



At the forefront of technology

**AUSTRALIA**

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The early dental laboratory circa 1960



The first Parramatta laboratory on Charles Street circa 1980

# Our History

**Race Dental has grown from modest beginnings - John Leonard Race founded the original laboratory at 141 Macquarie Street, Sydney, in 1936. Assisted by his wife Lucy he slowly built the customer base of the business.**

In 1940 John was drafted into the Australian Army for a second time and forced to leave the business and his heavily pregnant wife, for the Middle East and Papua New Guinea. In his absence and fearing the worst, Lucy named their son after him. She reverted to John's preference and began calling the infant David once she received John's congratulatory telegraph some days after the birth. John had been badly injured in Papua New Guinea and negotiated the infamous Kokoda trail on a broken knee, with bamboo crutches made by a friendly local. He later returned safely to Australia, his wife, and his 2 year old son.

After the second world war John realised the west of Sydney would grow rapidly and relocated the business to a premises shared with a dental practice, at 2 The Kingsway, Wentworthville. John was shown to be right, there was a shortage of dental practices in the western area and work flowed in.

In 1954 a small purpose-built laboratory was constructed in the nearby, larger town of Parramatta to accommodate an expanding customer base.

The laboratory continued to develop strong and loyal customers and in 1956 John's eldest son David (née John) joined the company. By 1987 the staff had grown to over 20 and the outstanding success of the family business allowed for a fully equipped, state-of-the-art dental laboratory to be set up in North Parramatta.

Faced with seismic changes to the industry in the 1990's and 2000's, Race Dental invested heavily in new technology and digital workflow automation to allow a broader solution to be provided to customers. During this time Race was always **"At the Forefront of Technology"** – the business' motto for many years.



Company Founder John Leonard Race Circa 1940



The first Parramatta laboratory on Charles Street 1987



# Race Dental Today

Today David's sons, Brad, Matt and Anthony operate the business from ultra modern Sydney facilities covering 2500m<sup>2</sup>, making it the largest in Australia. With more than 80 years of industry experience, spanning three generations, the Race Dental team boasts an unsurpassed record of excellence and performance in the realm of dental production and technology.

The business prides itself on industry leading adoption of new technology and the ongoing training and development of key people to efficiently deliver a full suite of traditional and digital laboratory services. It is this focus on perpetually evolving and leading the market that has allowed the business to keep manufacturing 100% locally in Australia and New Zealand and continue to be the most advanced dental laboratory.

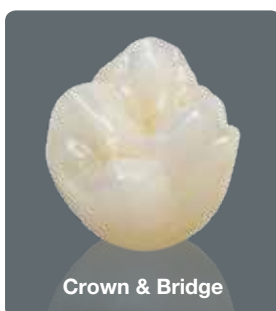
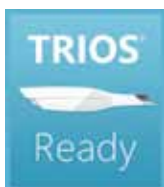
The focus, as always, remains our customers. We exist to fulfil the potential of the dental professionals we serve by providing them with optimal solutions and the highest quality products.

In 2017, Race Dental continues to expand, opening a fully digital production facility in Grey Lynn, Auckland.

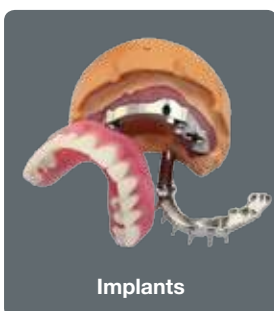


## IMPRESSION OPTIONS

Race Dental is the most advanced Australian dental laboratory and accepts all types of impression from traditional PVS to digital impressions taken with these leading digital systems.



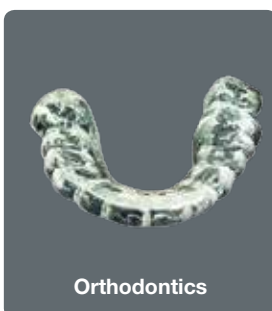
Crown & Bridge



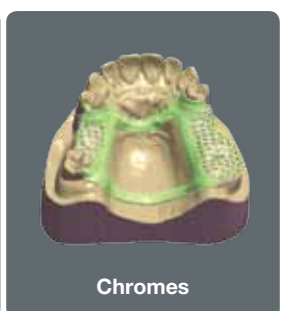
Implants



Acrylic



Orthodontics

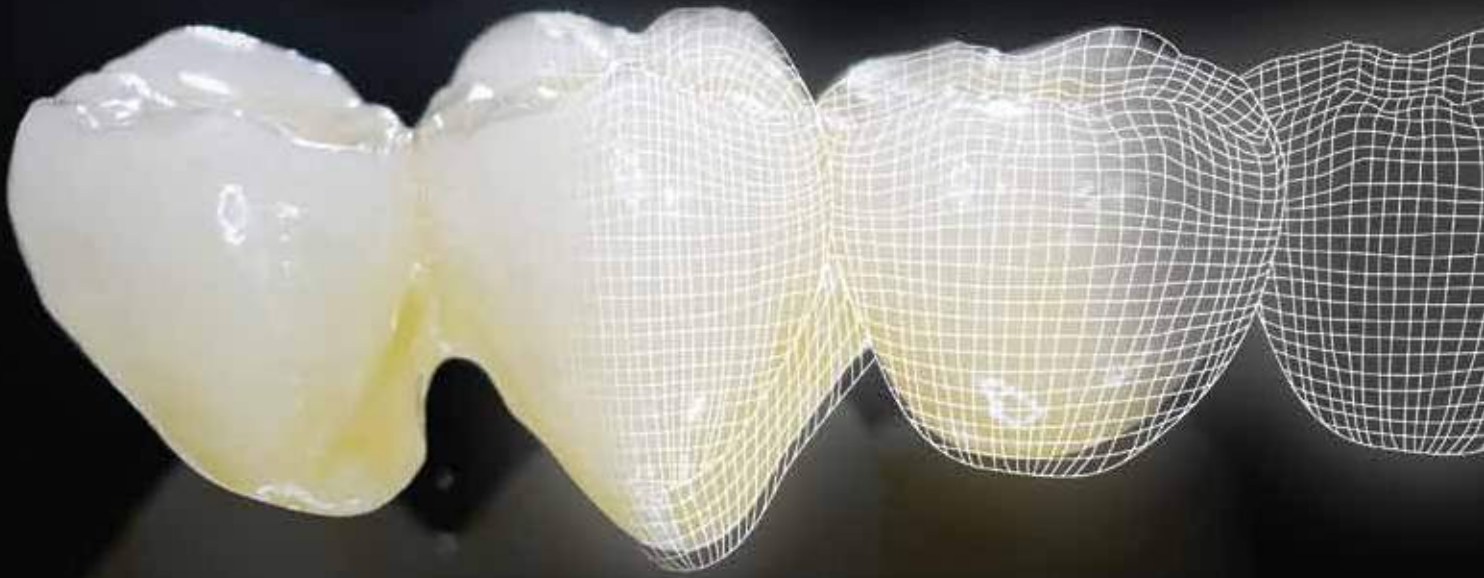


Chromes



*"Premium restorations are the very best replacement for natural dentition, both functionally and aesthetically."*

Matthew Race, LVI Master Technician



# Crown and Bridge

Race Dental offer a large range of traditional and modern crown and bridge restoration services. All work is completed in Australia and New Zealand by fully trained dental technicians using the latest equipment and specialist quality control technicians to ensure consistent quality assurance.



## **MATERIAL OPTIONS**

Race Dental offers you access to all of the traditional and modern materials however you choose to take impressions. A range of handmade metal and metal free restorations to digitally manufactured metal and metal free restorations. For optimal results we recommend the full digital workflow.

## **STANDARD AND PREMIUM OPTIONS**

Race Dental offers the broadest range of different systems with various levels of customisation to suit your requirements and budget.



