FUNDAMENTALS OF

CHROME GuidedSMILE

Safer. Faster. Smaller. Stronger.

CHROME™

Contents

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WHY CHROME?

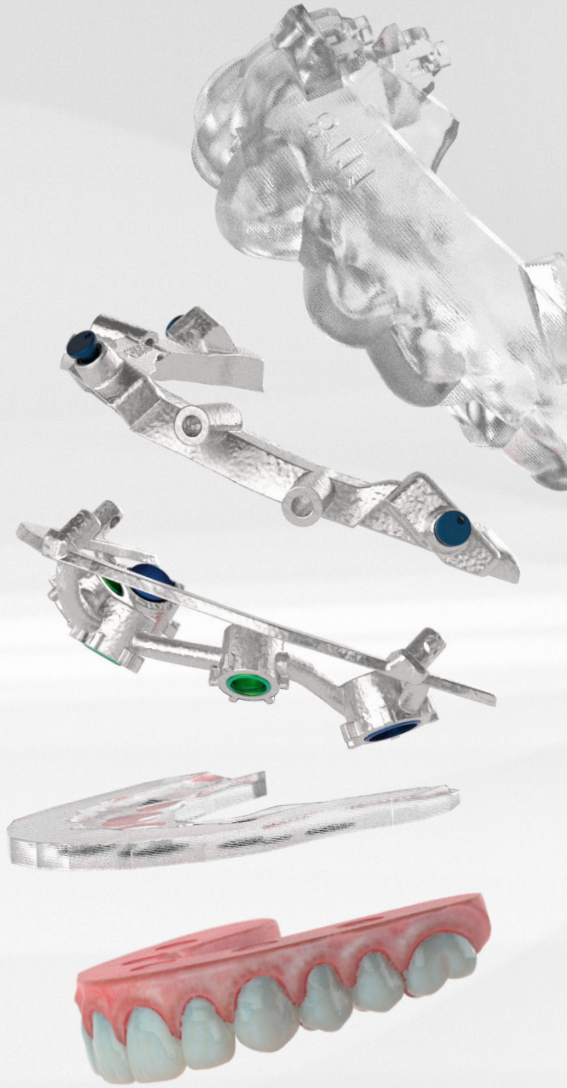
Introduction

This booklet is an introduction to the fundamentals and components of CHROME GuidedSMILE; a patented, fully guided, “prosthetic-down” approach to all-on-x. This protocol was developed for dentists who desire a safer, faster, smaller, and stronger immediate solution for their full arch patients.

CHROME has been adopted by thousands of dentists and is an extremely predictable protocol that produces consistent results regardless of the patient’s dental situation.

The general guidelines described in this booklet are typical for most CHROME GuidedSMILE cases, but as with any complete solution, there are some small adaptations depending on the patient’s clinical situation.

For the most comprehensive information available about CHROME GuidedSMILE, please visit **www.roedentallab.com/chrome**



WHY CHROME?

CHROME in Motion

Watch an animation of a full-arch surgery to view the sequence and precision of CHROME GuidedSMILE.

Watch the Animation

WHY CHROME?

Benefits of CHROME

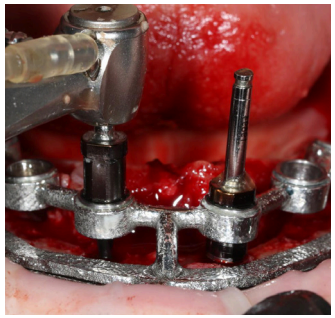
Safer. Faster. Smaller. Stronger.

» **Predictable surgery -** CHROME stacked metal guides offer an uncomplicated and highly methodical approach to guided surgery.

» **Precise planned placement** - Metal guide facilitates accurate implant depth and trajectory.

» **Planned bone reduction -** Prosthetically driven plan ensures ideal space and bone reduction.

» **Full visibility and irrigation –** Watch your osteotomies safely take shape with highly visual floating guide technology. Floating guide technology means zero bone contact and minimal lingual flapping, improving patient comfort and healing times.



