dental laboratories.

**Controlled milling.** As the scanner and milling tools are on the same axis, CEREC inLab eliminates any unnecessary loss of precision. The dimensions of the milling tools (consisting of a cylindrical and a conical diamond bur) are automatically tested before each milling process begins. The built-in "Soft Touch Control" function recalibrates the tools to take account of

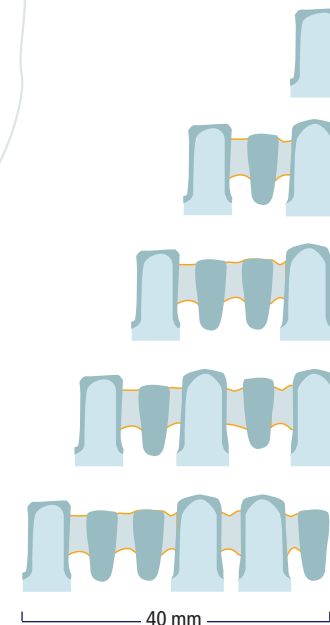
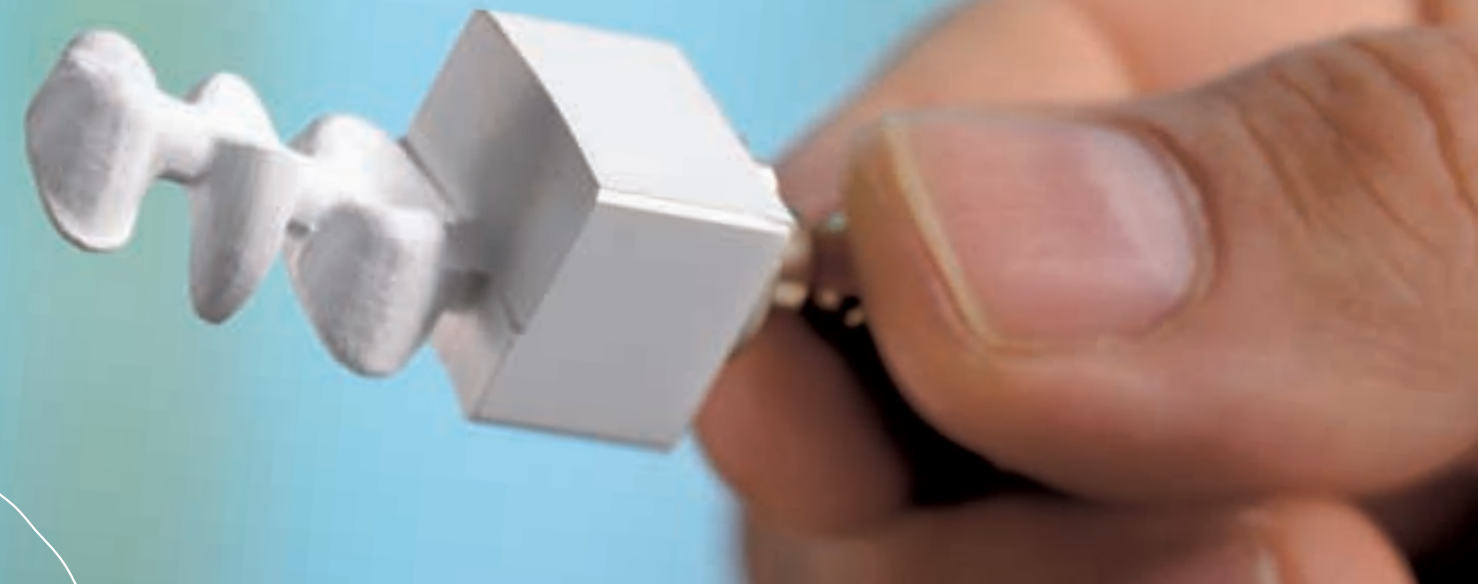
wear. During the actual milling process the twin tools produce much finer results than conventional machining systems – and save time as well. The integrated water-cooling system (no separate connection required!) is gentle to the ceramic material and obviates the need for a dust extraction system.