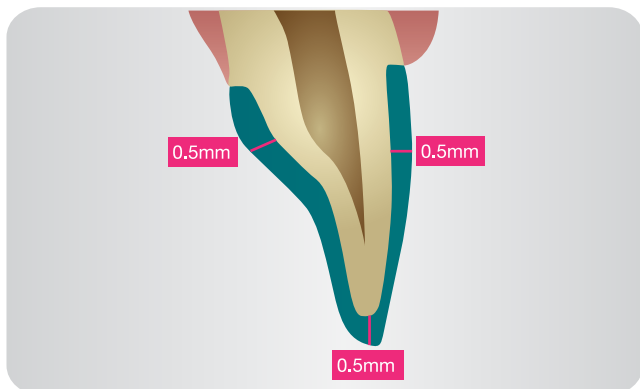
# Crystalite™



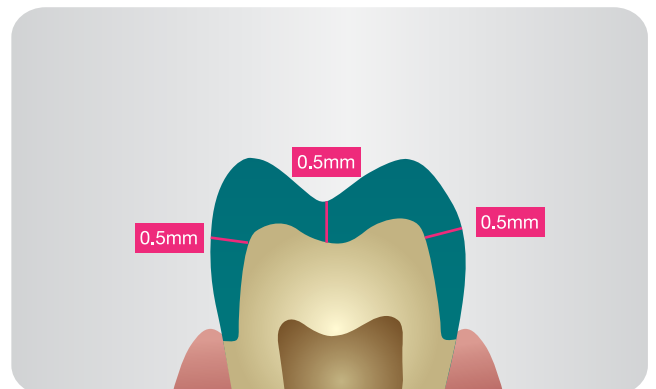
The new Crystalite™ crown is a material revolution for dentists who love aesthetics and excellence. A highly biocompatible material with outstanding transparency. The Crystalite system combines the known positive properties of zirconia with a significant increase in translucency as is known only from lithium disilicate. This material is perfect for all highly aesthetic treatments in anterior and posterior single tooth regions.

Impression technique	Digital or traditional
Material	Monolithic super translucent zirconia
Indications	Full mouth, crowns, implants
Recommended use	Full mouth, single crowns
Margins	Feather edge, chamfer or shoulder
Cementation	Conventional cementation
Etch	N/A
Recommended adhesive	3M™ RelyX™ Unicem 2
Turnaround time	5 lab days
Method of manufacture	Digitally designed and manufactured
Aesthetics	★★★★★
Shades / colouring	No internal effects, standard shades
Strength	★★★★★
Add-on options	Fit to denture
Benefits	High durability extreme strength metal-free, exceptional accuracy
Warranty	15 years
Type	Premium crown
Popularity	★★★★★
Strength	>750MPa

## FULL CROWN



Recommended Preparation For Anterior Teeth



Recommended Preparation For Posterior Teeth



Screw Retained 4 Unit Opalite Bridge



# Opalite™ GENERATION II

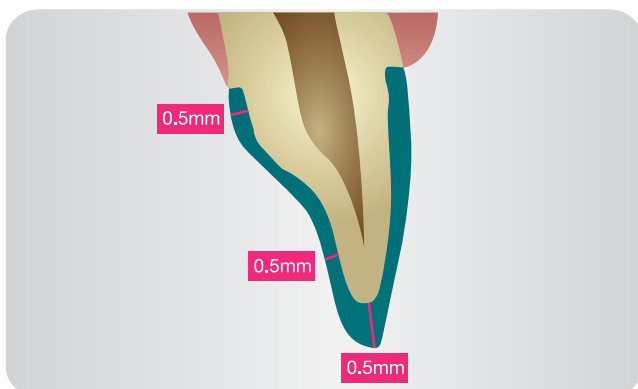
# Opalite™

**Opalite™ Generation II is monolithic zirconia and requires much less preparation space than traditional crowns, and is far more aesthetic than traditional PFM restorations.**

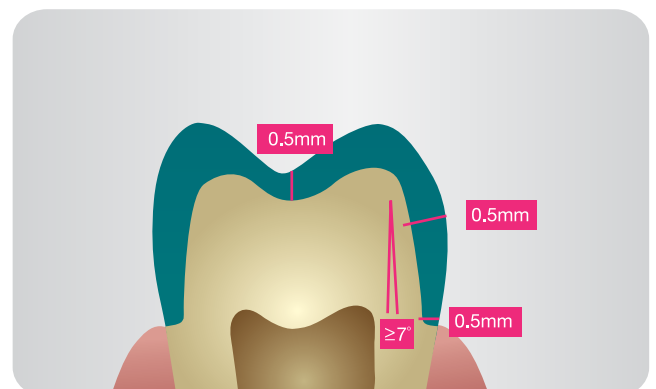
Every dentist has experienced challenging situations with bruxers and grinders. With an exceptional flexural strength of 1100MPa, Opalite™ restorations are virtually clinically unbreakable. Opalite™ all-zirconia crowns and bridges are designed digitally and milled from zirconia using CAD/CAM technology before being polished to a smooth finish with a similar lustre to a full gold crown for minimal abrasion.

Impression technique	Digital or traditional
Material	Monolithic translucent zirconia
Indications	Full mouth, crowns, bridges, implants
Recommended use	Full mouth, crowns, bridges, implants
Margins	Feather edge, chamfer or shoulder
Cementation	Conventional cementation
Etch	N/A
Recommended adhesive	3M™ RelyX™ Unicem 2
Turnaround time	5 lab days
Method of manufacture	Digitally designed and manufactured
Aesthetics	★★★★★
Shades / colouring	No internal effects, standard shades
Strength	★★★★★
Add-on options	Fit to denture
Benefits	High durability extreme strength metal-free, exceptional accuracy
Warranty	15 years
Type	Standard crown
Popularity	★★★★★
Strength	1200MPa

## FULL CROWN



Recommended Preparation For Anterior Teeth



Recommended Preparation For Posterior Teeth





# Enamic®



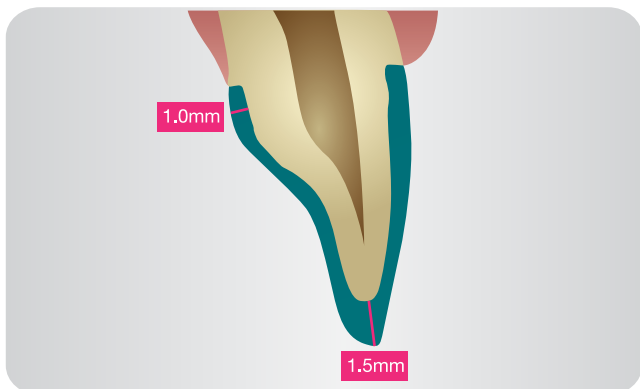
**VITA ENAMIC® is the first dental hybrid ceramic in the world with a dualnetwork structure.** In this dental material, the dominant ceramic network is strengthened by a polymer network, with both networks fully integrated with one another. In addition to a high degree of elasticity, this innovative hybrid ceramic guarantees particularly high load capacity after adhesive bonding.

### Features/Benefits

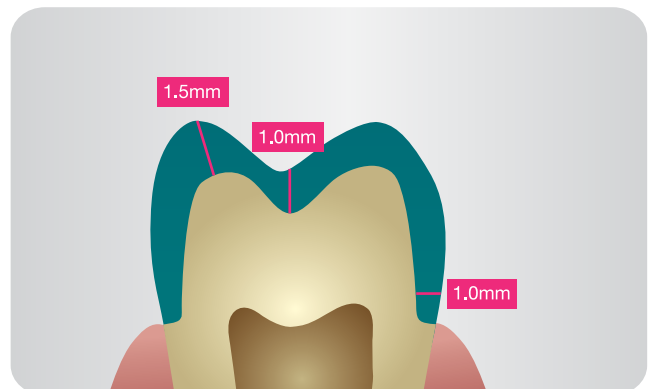
- Enormous load capacity since masticatory forces are absorbed
- Reduction of wall thickness possible to achieve restorations that are gentle on teeth
- Precise and accurate results
- Tooth-like material properties

Impression technique	Digital or traditional
Material	Hybrid ceramic
Indications	Full mouth, crowns, inlays, onlays, implants
Recommended use	Posterior crowns, implants
Margins	Feather edge, chamfer, shoulder
Cementation	Adhesively bonded
Etch	Hydrofluoric acid
Recommended adhesive	3M™ RelyX™ Ultimate
Turnaround time	5 lab days
Method of manufacture	Digitally designed and manufactured
Aesthetics	★★★★★
Shades / colouring	No internal effects, standard shades
Strength	★★★★★
Add-on options	N/A
Benefits	Minimally invasive, shock absorbing
Warranty	5 years
Type	Standard crown
Popularity	★★★★★
Strength	150-160MPa