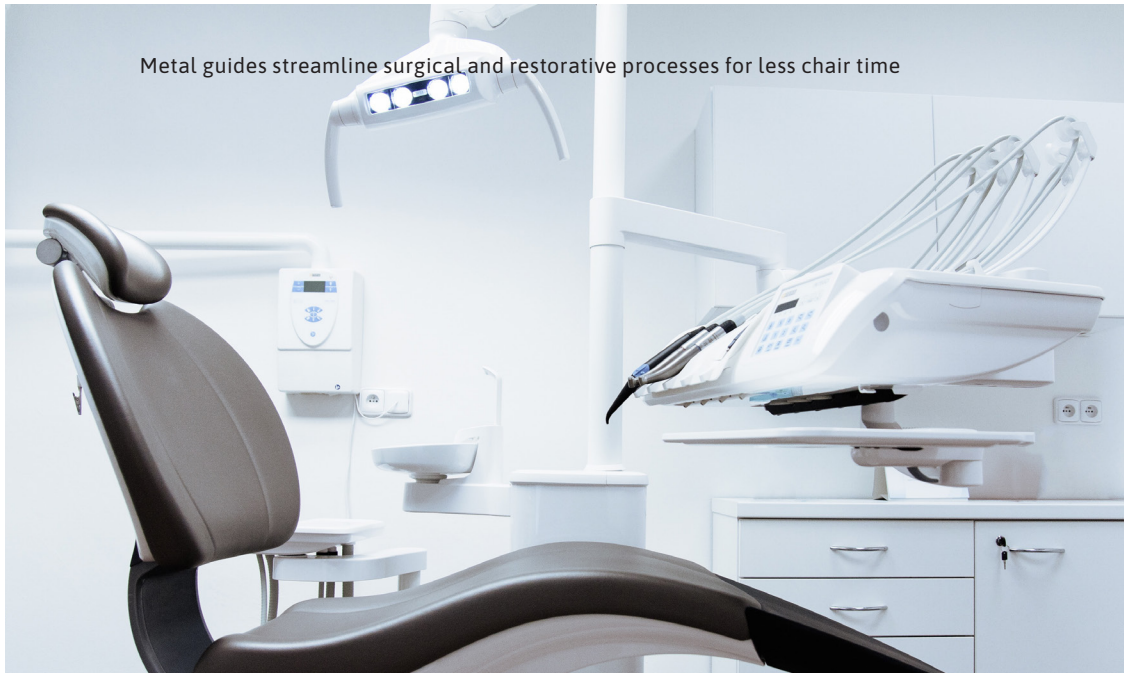
Metal guides allow full visualisation of drills and implant sites

Safer. **Faster.** Smaller. Stronger.

» **Dedicated CHROME team** - Our expert CHROME team takes your case from record capture to patient surgery in just under a month.

» **Efficient surgery** - Many dentists finish a full arch all-on-x surgery in under 2 hours.

» **Enhanced healing** - Minimal lingual flapping and shorter surgery time results in reduced patient healing time.



Metal guides streamline surgical and restorative processes for less chair time

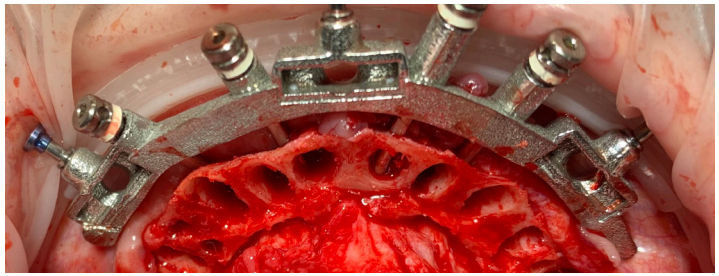
Benefits of CHROME

Safer. Faster. **Smaller.** Stronger.

» **Functional design** – Core components of CHROME GuidedSMILE are made of strong a CoCr alloy resulting in a guide with a smaller oral footprint when compared to plastic guide systems.

» **Mechanical pinning** - A small, incredibly strong pinning system removes the significant patient discomfort caused by larger pins required by other non-metal guided systems.

» **Precise actions** - Dentists fit our guides to the tissue and/or teeth, not the bone, as with plastic guides.