**Precise.** The sensitive stepping motor scans the model in 5-µm steps. Machining takes place with the help of a cylindrical and a conical diamond bur. The integrated water-cooling system is gentle to the ceramic materials.

### CEREC inLab – the benefits in brief:

- Table-top unit (weight 30 kg) with scanner and twin milling unit
- Operation of all functions via a conventional PC
- Simple Plug & Play installation
- Flexible and cost-effective solutions geared to the growing demand for all-ceramic restorations



**CEREC inLab allows for a wide range of all-ceramic restorations.** Crown copings (also in blocked form) and multiple-unit bridge frameworks up to a maximum anatomical length of 40 mm (with no limit on the number of individual bridge units).

**Biocompatible.** Ceramic restorations are ideally suited to the human organism. They do not react with other restoration materials in the patient's mouth – for example, existing amalgam fillings. The proven biocompatibility of ceramic materials is a key advantage in the light of the growing incidence of allergies (also with regard to precious metals). This opens up new sources of business potential.

**All-ceramic restorations.** The trend towards all-ceramic restorations continues unabatedly. They offer unrivalled benefits in terms of aesthetics and biocompatibility and have proved themselves time and time again in single-tooth applications. However, the increasing demand for non-metallic restorations necessitates innovative manufacturing processes. CEREC inLab complies with all these requirements and caters for a broad-spectrum range of clinical indications, including multi-unit bridge frameworks.

**Decide for yourself.** Ceramic materials also offer decisive aesthetic advantages. In terms of translucency ceramic restorations are virtually indistinguishable from natural tooth enamel. Light can penetrate into the dentine core and the surrounding gum tissue. You can choose from a broad range of ceramic materials in order to achieve perfect visual results. Feldspathic ceramic restorations, for example, boast a so-called "chameleon" effect – i.e. they adapt to the colour of the surrounding dentition.

**Extensive practical experience.** Sirona has acquired extensive know-how in the field of dental CAD/CAM. The CEREC chairside systems have been on the market for 15 years, with outstanding success. Exacting scientific studies of more than 2,500 restorations have revealed that the survival rate of CEREC restorations compares favourably with that of conventional precious metal equivalents.



# CEREC inLab – harnessing computers to your craft skills.



*The choice is yours.* CEREC inLab offers you a choice of sophisticated CAD/CAM and virtual wax-up modelling techniques. Thanks to CEREC inLab you are at the forefront of modern technology and ideally equipped to deal with future demands.

*Always in the picture.*

CEREC inLab adapts seamlessly to your dental laboratory and boosts efficiency. The CAD/CAM technology deployed in CEREC inLab is easy to understand and mirrors your established workflows. The 3-D design tools allow you to view and assess the results of your work at any time.

*Always up to date.* CEREC inLab is a safe investment in the future. Regular software updates (available on CD and via the Internet) ensure that the hardware always remains up to date.

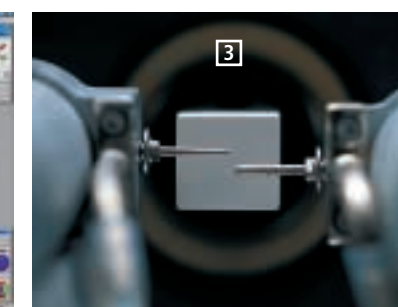
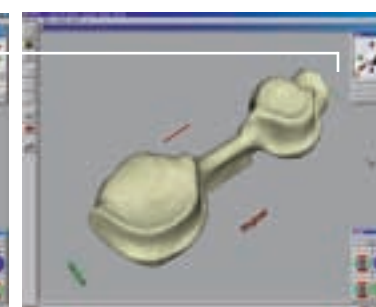
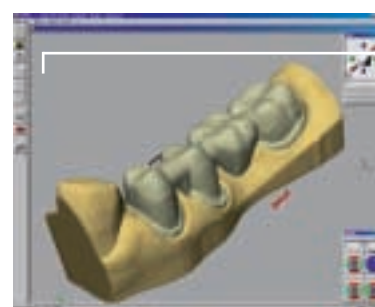
*Perfect data management.* Thanks to CEREC inLab, data management is child's play. Scan, design and customer data can be saved either to the hard drive or to a CD-ROM. If required the data can also be transmitted electronically by E-mail or LAN.