### FULL CROWN



Recommended Preparation For Anterior Teeth



Recommended Preparation For Posterior Teeth



e.max veneers 11, 21

# IPS e.max<sup>®</sup> Pressed

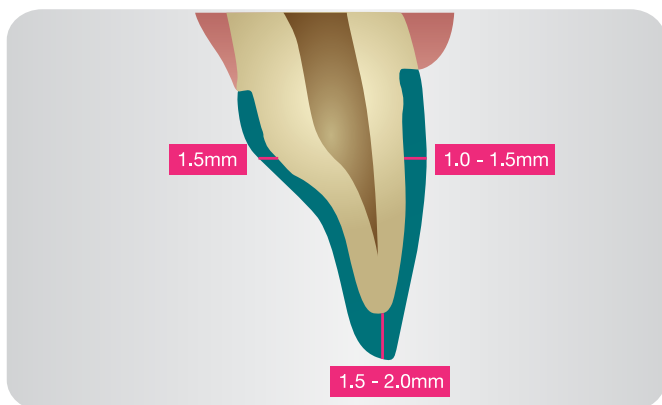


Using the Empress system as a technological basis, the IPS e.max<sup>®</sup> system delivers strength and premium aesthetics.

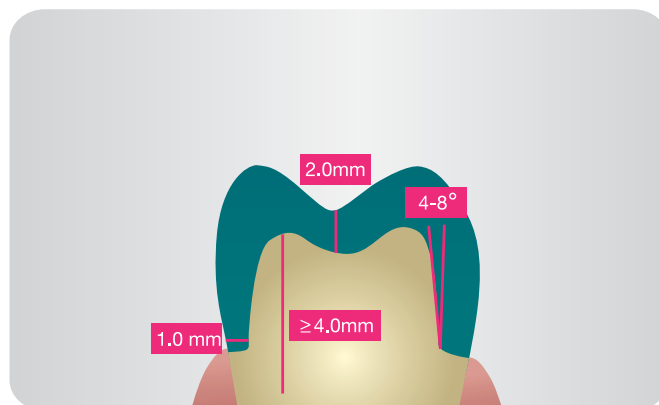
All IPS e.max<sup>®</sup> restorations offer highly aesthetic solutions due to their natural-looking colour and optimal light transmission.

Impression technique	Digital or traditional
Material	Ivoclar™ e.max lithium disilicate
Indications	Full mouth, crowns, inlays/onlays, veneers
Recommended use	Full mouth, crowns, inlays/onlays, veneers
Margins	Chamfer or shoulder
Cementation	Conventional cementation or adhesively bonded
Etch	Hydrofluoric acid
Recommended adhesive	3M™ RelyX™ Ultimate
Turnaround time	5 lab days
Method of manufacture	Waxed & pressed by hand
Aesthetics	★★★★★
Shades / colouring	Customised shading
Strength	★★★★★
Add-on options	N/A
Benefits	Premium aesthetics, metal-free
Warranty	1 year
Type	Premium restoration
Popularity	★★★★★
Strength	400±40MPa

## FULL CROWN



Recommended Preparation For Anterior Teeth



Recommended Preparation For Posterior Teeth



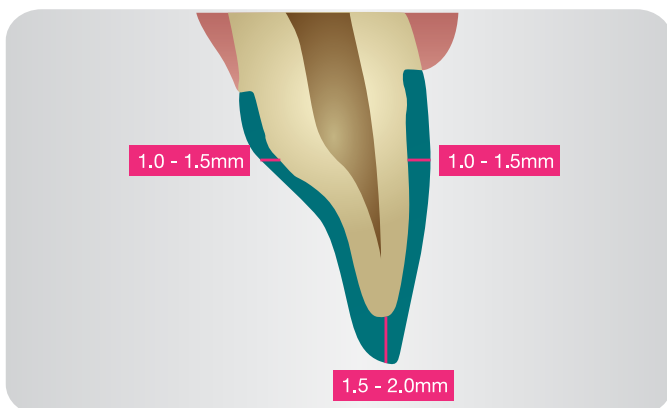
# IPS e.max<sup>®</sup> CAD



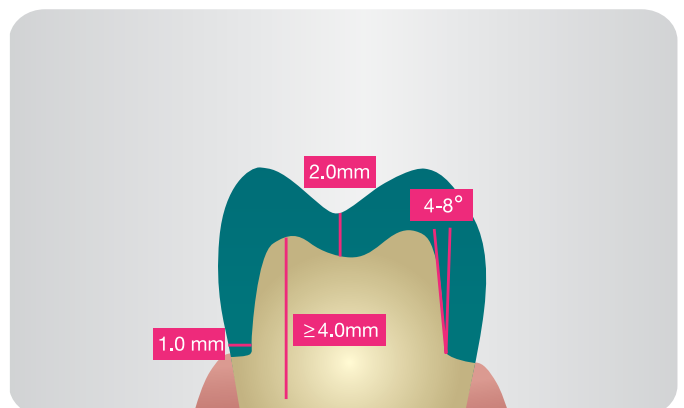
IPS e.max<sup>®</sup> CAD utilises the same high-performance lithium disilicate ceramic material as traditional pressed IPS e.max<sup>®</sup> matching its aesthetic qualities, while also giving all the advantages of CAD/CAM manufacture including accurate fit and consistent quality. These single-unit crowns are milled by Core3dcentres, an Ivoclar Vivadent authorised milling centre. This innovative crown is 2.5 to 3 times stronger than layered porcelain crowns at 360 – 400 MPa. IPS e.max<sup>®</sup> CAD is an ideal material for crowns as it exhibits aesthetic properties of both translucency and opalescence.

Impression technique	Digital or traditional
Material	Ivoclar™ e.max lithium disilicate
Indications	Full mouth, crowns,
Recommended use	Full mouth, single crowns
Margins	Chamfer or shoulder
Cementation	Conventional cementation or adhesively bonded
Etch	Hydrofluoric acid
Recommended adhesive	3M™ RelyX™ Ultimate
Turnaround time	5 lab days
Method of manufacture	Digitally designed and manufactured
Aesthetics	★★★★★
Shades / colouring	Customised shading
Strength	★★★★★
Add-on options	N/A
Benefits	Premium aesthetics, excellent fit, metal-free
Warranty	5 years
Type	Premium crown
Popularity	★★★★★
Strength	360±60MPa

## FULL CROWN



Recommended Preparation For Anterior Teeth



Recommended Preparation For Posterior Teeth





# Lava™ Plus

Lava™

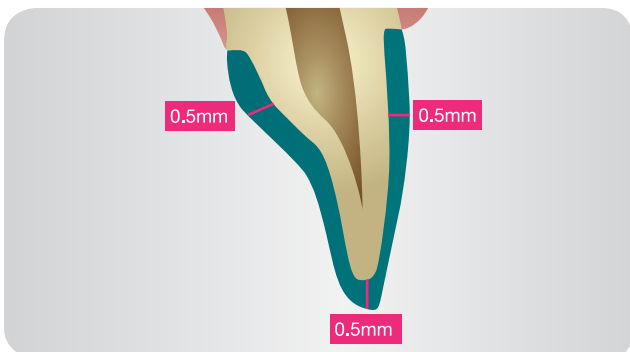
Race Dental is proud to offer Lava™ Plus.

3M™ Lava™ Plus perfectly blends with adjacent teeth in colour, translucency, individual characteristics and shape. Lava™ Plus can meet any aesthetic requirement thanks to its special chemistry and processing.