Small oral footprint: metal guide does not touch bone

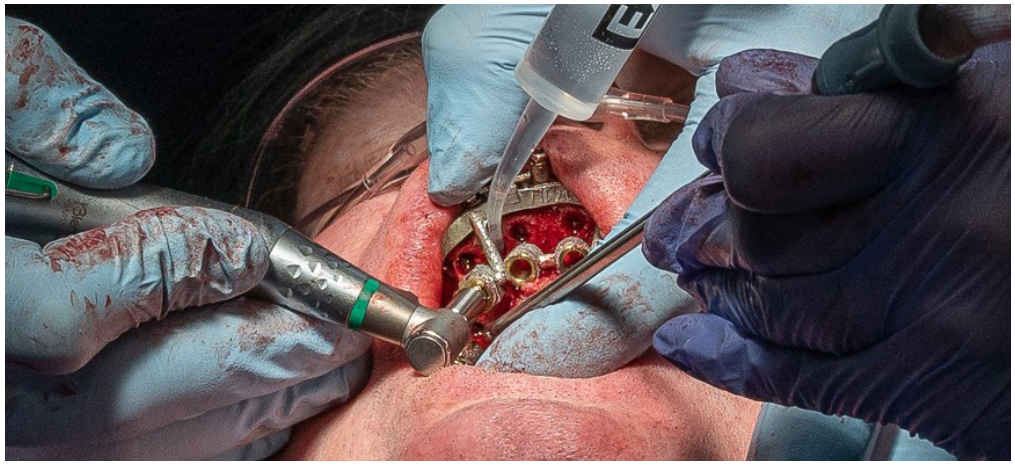
Safer. Faster. Smaller. **Stronger.**

» **Inherent strength** - The CoCr CHROME guides are 20x stronger than surgical resin and do not flex or break under pressure during surgery.

» **Prosthetic choice** – CHROME allows for strong, beautiful, metal-reinforced FP1 to FP3 provisionals.

» **Superior Anchorage** – A special cortical engagement drill and pin design ensures a stable guide to stack the componentry.

» **Strong chairside support network** - Quoris3D offers clinical support to assist chair side for Chrome dentists throughout the UK & Ireland.



Metal guides do not flex or break under the pressures of surgery

THE CHROME CASE

Case Contents

With some exceptions, due to case design and surgical needs, CHROME case contents consist of the following:

1. Bone Model
2. Reduced Bone Model
3. Tooth Model
4. Osteotomy Guide
5. Pin Guide
6. Fixation Base
7. Provisional Prosthetic
8. RAPID Appliance
9. Carrier Guide
10. CHROME Pouch: Includes blockout plugs, gaskets, models, misc.
11. CHROME Box: Contains all listed above

