



Fundamentals of
CHROME GuidedSMILE

Safer. Faster. Smaller. Stronger.

CHROME™ GuidedSMILE™

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WHY CHROME?

Introduction

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

CHROME has been adopted by thousands of doctors 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.chromeguidedsmile.com

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

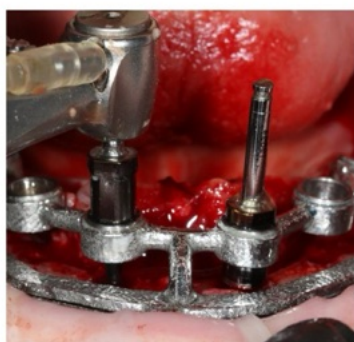


WHY CHROME?

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 visualization 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 doctors finish a full-arch all-on-x surgery in under 2 hours.
- **Efficient conversions** - C2F Small Hole Technology allows for extra-oral conversions while the patient is sutured.
- **Enhanced healing** - Minimal lingual flapping and shorter surgery time results in reduced patient healing time.

Metal guides streamline surgical and restorative processes for less chairtime.

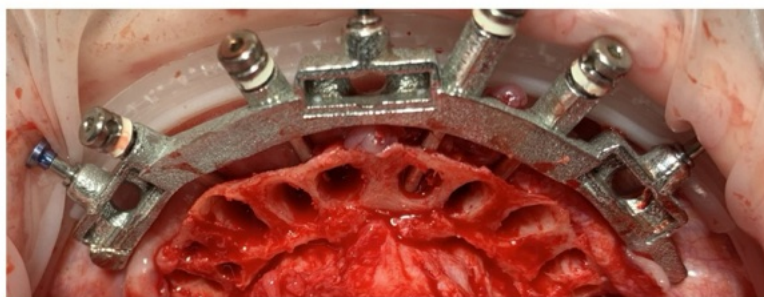


WHY CHROME?

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** - Doctors fit our guides to the tissue and/or teeth, not the bone, as with plastic guides.
- **Smaller prosthesis holes** - C2F Small Hole Technology allows for extra-oral conversion, stronger prostheses, and small 2.5mm holes, similar to final restorations.



Small oral footprint: metal guide does not touch bone



C2F Small Hole Technology

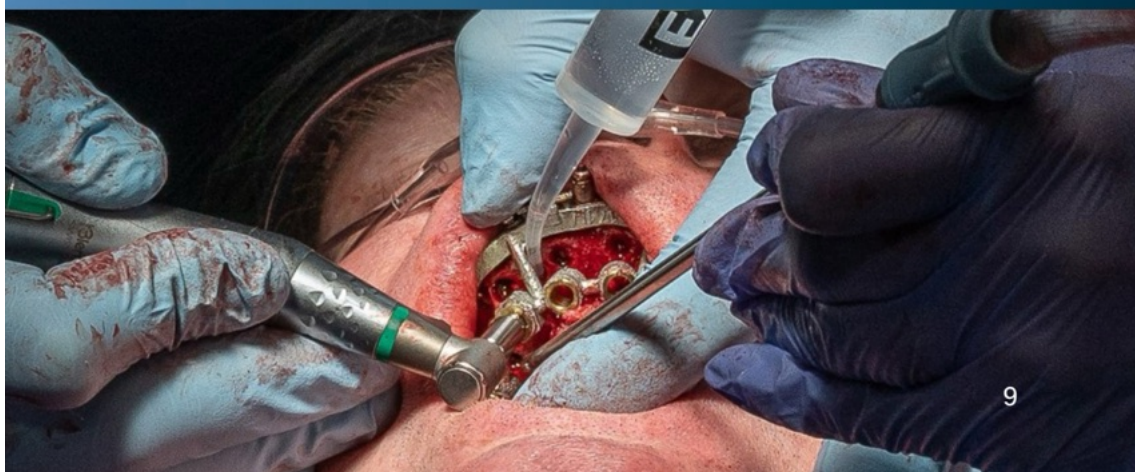


C2F extra-oral equilibration

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.
- **Prosthesis 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** - CHROME offers clinical technicians to assist chairside for doctors throughout the country.