*Easy start.* The CEREC inLab software makes it easy to get to grips with CAD technology, regardless of which programme package you use.

*Desktop or laptop.* To run the CEREC inLab software all you need is a standard PC or laptop with at least 2.5 GHz. Internet access is also an advantage as it allows you to transmit the design data electronically.

*Future compatible.* The CEREC inLab software is the centrepiece of a complete system. As a rule existing CEREC milling units can be upgraded in line with changing requirements. In other words, CEREC inLab "grows" in pace with your dental laboratory.

CEREC inLab: clinical indications	CEREC inLab Software		
	FrameWork 3D	VInCrOn 3D	WaxUp 3D
Anterior copings	■		■
Premolar copings	■		■
Anterior bridge frameworks	■		■
Premolar bridge frameworks	■		■
Inlays		■	
Onlays		■	
Veneers		■	
Anterior crowns		■	
Premolar crowns		■	
Primary interior telescopes			■
Implant abutments			■



**CEREC inLab – the benefits in brief:**

- Computers enhance your craft skills
- Choice of different design methods
- Simple integration into existing workflows
- Easy to operate
- Short processing times minimize your labour input
- Convenient data handling
- Sirona's proven software and hardware expertise
- Complete range of software for different clinical applications
- Realistic 3-D visualization
- User-friendly intuitive operation
- Specialist computer skills not required
- Simple, low-cost upgrades

- 1 Scanning**  
Automatic non-contact scanning of plaster models and wax-up models.
- 2 Design**  
Precise and simple design with the help of sophisticated 3-D software tools.
- 3 Milling**  
Precise water-cooled milling of the ceramic block with twin diamond burs.

*Realistic visualization.* The restoration appears on the screen as a fascinating 3-D image. You can assess all the relevant details at a glance and from any angle of your choice. This boosts your confidence in the final result.

*User-friendly design.* The 3-D design tools allow you to work intuitively and with the utmost precision. The finished results can be viewed and assessed instantaneously.

# CEREC inLab – the right ceramic material for every clinical indication.



### Working towards a common goal.

To create top-quality restorations you need the very best ceramic materials. Years of experience and continuous development work are the basis for the highly successful working relationship between Sirona, VITA and Ivoclar Vivadent.

**High standards.** CEREC inLab deploys industrially produced ceramic blocks. Compared with conventional laboratory-produced materials, these blocks boast a homogeneously distributed particle size. And this means optimum physical characteristics and outstanding quality.

**Decide for yourself.** CEREC inLab sets new standards in terms of material diversity. You can choose from a total of eight different materials: three tried-and-tested oxide ceramics (VITA In-Ceram ZIRCONIA, ALUMINA, SPINELL BLANKS); four finely structured feldspathic ceramics (VITABLOCS MARK II, ESTHETIC LINE, TriLuxe, IVOCLAR VIVADENT ProCAD BLOCKS); plus zirconium oxide (VITA In-Ceram YZ CUBES). With these eight materials at your disposal you can respond even more flexibly to customer requirements in terms of clinical indications, aesthetics, production times and durability.

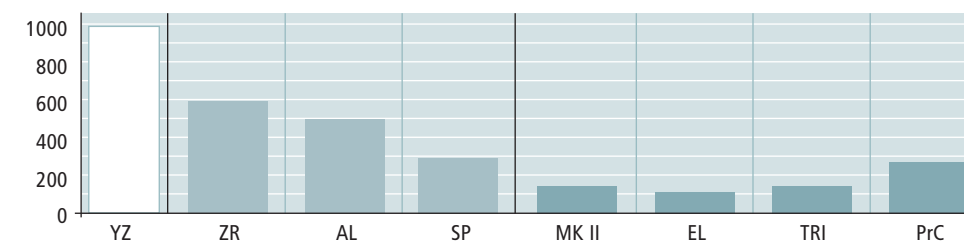
**Making the right choice.** Flexural strength and fracture toughness are decisive criteria when choosing a ceramic restoration material. CEREC inLab offers the perfect solution for every type of clinical indication.