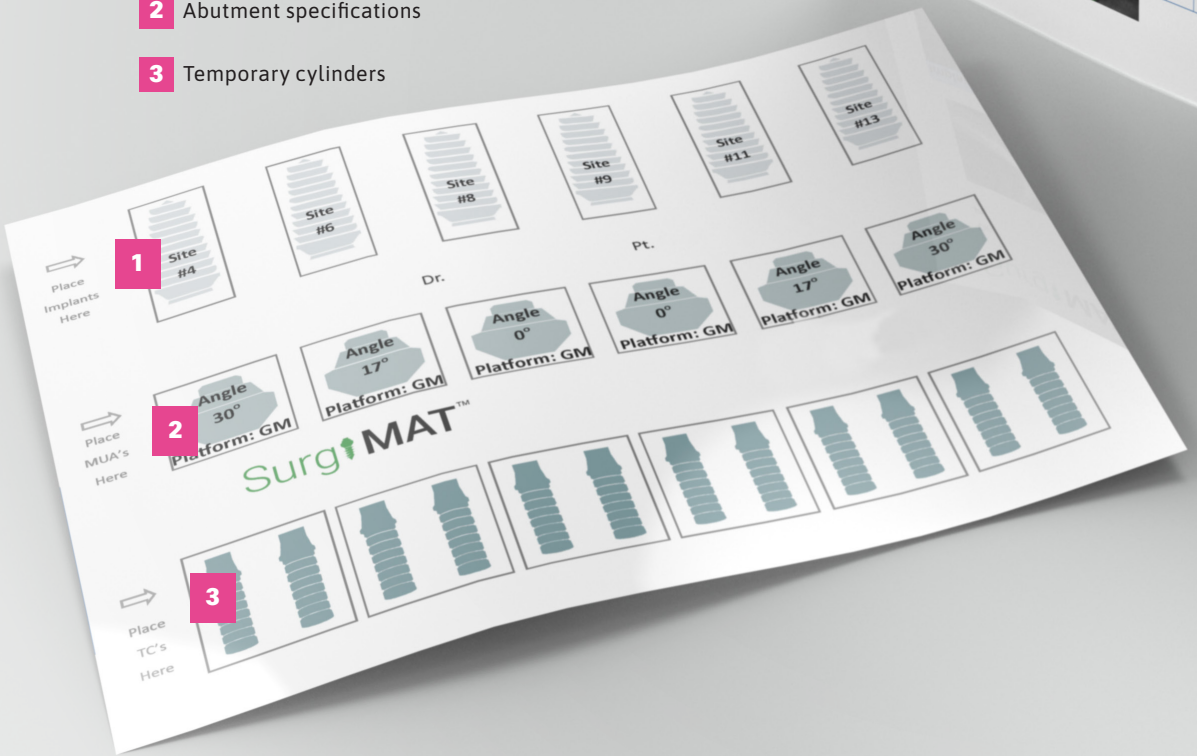
Intro to CHROME Video

THE CHROME CASE

SurgiMAT

SurgiMAT replaces traditional complicated multi-page drill reports for greater ease of use and accessibility.

A SurgiMAT contains two reports: (1) to be wall-mounted (or viewed digitally) and (2) for the surgical table. The information presented on the SurgiMAT enables the dentist to coordinate their day of surgery efficiently.



For the surgical table:

1. Implants per site
2. Abutment specifications
3. Temporary cylinders

For the wall or screen:

4. Dentist & patient names
5. Panoramic radiograph
6. Cross-section images of implants with surgical details
7. Guided kit specifications
8. Cross-section images of guides
9. Notes field

SurgiMAT Video

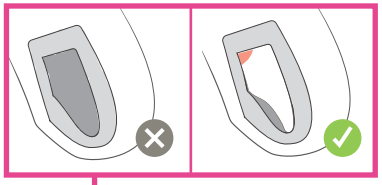
Pin Guide

The Pin Guide is the first component of the CHROME surgical process and ensures that the surgery starts accurately. Its only purpose is to deliver the Fixation Base accurately.

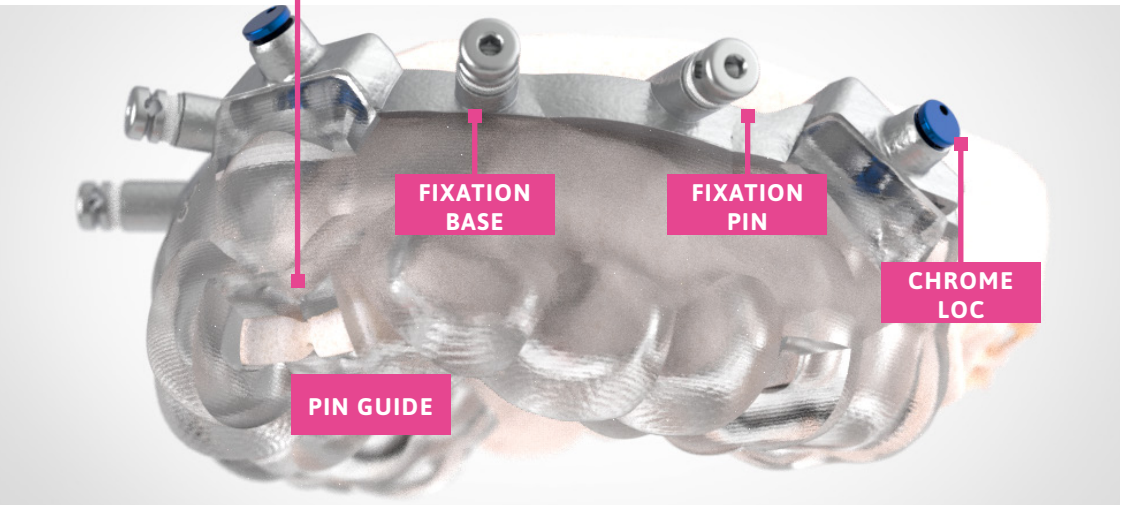
Dentate Pin Guides seat securely on the teeth and are verified via occlusal windows. The Pin Guide is held down firmly to maintain its position while the fixation pins are set. Due to tooth undercut, not all the windows need to be seated, just the occlusal/incisal.