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

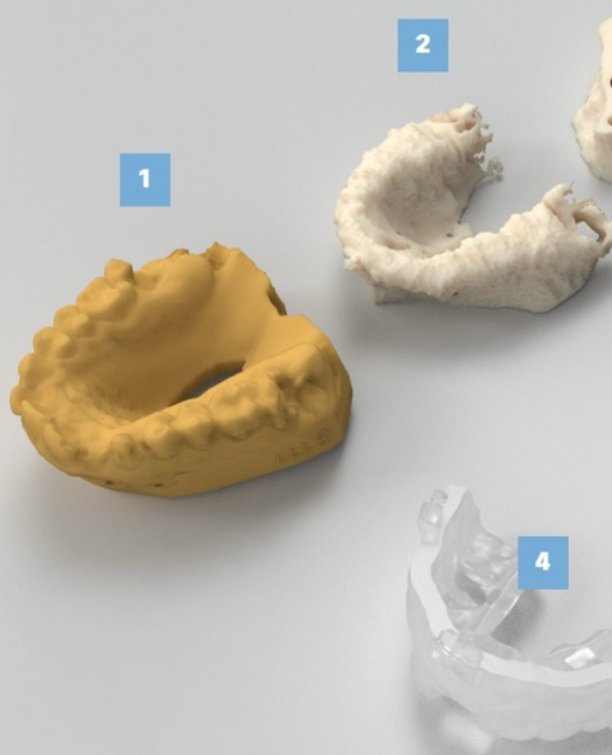


THE CHROME CASE

Case Contents

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

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





THE CHROME CASE

SurgiMAT

CHROME™ GuidedSMILE

Pt. Name **1**
Dr. Name **1**

Extract Prior to Pinning: N/A
Long Pins: A,B,C,D
Short Pins: N/A
Kit: Neodent GM Guided

NOTES:
Can rescue one diameter on ALL osteotomies except #9.
Sinus bump on #14 - stop drill 3.5-4mm, sinus is at 5mm deep.

4

Pin A
Pin B
Pin C
Pin D

5

Panoramic View

Pin Length & Occlusal View

Implant #3 4 x 11.5

Sleeve	H9
Handle	GM
Drilling Depth (mm)	22.5

Implant #5 4 x 10

Sleeve	H9
Handle	GM
Drilling Depth (mm)	21

Implant #7 4.3 x 10

Sleeve	H9
Handle	GM
Drilling Depth (mm)	21

Day-of-Surgery Info

Collar Height	mm
Implant Torque	N cm
Abutment Torque	N cm
Yes / No	
Angle changed to	

To be placed on operatory wall

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 doctor to efficiently coordinate their day of surgery.

For the wall or screen (above):

1. Doctor & patient names
2. Guided kit specifications
3. Notes field
4. Cross-section images of pins
5. Panoramic radiograph
6. Surgical views with guides
7. Cross-section images of implants with surgical details
8. Post-surgical adjustment notes
9. QR Code to recommended torque values

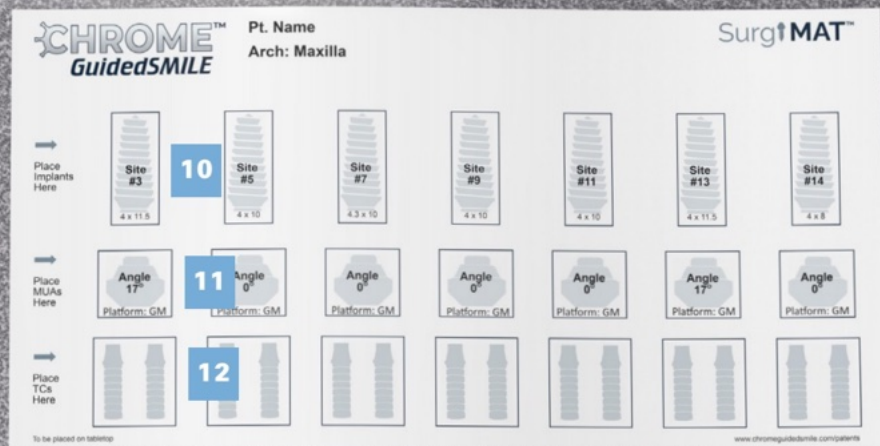


For the surgical table (below):

10.Implants per site

11. MUAs

12. Temporary cylinders



SURGICAL COMPONENTS

Engineered Simplicity

TOOTH-DELIVERED FOUNDATION

The foundation for the surgery, the Fixation Base, is delivered to the bone via a tooth-supported, not bone-supported, guide. It is the foundation upon which all of the other guides connect.