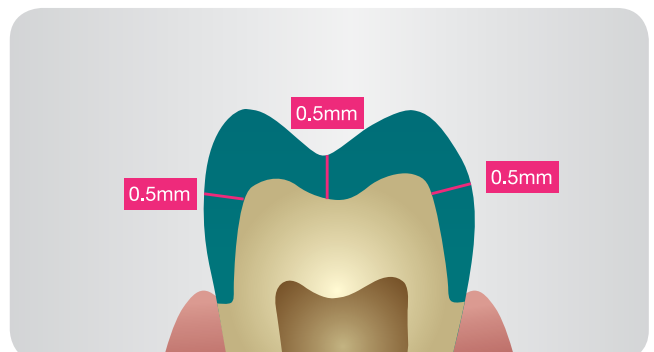
- Highly aesthetic monolithic
- Well-suited for anterior and posterior restorations
- Excellent colour match to VITA® Classic Shades
- Excellent colour match to VITA® SYSTEM 3D-MASTER® Shades
- Strength allows tooth-preserving 0.5mm minimum wall thickness
- Easy adjustments and easy cementation

Impression technique	Digital or traditional
Material	Monolithic translucent zirconia
Indications	Full mouth, crowns, bridges, implants
Recommended use	Full mouth, crowns, bridges, implants
Margins	Feather edge, chamfer or shoulder
Cementation	Conventional cementation
Etch	N/A
Recommended adhesive	3M™ RelyX™ Unicem 2
Turnaround time	5 lab days
Method of manufacture	Digitally designed and manufactured
Aesthetics	★★★★★
Shades / colouring	No internal effects, standard shades
Strength	★★★★★
Add-on options	Fit to denture
Benefits	High durability extreme strength metal-free, exceptional accuracy
Warranty	15 years
Type	Standard crown
Popularity	★★★★★
Strength	1150MPa

## FULL CROWN



Recommended Preparation For Anterior Teeth



Recommended Preparation For Posterior Teeth



# CELTRA<sup>®</sup> DUO

## YOUR DIGITAL CROWN

### The New DNA of High Strength Glass Ceramics

Together with the Fraunhofer Institute and VITA, DENTSPLY has developed a new class of materials for high-strength glass-ceramic from zirconia-reinforced lithium silicate: ZLS.

ZLS has a unique microstructure compared with traditional glass ceramics. It comprises three distinct properties:

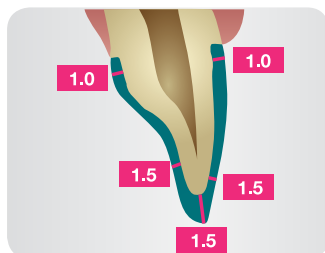
- **High glass content** (high translucency, opalescence, fluorescence)
- **10% Zirconia** (high mean flexural strength)
- **Very small lithium silicate crystals** (ultra-fine microstructure)

Impression technique	Digital or traditional
Material	Zirconia-reinforced lithium silicate
Indications	Full mouth, crowns
Recommended use	Posterior crowns
Margins	Chamfer or shoulder
Cementation	Adhesively bonded
Etch	Hydrofluoric acid
Recommended adhesive	3M™ RelyX™ Ultimate
Turnaround time	5 lab days
Method of manufacture	Digitally designed and manufactured
Aesthetics	★★★★★
Shades / colouring	No internal effects, standard shades
Strength	★★★★★
Add-on options	N/A
Benefits	High durability extreme strength metal-free, exceptional accuracy
Warranty	10 years
Type	Standard crown
Popularity	★★★★★
Strength	370MPa

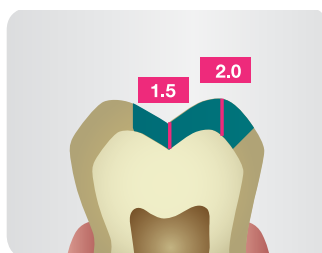
### POSTERIOR CROWNS



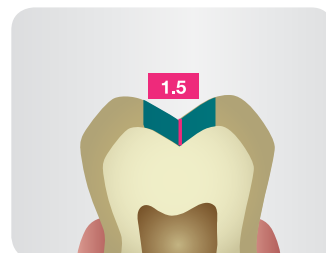
### ANTERIOR CROWNS



### ONLAYS



### INLAYS





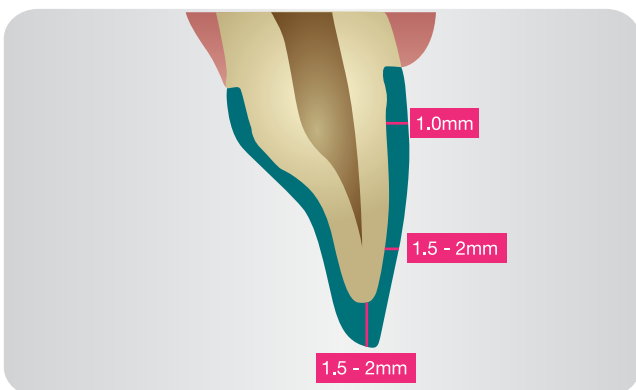
# Layered Zirconia

The layered zirconia crown is an aesthetically pleasing and cost-effective restoration.

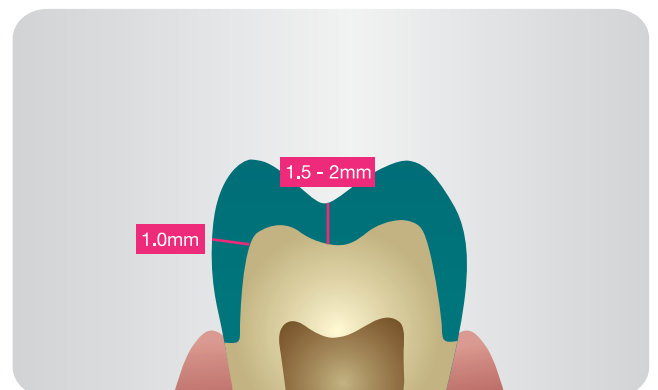
The zirconium oxide used is fully biocompatible and meets high aesthetic expectations due to its tooth-like colour. CAD/CAM manufactured for excellent fit and the material used is exceptionally strong - it can be used to make single copings and large-span bridges with up to 14 units as well as abutments and primary components.

Impression technique	Digital or traditional
Material	Zirconia (layered) coping with porcelain overlay
Indications	Full mouth, crowns, bridges, implants
Recommended use	Full mouth, crowns, bridges, implants
Margins	Feather edge, chamfer or shoulder
Cementation	Conventional cementation
Etch	N/A
Recommended adhesive	3M™ RelyX™ Unicem 2
Turnaround time	5 lab days
Method of manufacture	Digitally designed and manufactured (Framework) & built up by hand
Aesthetics	★★★★★
Shades / colouring	No internal effects, standard shades
Strength	★★★★★
Add-on options	Fit to denture, rests and ledges
Benefits	Good fit, metal-free
Warranty	1 year
Type	Standard crown
Popularity	★★★★★
Strength	90-120MPa

## FULL CROWN



Recommended Preparation For Anterior Teeth



Recommended Preparation For Posterior Teeth





# Premium PFM



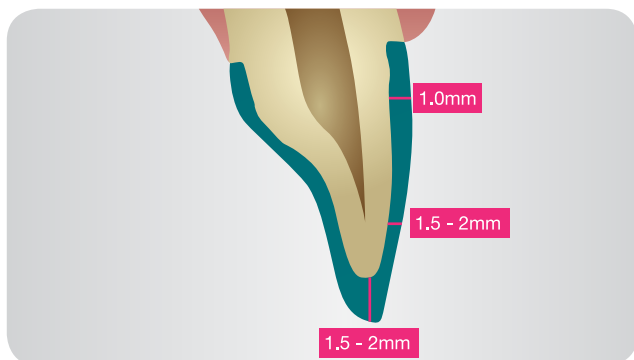
Race Dental is the market leader in producing porcelain fused to metal (PFM) restorations.

PFM crowns have been tried and tested for decades and offer strength, reliability, aesthetics, and good marginal fit. All PFM crowns use biocompatible alloys and the finest feldspathic porcelain systems to ensure attractive and natural aesthetics.