Pins and Drills

Verify seating via occlusal windows



Pin Guide Video



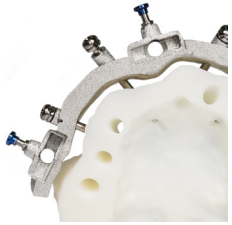
Fixation Base

The Fixation Base is designed using patent-pending floating guide technology; meaning the guide does not contact bone and is supported by divergent pin placement.

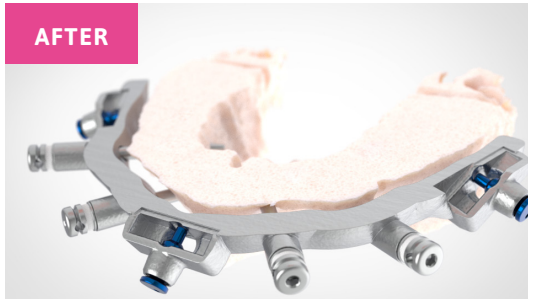
The Fixation Base has two core functions:

The first is bone reduction. The occlusal edge of the Fixation Base is designed to indicate the level to which the bone needs to be reduced. The passive placement of the Carrier Guide onto the Fixation Base indicates sufficient bone reduction.

The second function of the Function Base is that it is the foundation for all subsequent components in the CHROME GuidedSMILE surgery.



Above: Floating guide technology; guide does not touch bone



Accurate Bone Reduction

Right: Before and after guided bone reduction with the Fixation Base

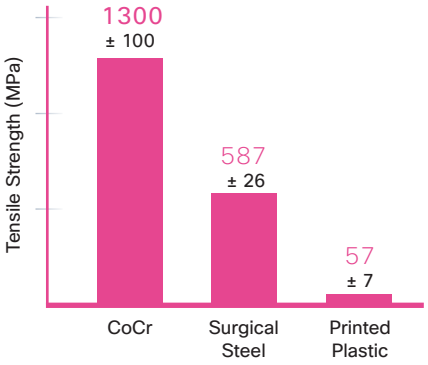
Fixation Base Video

Osteotomy Guide

The Osteotomy Guide facilitates stable, controlled drilling for implant depth, trajectory, and indexing (rotation).

It mechanically clicks into the Fixation Base via custom CHROME Locs and allows for the full visualization, irrigation, and precision in osteotomy creation.

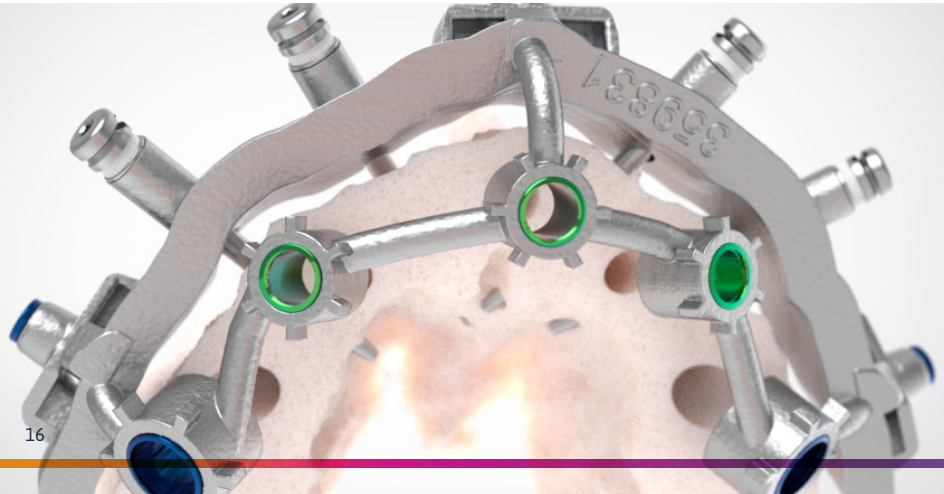
Made of Cobalt-Chromium alloy, the Osteotomy Guide is unique in the industry for its strength, size and rigidity, and is compatible with semi or fully-guided surgical kits.