VISIBILITY & IRRIGATION

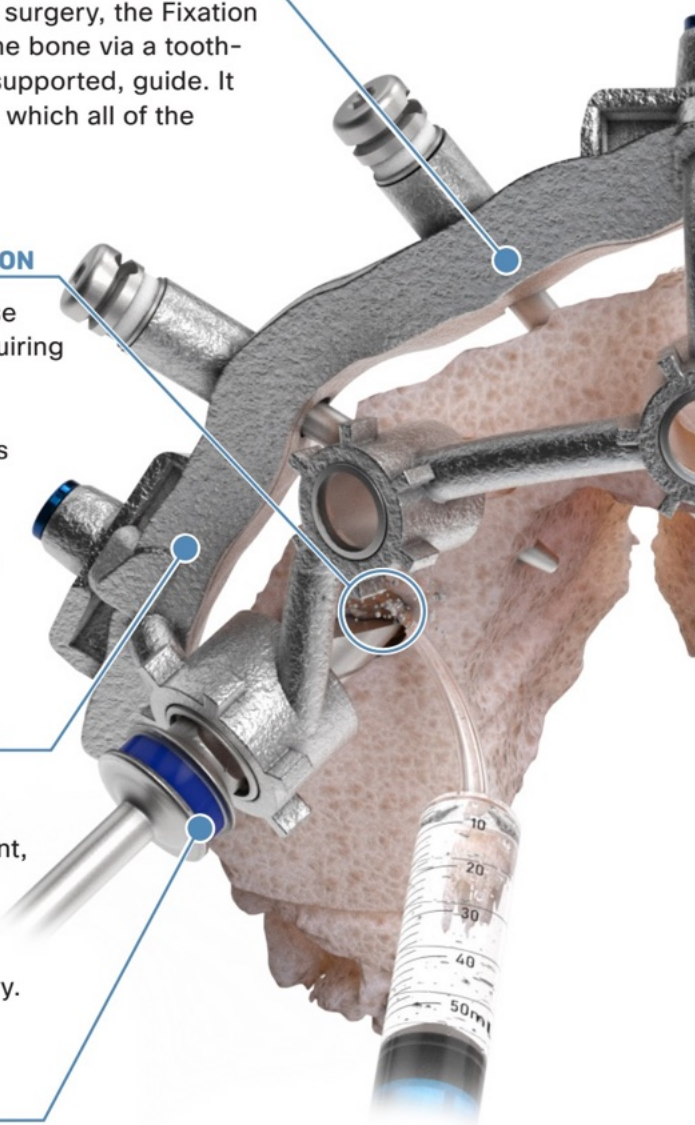
The metal Fixation Base floats off the bone requiring zero lingual bone contouring. The metal Osteotomy Guide locks into the Fixation Base allowing for complete visibility and irrigation, helping ensure increased accuracy.