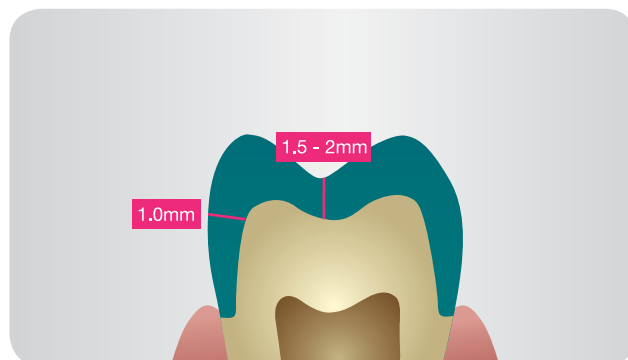
## METAL FREE ALTERNATIVE:

- Crystalite

Impression technique	Digital or traditional
Material	Semi-precious or precious alloy coping with layered porcelain overlay
Indications	Full mouth, crowns, bridges, implant
Recommended use	Full mouth, crowns, bridges, implant
Margins	Feather edge, chamfer or shoulder
Cementation	Conventional cementation
Etch	Sand blast
Recommended adhesive	3M™ RelyX™ Unicem 2
Turnaround time	5 lab days
Method of manufacture	Hand layered by senior technician
Aesthetics	★★★★★
Shades / colouring	Internal effects customised shading multi-layered
Strength	★★★★★
Add-on options	Fit to denture, attachments etc. Charges apply
Benefits	Traditional method, choice of alloys, 10x microscope fit, multi-layer build
Warranty	6 years
Type	Premium Crown
Popularity	★★★★★
Strength	90-120MPa



Recommended Preparation For Anterior Teeth



Recommended Preparation For Posterior Teeth



# Standard PFM

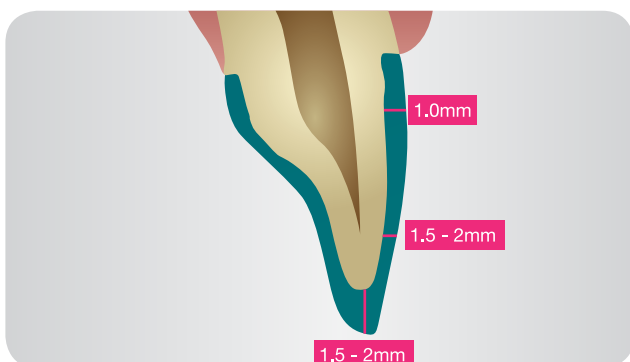
PFM crowns are available as standard or premium varieties depending on your budget and the required level of customisation.

The standard PFM restoration covers all the basics in standard VITA classic shades. Made to the same high quality as every Race Dental crown, standard PFMs are a cost effective restoration using traditional materials.

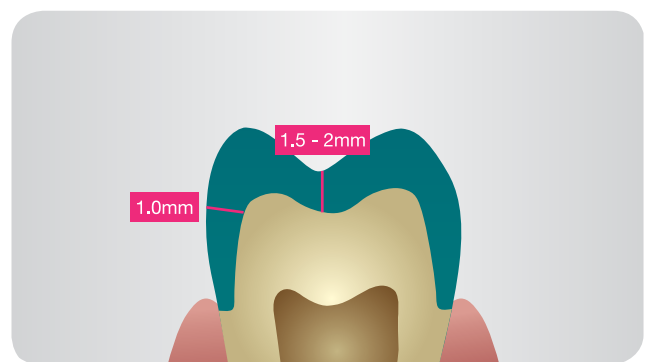
### METAL FREE ALTERNATIVE:

- Opalite
- Layered Zirconia
- Lava™ Plus
- VITA Enamic®
- Celtra® Duo

Impression technique	Digital or traditional
Material	Semi-precious or precious alloy coping with layered porcelain overlay
Indications	Full mouth, crowns, bridges, implant
Recommended use	Full mouth, crowns, bridges, implant
Margins	Feather edge, chamfer or shoulder
Cementation	Conventional cementation
Etch	Sand blast
Recommended adhesive	3M™ RelyX™ Unicem 2
Turnaround time	5 lab days
Method of manufacture	Hand layered
Aesthetics	★★★★★
Shades / colouring	Internal effects customised shading multi-layered
Strength	★★★★★
Add-on options	Fit to denture, attachments etc. Charges apply
Benefits	Traditional method, choice of alloys 5x microscope fit
Warranty	6 years
Type	Standard crown
Popularity	★★★★★
Strength	90-120MPa



Recommended Preparation For Anterior Teeth



Recommended Preparation For Posterior Teeth



Pressed ceramic veneer 11

# Shade Taking With Digital Photography

Digital photography has become a priceless tool in the dental industry. Its use can provide much more consistent results when trying to match shades.

It can be done easily and quickly and helps with **more than just the shade**. Other information it provides the technician include – labial characterisation, soft tissue blanching, gingival hue, glaze texture, and internal characteristics such as mamelons and check lines. Any digital camera or smart phone can be used.

Shade photos should be taken **prior to commencing preparation** so the tooth does not dry out and lighten in colour. First decide which tooth you wish to match. **If the 11 is being restored, it is best to photograph the 21** as it is the tooth that the crown should match.

Decide which shade tab is **most like the patients tooth which will be matched**. Invert the shade tab(s) and sit it (them) edge to edge with the tooth to be matched. Ensure the patients mouth is open to create a black background behind tooth and shade tab and take your first photo.

Notice the finish on the teeth which allows the technician to know what texture and glaze techniques to use. It also shows the labial characterisation in detail ensuring the light reflection will be matched with accuracy.

Shape and contour will be designed from the teeth on the model therefore not making it necessary to photograph any other teeth. **A second and third photo** with different shade tabs can help too. For all ceramic crowns and veneers please provide photos of the underlying preparation so it can be masked when necessary.

**A black and white photo** can also help with getting the value correct but this can be done in the laboratory.



Please send photos with Dr and patient name to [images@racedental.com.au](mailto:images@racedental.com.au)





# Implants



Race Dental provides a wide range of implant-supported restorations, fixed or removable crowns and bridges, over-dentures and full-arch restorations. We continuously strive to keep up to date on the latest techniques and components of all systems current in Australia. Race Dental has been able to support its customers with state of the art implant-supported prosthetic work for many years.

# Full Arch Restorative and Bars

Impression Technique: Digital or Traditional (Limited)

## RACE DENTAL HAS SPENT MANY YEARS PERFECTING THE ART OF FULL ARCH RESTORATIVE RECONSTRUCTION.

Full arch implant supported restorations are becoming increasingly popular due to the accuracy and predictability CAD / CAM solutions can provide. Race Dental is able to provide patients with the latest innovations in implantology through our partnership with core3dcentres. We provide a wide range of full arch solutions including removable overdentures, fixed removable overdentures, fixed hybrid dentures and full arch fixed zirconia or porcelain fused to metal bridges.

All of our solutions are designed and created with the latest CAD / CAM technology and are in turn manufactured using industrial milling technologies. This innovation provides complete stress and distortion free results which are created when using traditional manufacturing techniques. Thanks to CAD / CAM milling techniques, frameworks are now stronger than ever and show no solder or laser welds, meaning corrosion and fracture hazards are no longer a factor.



### REMOVABLE OVERDENTURES

All our removable overdentures are fabricated using retention abutments, premium teeth and high impact acrylic for added strength and aesthetics. They are an excellent solution for mandibular cases where there is sufficient alveolar ridge. They provide excellent retention for tissue-born prostheses.



### FIXED HYBRID DENTURES

Fixed hybrid dentures are most popular in the maxilla and provide outstanding aesthetics. They are fabricated using premium teeth, high impact acrylic for strength and aesthetics and come with all the relevant restorative hardware necessary for placement. The internal frameworks are milled from medical grade Titanium using industrial technologies.



### FIXED REMOVABLE OVERDENTURES

All our fixed removable overdentures are fabricated using retention abutments, premium teeth, high impact acrylic and precision milled implant bars. They are an outstanding solution for cases with heavy occlusal loads or minimal bone retention. They are an implant and tissue-born prosthesis which help to broaden occlusal forces across all implants.



### FULL ARCH FIXED BRIDGES

All our full arch fixed bridges are manufactured using the latest CAD / CAM solutions and custom abutment technology. We specialise in high end aesthetics and focus on gnathology to ensure long term stability and function. These restorations are available in zirconia or porcelain fused to metal.