Strength & Stability

Left: Tensile strength of Cobalt CHROME vs surgical stainless-steel vs medical printed plastic

Osteotomy Guide Video



Carrier Guide

Once the Osteotomy Guide has been removed, the Carrier Guide is locked into the Fixation Base by use of the CHROME Locs. The Carrier Guide remains in the mouth through the prosthetic conversion. The two transparent plastic pegs on the Carrier Guide deliver the Provisional Prosthetic and RAPID Appliance in the proper position as planned.

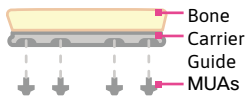
One function of the Carrier Guide is as a tissue gap between the bone reduction and prosthetic conversion.

A second function is as an isolation device to prevent acrylic from entering the implant sites.

Finally, it also serves as a key indicator to the rotation and direction of the multi-unit abutment screw.

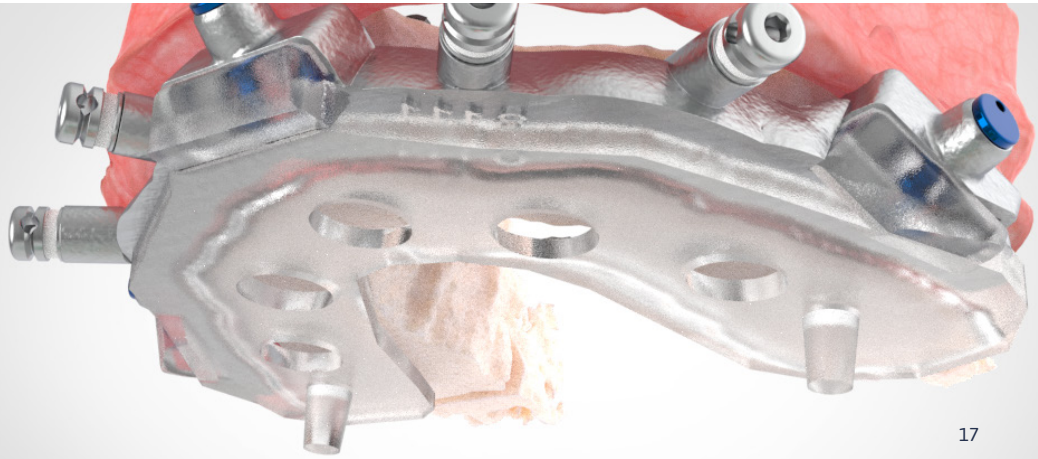
3 FUNCTIONS

1. Seats abutments



2. Seats prosthetic / RAPID

3. Preserves tissue gap



SURGICAL COMPONENTS

Provisional Prosthetic

- The Provisional is a strong and aesthetic prototype for the final restoration. It is designed for immediate load and extended use.
- The Provisional is delivered the day of surgery and remains in use until the final prosthetic delivery.
- Quoris3D is proud to offer an alternative modalities for improved provisional prosthetics: Smileloc.
- Smileloc provisionals are hole-free, cement-free, and screw-free, and are compatible with major implant systems (see page 21 for more details).