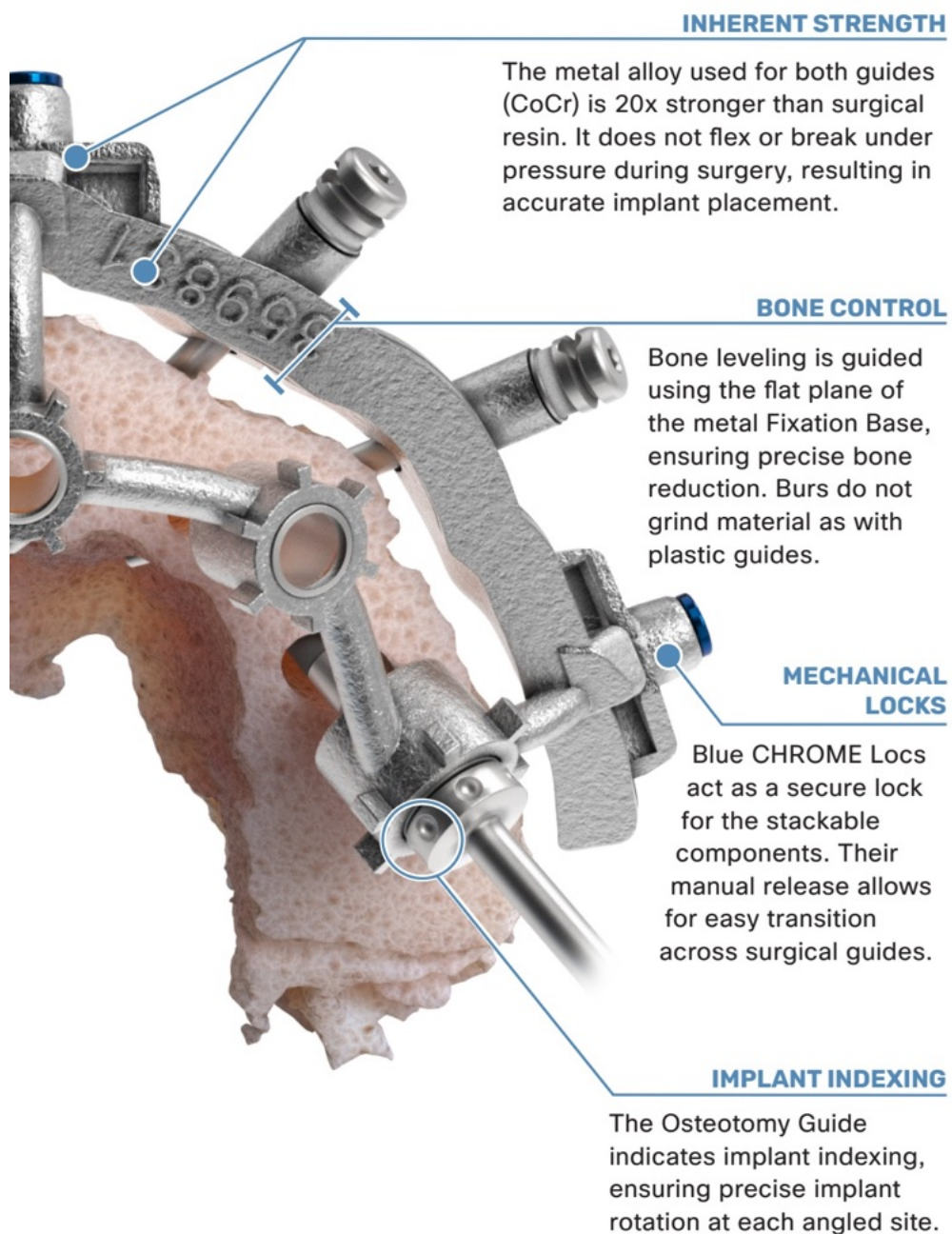
LABIAL-ONLY DESIGN

Materials and design offer a guide with a labial-only oral footprint, smaller than plastic guide systems. Only a minimal lingual flap is required during surgery.

COMPATIBILITY

The Osteotomy Guide is compatible with any implant system that uses a guided drill protocol.