# Fixed Price Impla

## General Restorative (Race Implants)



### 3M™ LAVA™ PLUS

- Screw Retained
- Cement Retained  
(Incl. Customised Titanium or Zirconia Abutment)



### Opalite™

- Screw Retained
- Cement Retained  
(Incl. Customised Titanium Abutment)
- Zirconia abutment additional



### CRYSTALITE™

- Screw Retained
- Cement Retained  
(Incl. Customised Titanium Abutment)
- Zirconia abutment additional



### LAYERED ZIRCONIA

- Screw Retained
- Cement Retained  
(Incl. Customised Titanium Abutment)
- Zirconia abutment additional



### GINGIVAL TRAINING CROWN PMMA SCREW RETAINED (Incl. Titanium Base)



### PFM

- Screw Retained
- Cement Retained  
(Incl. Customised Titanium Abutment)  
Alloy Extra

#### Includes

- Titanium Clinical Screw
- Implant Analogue and Soft Tissue Model
- Core3dcentres' Hardware

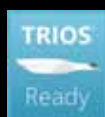
More solutions available on request

Genuine branded hardware incurs alternative pricing

Contact us for more information



POWERED BY





# nt Solutions

Warranty  
Provided  
on Restoration  
and Implant\*\*

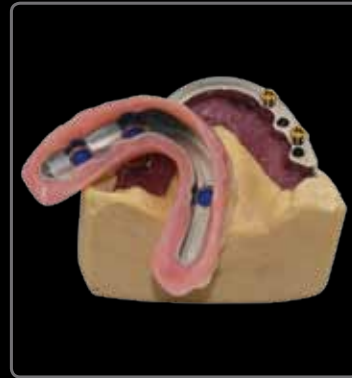
**WARRANTY**

\*\*Terms and conditions apply.

## Full Arch Implant Supported Solutions (All-on-X)



**FRAMELESS  
REMOVABLE  
HYBRID DENTURE**



**FIXED / REMOVABLE  
HYBRID DENTURE**  
Milled Bar with Locator Abutment  
Removable Locator Chrome  
Hybrid Denture



**COMBINATION  
REMOVABLE / CHROME  
HYBRID DENTURE**



**TRANSLUCENT ZIRCONIA  
IMPLANT BRIDGE**



**ECOBAR FIXED  
HYBRID DENTURE**



**MILLED TITANIUM  
FRAMEWORK  
HYBRID DENTURE**

Restorative only  
More solutions available on request

Genuine branded hardware incurs alternative pricing  
Contact us for more information

### EXTRAS

- \_\_\_\_\_ Radiographic Guide
- \_\_\_\_\_ Implant Placement Guide
- \_\_\_\_\_ Diagnostic Set Up
- \_\_\_\_\_ Verification Jig
- \_\_\_\_\_ Implant Special Tray

- \_\_\_\_\_ Custom Shade
- \_\_\_\_\_ Customised Gum Contour
- \_\_\_\_\_ Chair side Consult (Case Planning incl.)
- \_\_\_\_\_ Alloy    Semi Precious (Per Unit)
- \_\_\_\_\_            Precious (Per Gram)



# Implant Restorative

Impression Technique: Digital or Traditional



Screw Retained Implant PFM 12

Race Dental specialises in implant dentistry. Our specialist team is highly trained in all aspects of implant restorative manufacture and are dedicated in finding solutions to even the most challenging cases. Our expertise in this field has seen us work with some of the most respected Implant Surgeons, Maxillofacial Surgeons and Prosthodontists in the country and has allowed us to become one of the leading implant laboratories throughout Australia. The technical support from Race Dental will provide invaluable support when planning your more difficult cases and we like to ensure each case is looked at with a holistic approach to ensure the best possible outcomes for your patients.

We ensure all our restorations function correctly and maintain stability long term in the mouth. We focus on high end cosmetics and proper phonetics; and ensure correct soft tissue management for hygiene and aesthetic purposes.

We work with all implant brands currently available in Australia and we are happy to be involved with the case planning of each and every case.

**Ankylos, Astra Tech, Avinent, Nobel Biocare, BioHorizons, Biomet 3i, Dentsply, Implant Direct, MIS, Neoss, Southern Dental Implants, Straumann, Dentium, Osstem, Thommen, Tekka and more...**

# IC SIMPLICITY

Impression Technique: Digital or Traditional



IC Simplicity 'implant to crown' packages are being placed across Australia and New Zealand. Contact us to find out how you can benefit from our fixed cost implant to crown solutions.



## FUNCTIONAL PACKAGE



Implant



Core™ Titanium Abutment

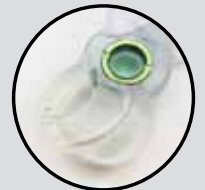


Cement Retained Core™ Full Contour Crown

OR



Screw Retained Core™ Full Contour Crown



Implant Placement Guide (Optional)

## AESTHETIC PACKAGE



Implant



Core™ Zirconia Abutment



Cement Retained Core™ Cosmetic Crown

OR



Screw Retained Core™ Cosmetic Crown



Implant Placement Guide (Optional)

## ALL-ON-X PACKAGES Includes restorative & implants



EcoBar Fixed Hybrid Denture



Milled Titanium Framework Hybrid Denture



Fixed / Removable Hybrid Denture



Translucent Zirconia Implant Bridge



Implant Placement Guide (Optional)

- All implants are provided by Implant Direct
  - Includes implant, implant replica, cover screw and impression coping / scan body
- Terms and conditions apply, contact us for details

Implants by:



Powered by:





# Acrylic



Race Dental's acrylic department has been servicing dentists since 1936. Acrylic work is the foundation of the company and what we do best! Our four senior acrylic supervisors have over 110 years experience between them and together they ensure that all acrylic work maintains a high level of quality, professionalism and individual service. We accept all varieties of acrylic work and our large and dedicated team of technicians and supervisors are always available to assist you in providing well-fitting and aesthetically pleasing work.





Impression Technique: Traditional

# Full Acrylic Dentures

Designed to replace dentition in an edentulous mouth. Dentures can be constructed in a combination of metal and acrylic, or purely out of the diverse acrylics. Now available in Vertex.

## MATERIALS:

- Heraeus Paladent 20 heat cured acrylic
- Heraeus, Vita and Ivoclar teeth
- Cast metal: full palate, full mesh palate
- High impact acrylics
- Soft linings
- Gold inlays
- Vertex

## PROCESSES:

- Cold cured
- Heat cured
- Injection moulded
- Pressure and heat packed
- Characterisation: rugae, labial buccal carving and tinting

**RELINES AND REPAIRS**

- Same day service for Sydney metropolitan areas
- Next day service if outside Sydney metropolitan areas



# Flexible Dentures

Impression Technique: Digital or traditional (Limited)

Thermo-plastics are a versatile material often prescribed for flexible removable partial dentures, as they are stronger, more flexible and reduce chair time. The invasive procedures and the cumbersome materials associated with rigid partials are eliminated and there are fewer steps in the treatment process because preparation of natural teeth is unnecessary. As there is no metal frame, the fabrication and try-in processes are simplified. The choice of a thermo-plastic partial also avoids the use of metal, for higher patient satisfaction. Thermo-plastics are appropriate for a wide range of challenging cases due to their adaptability and the virtually invisible support which they provide.





Impression Technique: Digital or traditional (Limited)

# Partial Acrylic Dentures

Partial dentures are designed to replace missing dentition and prevent healthy dentition from migrating due to a loss of proximal or opposing teeth. The general objective with partial dentures is to prevent problems which might occur if teeth migrate out of their natural dimension and position. Various problems can arise due to migrating dentition, such as issues with occlusion, Temporomandibular Joint (TMJ) headaches, ear aches, or even difficulty moving the jaw due to extreme pain. These issues can sometimes be initially identified by a clicking or popping sound.

Generally, partial dentures have appropriately placed retaining clasps, which can be made of chrome, stainless steel or flexible clear/tooth coloured matched material for aesthetic purposes. Partial dentures can be constructed in a combination of metal and acrylic, or purely out of the diverse range of acrylics available.

**REPAIRS AND ADDITIONS**

- Same day service for Sydney metropolitan areas
- Next day service if outside Sydney metropolitan areas
- Laser welding
- Cast and laser weld additions
- Immediate additions
- Tooth and Clasp additions



## MATERIALS:

- Heraeus Kulzer Acrylic
- Cast metal
- Mixed materials: Cast metal + Heraeus Kulzer Acrylic / Vertex / Valplast / Dental D
- High impact acrylics
- Flexible material base dentures
- Stainless steel clasping - 0.7, 0.8, 0.9, 1.0 mm
- Characterisation: rugae, labial buccal carving, stippling and colouring

## PROCESSES:

- Cold cured
- Heat cured
- Injection moulded
- Pressure and heat packed
- Characterisation of dentures (rugae), labial buccal carving and colouring

## BENEFITS:

- Prevents tooth migration
- Aids chewing
- Prevents sagging of the cheeks and lips
- Restores speech

When treating patients with sensitive mouths or other oral health considerations, flexible dentures may be found to be more tolerable since they mould to existing dentition





# Mouthguards

Impression Technique: Digital or Traditional



## ABOUT FORTRESS MOUTHGUARDS

Fortress Mouthguards are custom-made and professionally-fitted to ensure a high level of comfort and protection. They consist of multiple layers of laminate to add strength and durability.