Carrier Guide Video

Provisional Prosthetic Video

SURGICAL COMPONENTS

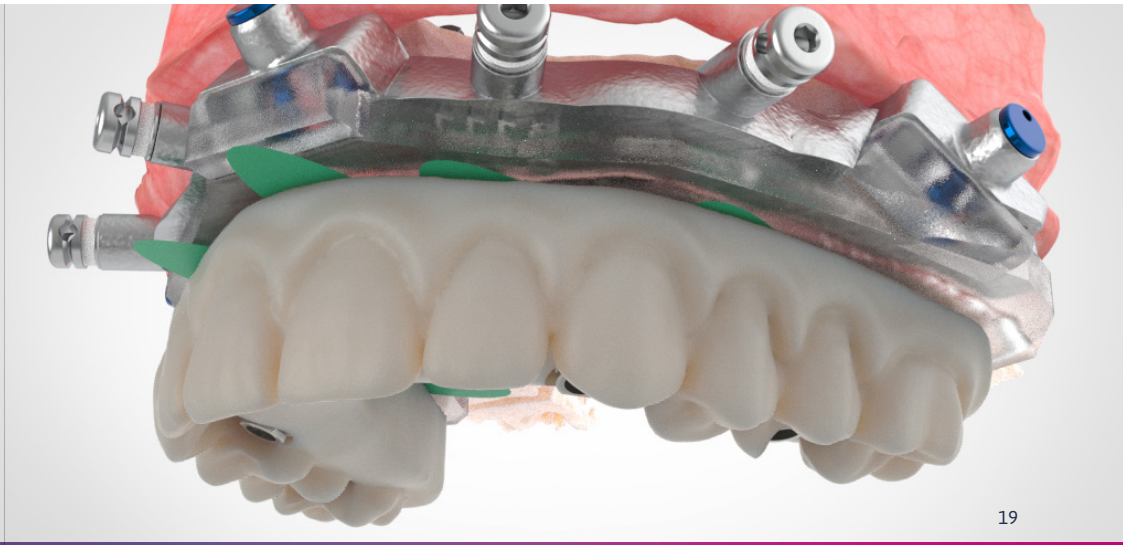
RAPID Appliance

The RAPID Appliance (ROE Advanced Prosthetic Implant Device) has two unique and very important functions:

1. Serves as the simplest method of transitioning to the final. Simply add tray adhesive to the intaglio, seat, capture a reline impression, equilibrate, and send to Quoris3D with bite opposing and photographs.
2. Serves as a back-up indexed prosthetic in case the surgical prosthetic fails. Simply seat the RAPID, equilibrate, capture a bite and opposing, and send to your lab for a new temporary or printed try-in.

The CHROME team can go to final or return what we call the Printed Try-In, a screw-down final prototype for clinical verification.

RAPID Appliance Video



CHANGING THE HOLE INDUSTRY

Smileloc

Utilising the Smileloc Abutment System, Quoris3D has removed the dental industry's dependence on prosthetic holes for final prosthetics. This system is comprised of three components: titanium coping, Smileloc, and titanium abutment. The Smileloc is made from nitinol, a medical-grade alloy with unique shape memory capabilities (can revert to original shape).

FEATURES

- Superior strength vs. conventional & small-hole provisionals
- Prosthetics can be removed & returned for cleaning in minutes
- Simplified extra-oral conversions
- Maintains lab-developed occlusion
- Compatible with major implant systems

No Hole Technology

Patients leave surgery with a provisional that is hole-free, cement-free, and screw-free

Superior Hygiene

Prosthetics may be removed for cleaning in just minutes with the Smilekey wand

Smileloc Video

Prosthetic Options

CHROME GuidedSMILE is compatible with FP1 to FP3 prosthetic options and is available in a range of restorative materials.

Choose from material options including, but not limited to:

» Acrylic/titanium

» UltraNano Trilor ceramics

» TLZ-IB all zirconia implant bridge (most popular)

TLZ-IB zirconia is layered with cutting-edge translucent liquid ceramics to capture natural gingival aesthetics, and is polished smooth for ease of cleaning.

All options include a functional prototype, which is tried-in and worn to verify function and aesthetics prior to fabricating the final restoration. This facilitates a predictable final appointment and provides the patient with an excellent spare, “just in case”, appliance.

FP1-FP3 Options

Package Pricing

CHROME Complete (prepaid package including final) is a fantastic opportunity to get a flat rate price on the final prosthetic including all restorative steps.

Prepaying the final restoration:

» Significantly decreases costs

» Stabilises the total case cost

» Simplifies billing

All finals are custom-designed with the latest software and milled with precision on industry-leading milling machines. The final result is a beautiful, hygienic prosthetic that is highly resistant to chipping or fracture.

Discuss your CHROME Complete options with your Quoris3D Technical Support Representative.

