

Are you ready for **incise™**

There are a number of metal-free CAD/CAM systems available to dentists and technicians, so what makes



Renishaw's incise™ process unique? It is the only system that offers a certificate demonstrating the excellent fit of the restoration. Renishaw plc, based in Wotton-under-Edge, Gloucestershire, UK is a world leader in metrology (the science of measurement) with worldwide support for its products.

Using its technology, experience and expertise, the inaccuracies at each stage of the crown and bridge process can be measured.

By eliminating or minimising these errors, the process created by Renishaw produces a precision fit and eliminates remakes, guaranteeing the patient, dentist and dental technician an easier life.

The Renishaw dental training facility, which opened on 14 March, will help educate all members of the dental team on their roles in the process.

Renishaw's background in dentistry

Renishaw's **incise™** is a simple and very accurate dental CAD/CAM framework production system which draws on Renishaw's 30+ year metrology history and its 20 years of experience in the reverse engineering field.

Dental CAD/CAM now comes in many forms but the basic objective remains the same: to produce strong dental prostheses with great aesthetics, biocompatibility, superb fit and excellent longevity.

incise™ uses zirconia and processes it in a novel way to eliminate errors caused by material shrinkage during sintering. Simple design processes within Renishaw's unique CAD software ensures that the accurate scanned data is not degraded by complex manipulation or data triangulation processes. Particular attention is paid to the impression and die stone materials. By using this scientifically validated process, the dentist and dental laboratory can be sure that the model closely represents the clinical situation. Unlike other dental CAD/CAM systems, the ceramic core need not be sintered after machining, eliminating the errors that occur as the material shrinks.

Renishaw's head office, Wotton-under-edge, Gloucestershire





Renishaw's award winning SP25M scanning probe

Introduction to the Incise™ process

incise™ ceramic restorations are produced by a revolutionary dental system that focuses on accuracy at every stage of the process. The result is a crown or bridge that not only looks great, but also fits perfectly. Leading-edge measurement technology and dental research support the system design. Superior accuracy is provided by Renishaw's renowned measurement and manufacturing technology, backed by pioneering research into clinical and laboratory processes.

Following the incise™ guidelines will generate a world class restoration. incise™ offers:

- Accurate fit and marginal adaptation. Good marginal adaptation correlates with good gingival health and reduced micro leakage;
- A restoration that meets clinical strength requirements for both posterior and anterior restorations;

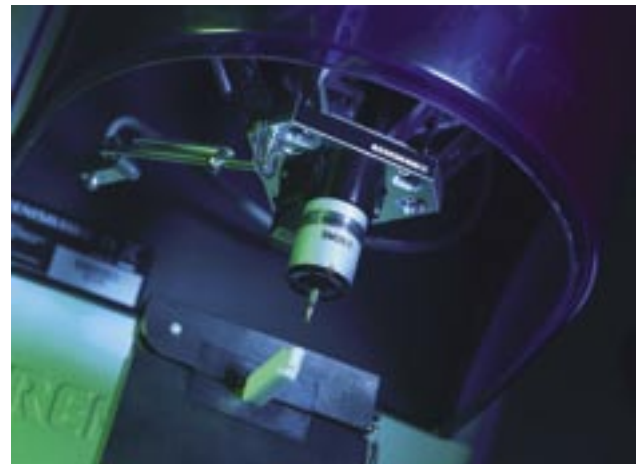
- Improved aesthetics by eliminating metal collars and dark margins;
- Longevity due to material stability and good marginal seal, which is enhanced by using recommended porcelains and cements.

Fitting a poorly designed or manufactured restoration can lead to problems such as periodontal disease, secondary caries, fractured restorations, de-bonding of cement, poor aesthetics and ultimately loss of tooth vitality. All incise™ frameworks are supplied with a certificate showing an analysis of the framework fit.

Before shot:
Dark line around the marginline



After:
incise crown is fitted



Incise scanning machine checking a coping

Improved aesthetics of incise crown on (right) next to traditional PFM crown (left)





Opening of the training facility at New Mills

Opening of the Training facility

The new dental training facility, at Renishaw's Headquarters, Wotton-under-Edge, in Gloucestershire, was opened on 14th March by Mr Richard Daniels, Chief Executive, Dental Laboratories Association. This facility will enable members of the dental team to become familiar with techniques developed to maximise the value of CAD/CAM in dentistry. Over the next few months, Renishaw's Dental Products Division will be revealing details of the incise™ process, which delivers precision fit ceramic restorations. The incise™ process is unique because the science developed at Renishaw reveals, in detail, the relationship between the clinical impression and the master model. An understanding of the behaviour of various impression materials and model materials together with the relationship between the clinical landmarks upon which the final prosthesis is to be fitted will be the starting point for the Renishaw Dental Seminars. All the members of the dental team (dentists, nurses and technicians) can be accommodated in the new training facility. This will bring the very latest in dental technology to the fingertips of those who wish to deliver state of the art metal free ceramic restorations to their patients.



Richard Daniel's opening speech at the Training facility



Action shot from Richard - unveiling the plaque!



Nick Jones demonstrating the benefits of the system



Dr Nigel Knott, Densure, Rebecca Evans, BDTA, David Smith, DLA and Richard Daniels DLA



Felicity Jones, Marketing and Bryan Austin, Director, General Manager Dental Products Division



Sir David McMurtry, Chairman and Chief Executive, Renishaw plc thanks Richard Daniels



Natalie Wooldridge showing case study information