### Fortress mouthguards offer the following benefits:

- Protection of the lips, teeth and jaw from most collision-induced injury
- Minimal interference to speaking and breathing even under demanding conditions
- Multi-layered laminate for extra protection
- Custom fit offers good retention and comfort

## SIZES AVAILABLE

A range of mouthguard types are available to suit your required level of protection.



	TYPE OF PROTECTION	RECOMMEND FOR	NAME/NO CUSTOM PRINTED	UP TO TWO INDIVIDUAL COLOURS	THICKNESS
<b>FORTRESS LIGHT</b>	Double-laminated for good all-round coverage	Juniors	✓	✓	4 - 6mm
<b>FORTRESS MEDIUM</b>	Double-laminated for good all-round coverage	Majority of team sports, junior to senior	✓	✓	4 - 7mm
<b>FORTRESS HEAVY</b>	Triple-laminated for stronger, smaller guards	High-impact contact sports, A-grade level	✓	✓	4 - 8mm



## COLOUR COMBINATIONS AND LOGOS

Fortress Mouthguards offer a comprehensive range of team colour combinations using a wide range of colours of materials which have been approved by the Therapeutic Goods Administration as being safe for use in the mouth. We can even print your team or sponsor logo on your mouthguard!

All mouthguards are printed with the wearer's name and contact number.

### PLAIN COLOURS



### FLUORESCENT COLOURS



### PEARL COLOURS



### CHOOSE UP TO 3 COLOURS



### CHOOSE YOUR OWN DESIGN\*\*



\* Please note: Real colours may vary from printed colour above

\*\*Your team's sponsor logo can also be printed on your mouthguard for an additional charge. 3 colour combination will also incur an additional charge.

## Preferred Dentist / Prosthetist Program

The Fortress Mouthguards Preferred Dentist / Preferred Prosthetist Program provides **FREE Patient Education Material** and can list your practice on our website as a preferred dentist or prosthetist.

### WHY IS PATIENT EDUCATION IMPORTANT?

Many of your patients play sport but are unaware of the benefits of using a properly fitted, custom built Mouthguard made from a professionally taken dental impression. If your patients are unaware of the dental health and sporting performance benefits of a custom mouthguard, and that wearing a Fortress Mouthguard can avoid costly and painful dental work after an injury to the face, patients will tend to opt for low cost 'boil and bite' Mouthguard which do not offer the same level of protection.

### FREE PATIENT EDUCATION MATERIALS:

1 x sample mouthguard, 1 x brochure display, 50 x patients brochures, 1 x A2 Poster and graphics for your practice's TV and social media



Sample mouthguard & patient education brochures



A2 Poster



Graphics available for your practice's television or social media

Fill out the form below and send it to Race Dental to receive your **FREE Patient Education Pack** or enter your details online at <http://fortressmouthguards.com.au/preferred-dentist-program>

Practice Name\* \_\_\_\_\_

Dentist Name\* \_\_\_\_\_

Qualifications\* \_\_\_\_\_

Address\* \_\_\_\_\_

Telephone\* \_\_\_\_\_ Fax\* \_\_\_\_\_

Email\* \_\_\_\_\_

Website \_\_\_\_\_

Tick all that apply:

- Please send FREE marketing pack (including 1 x sample mouthguard, 1 x brochure display, 50 x patients brochures, 1 x A2 Poster and graphics for your practice's TV and social media)
- Please list my practice website on [www.fortressmouthguards.com.au](http://www.fortressmouthguards.com.au)
- Please keep me informed of similar new products and offers

Please send the completed form to Race Dental  
 Unit 6, 40 Carrington Road, Castle Hill NSW 2154, Australia  
 or email [sales@racedental.com.au](mailto:sales@racedental.com.au)



Cut me out or photocopy me

# Bleaching



Impression Technique: Digital or Traditional

Many patients have an interest in a brighter, more attractive smile. Whitening can make such a dramatic difference to a smile.

Race Dental has partnered with Colgate to offer their Optic White™ Professional whitening kits which can only be supplied by a dentist.



## Colgate® Optic White™ Professional is a professional take-home whitening system, providing fast and effective performance.

- Visibly whiter teeth in 3 days<sup>^</sup>
- Easy 30 minute once-a-day wear time
- Clinically proven whitening efficacy<sup>^</sup>
- Viscous gel formula:
  - Enhances retention on tooth surface
  - Allows the hydrogen peroxide to rapidly break down extrinsic and intrinsic stains
  - Helps prevent dehydration of the teeth
  - Contains 0.25% sodium fluoride
- Available in a premium portable 4-syringe Kit (12.44g)



### Colgate® Optic White™ Professional take-home whitening system

#### 4-syringe Kit

- Four 3.11g syringes (total 12.44g)
- A mouth tray storage case
- Patient instructions
- Premium portable kit

\*Australian Reader's Digest Survey 2013

<sup>^</sup> Mohan et al: Journal of Dentistry 36 (2008) 21-26



# Chrome Casting

Our highly-trained technicians are at the forefront of technology with regards to cast partial design. We use high tensile strength cobalt chromium, the finest ultra thin frameworks, and strong, flexible clasps that are stain-resistant, lightweight and have proven bio-compatibility. We can also provide masking for anterior pins and anterior backings to improve function and make the restoration more natural in colour. Race Dental offers 5 lab-day turnaround times for chrome cast partials.

Impression Technique: Digital or Traditional (Limited)

**100%**  
Made in Australia  
& New Zealand



# Tooth-Coloured / Clear Clasps

Impression Technique: Traditional or digital (Limited)

Race Dental delivers a broad variety of tooth-coloured, tissue-coloured and translucent clasps that exhibit incredible colour stability.

Tooth-coloured clasping makes a viable alternative to metal clasps. They possess high tensile and shock strength with excellent resiliency, allowing the clasp to flex over extreme undercuts while still providing a comfortable fit. They offer an array of tooth-coloured and tissue-coloured clasps that exhibit incredible colour stability. These shaded clasps may also be used on existing metal partial dentures for an aesthetically enhanced yet highly functional result. They have excellent elastic memory and can be used in situations where metals are contra-indicated.



Clear Clasp on Partial Chrome Framework

## PARTIAL UPPER / LOWER

As dental hygiene awareness is improving, patients are keeping more teeth into their later years and may require a partial denture when a full mouth restoration isn't necessary. Teeth are set into acrylic and can be retained by clasps or implants, resulting in a lighter weight and more comfortable feel. This also adds strength and durability to the restoration.

## CHROME CASTING

A full metal palate is exceptionally thin and offers the lightest possible denture whilst being far stronger than full acrylic. A full metal palate can be more complex to relin. Please contact us to discuss individual cases.

## UNILATERAL

A unilateral chrome casting is a super-lightweight partial denture that helps hide ugly and unnecessary metal clasping in the mouth. Unilateral partial dentures can be used with flexible acrylic for an exceptional finish.

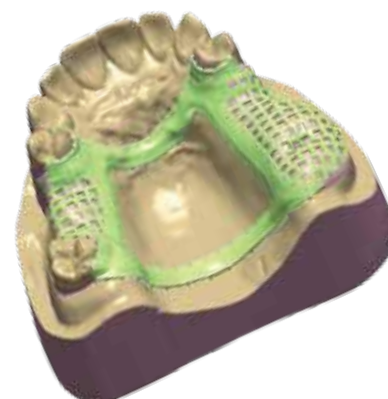
## MESH PALATE

Mesh palate full dentures and partial dentures provide the benefit of added strength with a cast mesh instead of full cast chrome. Mesh palates are covered with acrylic to give a more natural appearance.

## NEW CAD / CAM CHROME PROCESS

As a channel partner of **Core3dcentres**, Race Dental is working digitally to deliver a broader range of products and services. This is altering the way our laboratory functions in terms of the traditional manufacture of dental restorations, prosthetics and orthodontics.