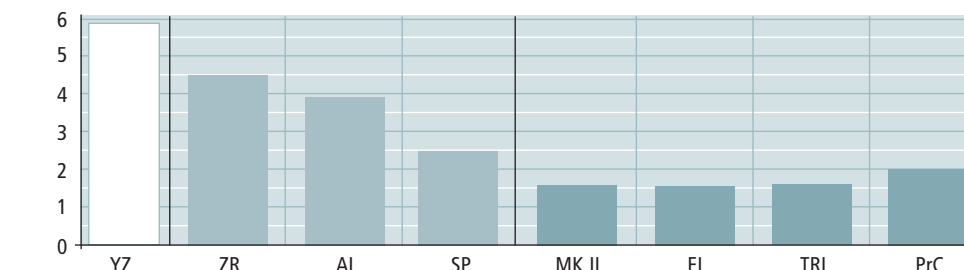
### Zirconium oxide

Bridge framework ceramics differ in terms of their visual and physical characteristics. Zirconium oxide is an absolutely reliable material for multiple-unit bridges in the premolar region. For crown copings it is "over-qualified" – also in cost terms.

Flexural strength (MPa)\*

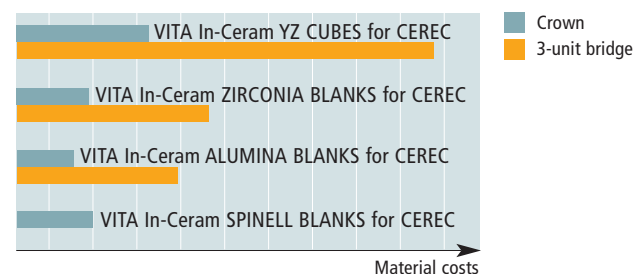


Fracture toughness (MPa x √m)\*



\* Manufacturer's figures

### It's worth comparing prices



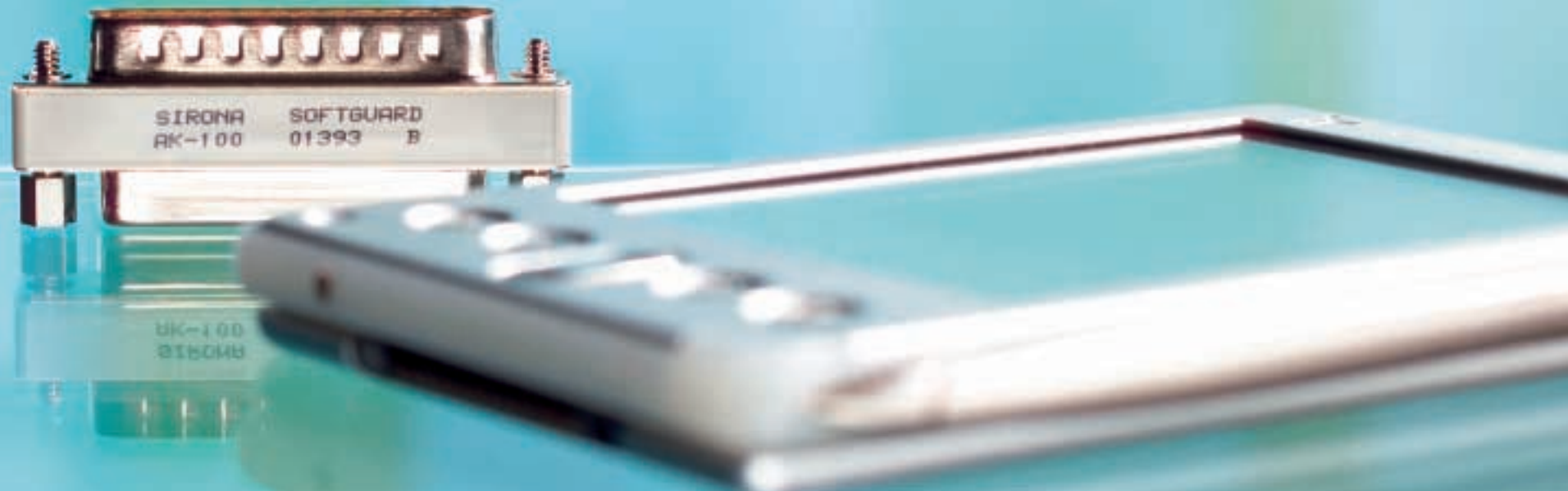
### CEREC inLab – the benefits in brief:

- Close cooperation with leading ceramics manufacturers
- Eight different materials (including zirconium oxide) for a wide range of clinical indications
- Deployment of industrially produced ceramics with homogeneous microstructures
- New types of material can be accommodated in the future without the need to modify the CEREC inLab system

CEREC inLab: clinical indications	Material							
	VITA In-Ceram YZ CUBES for CEREC	VITA In-Ceram ZIRCONIA BLANKS for CEREC	VITA In-Ceram ALUMINA BLANKS for CEREC	VITA In-Ceram SPINELL BLANKS for CEREC	VITABLOCS Mark II for CEREC	VITABLOCS ESTHETIC LINE for CEREC	VITABLOCS TriLuxe for CEREC	IVOCLAR VIVADENT ProCAD Blocks for CEREC
Anterior copings	■	■	■	■				
Premolar copings	■	■	■	●				
Anterior bridge frameworks	■ <sup>1</sup>	■ <sup>2</sup>	■ <sup>2</sup>					
Premolar bridge frameworks	■ <sup>1</sup>	■ <sup>2</sup>						
Inlays					■	●	●	■
Onlays					■	●	■	■
Veneers					■	■	■	■
Anterior crowns					■	■	■	■
Premolar crowns					■	●	■	■
Primary interior telescopes	■							
Implant abutments	■	●						

■ Recommended ● Possible <sup>1</sup> with two pontics <sup>2</sup> with one pontic

# CEREC inLab – a safe investment in the future.



*Low initial capital outlay.*

CEREC inLab is a modular system which requires a relatively low initial capital outlay. This means that relatively small laboratories can explore the fascinating possibilities of CAD/CAM, boost efficiency and reap the economic benefits.

The investment in CEREC inLab still pays off even if you take into account the additional costs of an unlimited activation key and a VITA high-temperature furnace (required for zirconium oxide and veneer ceramics). You pay less – yet receive enhanced product performance.

*The choice is yours.* Three high-performance software packages are available for CEREC inLab. What's more, Sirona is the only supplier of inhouse CAD/CAM systems who offers you different modes of payment.

You can either opt for an unlimited version of the software packages or else pay a separate charge for each unit (PPU). Either way, the costs remain within clearly defined limits. Small and medium-sized dental laboratories are not compelled to incur high software costs which exceed their expected production volumes.

**Pay-per-use (PPU) activation key**

- You pay only for the units you actually use.
- The units are counted with the help of a plug-in unit (dongle) attached to the parallel port of your computer.
- An interesting alternative for small and medium-sized laboratories.

**Unlimited activation key**

- You pay a fixed amount in advance and can then produce an unlimited number of restorations.
- You receive a separate activation key for each CEREC inLab software package.
- Unlimited activation keys can be purchased at a later date.

**CEREC inLab – the benefits in brief:**

- State-of-the-art CAD/CAM technology for only a small capital outlay.
- Choice of different software packages.
- In combination with zirconium oxide ceramics, the WaxUp software opens up very interesting new perspectives.
- Cost benefits have been confirmed by an in-depth study.

## Time is money

Time required to create a 3-unit bridge framework