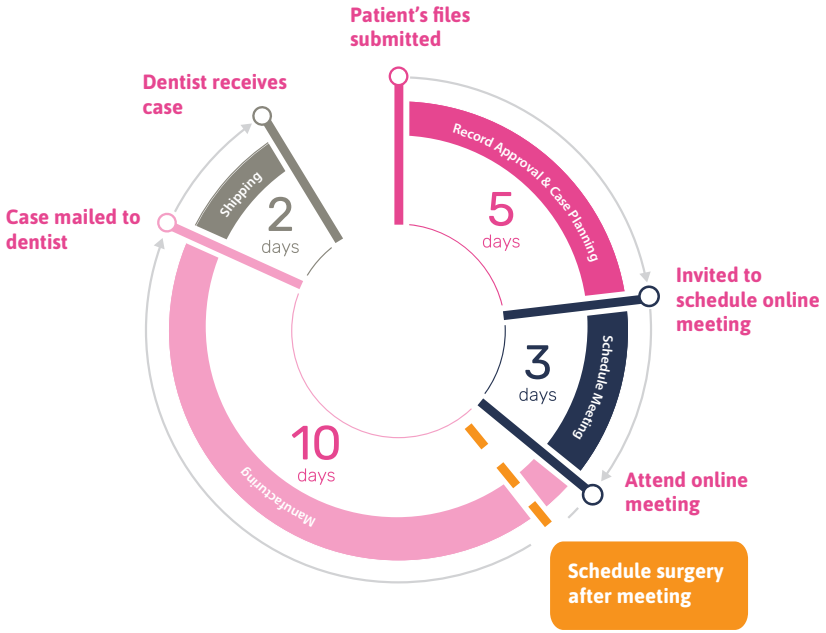
Getting Started

If you have not yet completed a CHROME case, we recommend reviewing our website's instructional videos and many pages of information. Then, please contact us to have a conversation with one of our specialists.

We can meet with you online and have a dialogue about the wonderful benefits of CHROME and discuss a specific case. Our experienced team of technicians, customer service, and chairside experts are here to support you. Call us when you are ready at +44 28 6862 8966.

CHROME Timeframe

Complete cases on an average of 20 days, depending on dentist schedule and case acceptance



Education

Quoris3D's educational resources provide an excellent opportunity for dental professionals to understand more fully the engineering and applicability of CHROME GuidedSMILE through the following channels:

Educational Events

Discover upcoming live in-person or online continuing education courses and events.

Deep Dive Series

Watch this video series to dive deeper into the core CHROME componentry and related processes.

Surgical Instructions: Dentate

This video series is an in-depth guide to the day-of-surgery protocols for a dentate patient.

Surgical Instructions: Edentulous

This video series is an in-depth guide to the day-of-surgery protocols for an edentulous patient.

Implementing CHROME in Your Practice

This series covers what you may want to consider when implementing CHROME in your practice, such as patient consultation, full arch workflows, records, and speech adjustments.

Training Videos

Watch an ever-growing list of CHROME training videos and patient case walkthroughs.

Educational Resources

Patient Records

To learn more about what records are required on a per-case basis, please scan the QR code to view our **Patient Records Checklists.**

1. Clinical Photographs

CHROME requires six photographs to start a case:

1. Full face full smile
2. Full face exaggerated smile
3. Full face profile

For ideal smile design

4. Centre retracted in occlusion
5. Left retracted in occlusion
6. Right retracted in occlusion

For verification of bite

» Have the patient wear any existing prostheses in the photos.

» Have the patient standing up, looking directly at the camera.

» Capture photos before taking impressions to keep the lips and teeth clean.

Ideal photos

Not ideal

2. Impressions & Bite Registration

» Capture ALL land areas of any dentate arch(es).

» Must capture full palate.

» If patient has a partial for the surgical arch, take impressions with & without it seated.

» When taking a bite, ensure patient is in full occlusion or specify if it's a CR bite.

» Use enough material to capture occlusion without opening bite.

» If patient has a prosthesis, have them wear it to stabilise bite.

Full palate

Full occlusion

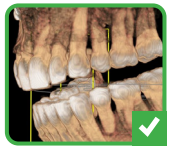
Missing palate

Centric only

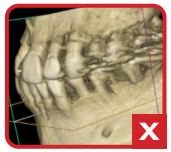
3. CBCT Scans

Depending on the patient's existing dentition, a CBCT scan of both arches in open position OR a dual scan protocol is required.

DENTATE

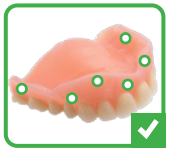


Bite is open

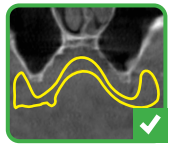


Bite is closed

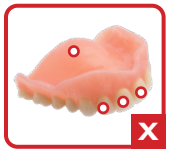
EDENTULOUS (DUAL SCAN PROTOCOL)



Scan markers, placed randomly



Denture fully seated, no voids



Do not place on teeth/intaglio

Not fully seated, black voids

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