Digital models allow us to deliver more accurate results and increases the flexibility and accuracy of chrome design. The prosthesis is digitally designed in our laboratory and then 'printed' by **Core3dcentres** – whereupon it is returned to be cast and finished.







# Orthodontics



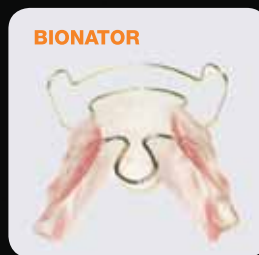
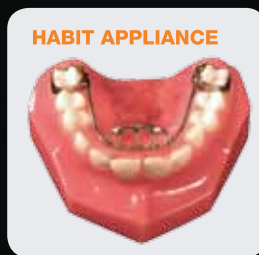
Impression Technique: Digital or traditional (Limited)

Race Dental provides a wide range of orthodontic appliances. We understand that orthodontics is a specialised area which requires technicians to have a greater understanding of how to make the appliances. We also realise that it is crucial to provide a quick and professional service for the busy Orthodontic clinician.

# We Now Accept Digital Impressions for Orthodontic Work



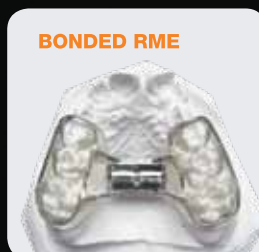
## FUNCTIONAL APPLIANCES



## RETAINERS



## EXPANSION APPLIANCES



Can't find precisely what you need?

We can cater to your special requirements. Contact us for more information.

## FIXED APPLIANCES

SUPPLY & FIT BANDS 1 or 2 per appliance total / 3 or 4 per appliance total



## SPLINTS



## SLEEP APNOEA DEVICES



## MODELS





# Specialist Services



## YOUR DSD SPECIALIST

Please send your photos for 2D designs. For all enquires contact us on 1300 722 352 or [dsd@racedental.com.au](mailto:dsd@racedental.com.au)

## IMPLANT PLACEMENT GUIDES

Implant placement guides provide distinct advantages for both surgical and restorative outcomes. CAD/CAM surgical guides provide master drilling sleeves that accurately guide your twist drills into the exact MD, BL orientation and vertical position with some systems also providing depth stops.



## NEUROMUSCULAR

- Highly trained technicians
- Detailed knowledge of TENS (Transcutaneous Electrical Nerve Stimulation) and Myobites
- Neuromuscular Orthotics Fixed and Removable
- Diagnostic workup and reporting
- Las Vegas Institute (LVI) Trained: Our Chief Operating Officer is a certified LVI Master Technician & Neuromuscular Trained Technician qualified in:
  - Core I
  - Core II
  - LVI Smile Design
  - Neuromuscular Technician
  - Practical Occlusion in the Progressive Practice (Occlusion I)
  - Mastering Neuromuscular Occlusion (Occlusion II)
  - The Ultimate Solution for Complex, Comprehensive Cases
  - Essentials for success with pressable ceramics



## ORTHOGNATHICS

### DIGITAL

- Specialist technicians
- Scanning and operating services
- Complete digital workflows



### TRADITIONAL

- Specialist technicians
- Model Desconstruction
- Orthognathic Splints



iTero®

3M True Definition Scanner

TRIOS Ready

Carestream DENTAL

- 1 Splint Final Occlusion Only
- 2 Splints Final Occlusion + Centric Occlusion
- 3 Splints Final Occlusion + Centric Occlusion + Other



# 3shape TRIOS® 3

## TRIOS® is more than an impression

Get a three in one digital impression solution. An intraoral scanner for fast and easy 3D colour impression taking; an integrated intraoral camera, so there's no need to purchase one separately, and shade measurement while you scan, for more accurate and predictable results.



### MORE REASONS TO CHOOSE TRIOS

- **Fast and Easy** - Scanning has never been easier for dentists and assistants.
- **RealColor™ Scans** - Create high quality digital impressions in lifelike colors
- **Shade Measurement** - Measure teeth shades while you scan for more accurate and predictable results.
- **Intraoral Camera and HD Photo** - Enhance significant details and accurately set the margin line. No need for separate intraoral camera
- **Indications for use** - Widest range of indications for material and mill choice
- **Open system** - Open and flexible for any laboratory set up

### ORTHO PACKAGE

Single user license of TRIOS Ortho™ including:

- TRIOS® Digital Impression software
- 3Shape Communicate™ Inbox for order reception and filtering (20 connections included)
- Ortho Analyzer™ for case analysis
- Study Model Builder (including Study model STL Output)
- Remote assistance software



### IMPLANT STUDIO™ SOFTWARE

Reasons to choose digital implant planning and surgical guides

- Reduce patient chair time and number of patient visits
- Benefit from digital accuracy and reduce manual errors
- Enhance predictability of final implant position and restorative outcome
- Create a consistent surgical procedure every time and avoid unforeseen complications
- Improve patient experience and patient comfort with less invasive procedures and shorter healing time
- Includes LABcare™ and CLINICare™



### DENTAL SYSTEM™

Innovative 3D Scanning and CAD Solutions

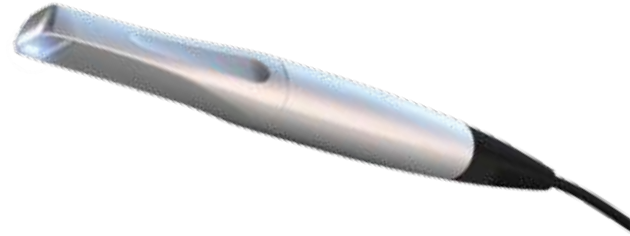
- Provides the widest range of indications, tools and libraries with integrated and intuitive workflows
- Integrated scanners and documented accuracy
- Global customer care
- Stronger ecosystem
- Integration with TRIOS® and third-party IOS scanners
- Fast and robust crown design engine
- RealView® Engine
- Implant planning and surgical guide design
- Complete integration with milling machines and 3D printers
- New impression scanning technology



# 3M True Definition Scanner

## Fit Rate 99.7%

of restorations made from a 3M™ True Definition Scanner digital replica are successfully seated without requiring a remake.<sup>2</sup>



### ACCURATE

The 3M™ True Definition Scanner is more accurate, and more consistently accurate, than other leading systems<sup>1</sup>—delivering superior full-arch accuracy for restorations that fit. Plus, powerful 3D-in-motion video technology provides a true replica of the dental anatomy with extraordinary detail, allowing you to capture and simultaneously view margins.

### FLEXIBLE

The open architecture opens up a wide range of workflow possibilities... giving you multiple connections and patient solutions all from one scanner.

- **Open, secure, cloud-based platform:** The 3M™ Connection Center lets you store unlimited files and share them with the partners you choose.
- **Trusted connections and workflows:** 3M™ partners with leading manufacturers in the industry to provide trusted and integrated workflows for dental labs or designing and milling chairside.
- **Open STL files:** The industry standard file format can be imported into existing design and production solutions—or other programs and systems, giving dentists more material and workflow options.



**3M**  
True Definition Scanner



<sup>1</sup> Study methodology described in: van der Meer WJ, et. al. (2012). Application of Intra-Oral Dental Scanners in the Digital Workflow of Implantology. PLoS ONE 7(8):e43312. doi:10.1371/journal.pone.0043312.

Additional measurements conducted by ACTA (Academic Center for Dentistry Amsterdam); Wicher J. van der Meer, et. al. (2012). Publication pending.

<sup>2</sup> Based on 3M ESPE field evaluation which produced 1,015 clinical cases from 23 systems in the U.S. and Europe, April-December 2012.

At the forefront of technology

**AUSTRALIA**

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[www.racedental.com.au](http://www.racedental.com.au)

**NEW ZEALAND**

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Phone: (09) 887 0327 | Email: [customersupport@racedental.co.nz](mailto:customersupport@racedental.co.nz)  
[www.racedental.co.nz](http://www.racedental.co.nz)



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#### NEW ZEALAND

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[www.racedental.co.nz](http://www.racedental.co.nz)

At the forefront of technology

Powered by



#### Visit Our Website

Visit our website to learn more about Race Dental and our great services



#### Manage Your Account

You can view online billing, payment history and manage your account