SURGICAL COMPONENTS

Pin Guide

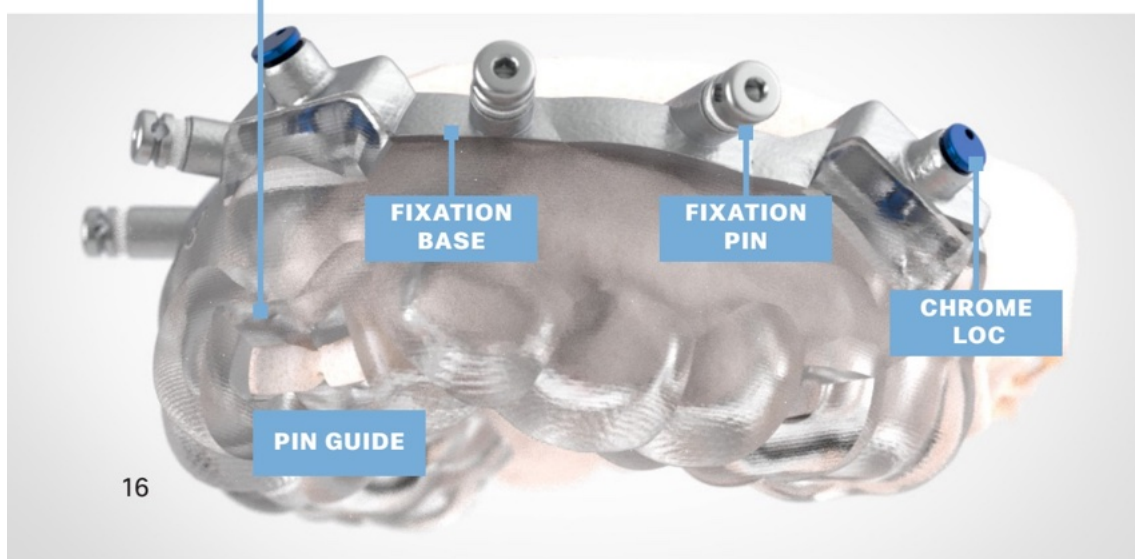
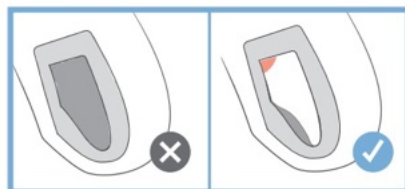
The **Pin Guide** is the first component of the CHROME surgical process and ensures that the surgery starts accurately. Its only purpose is to accurately deliver the Fixation Base.

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



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SURGICAL COMPONENTS

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:

1. 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.
2. 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



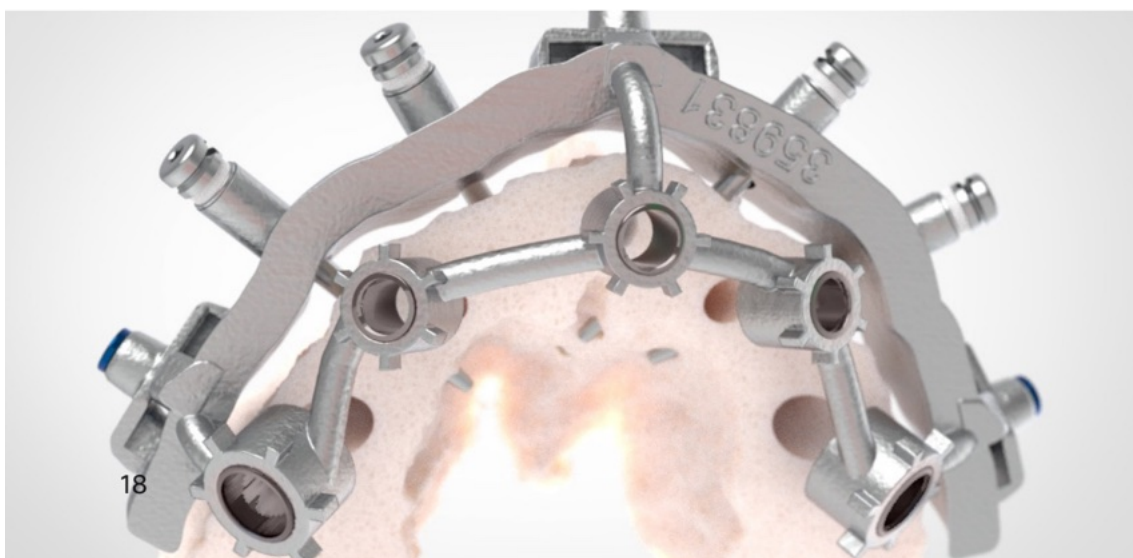
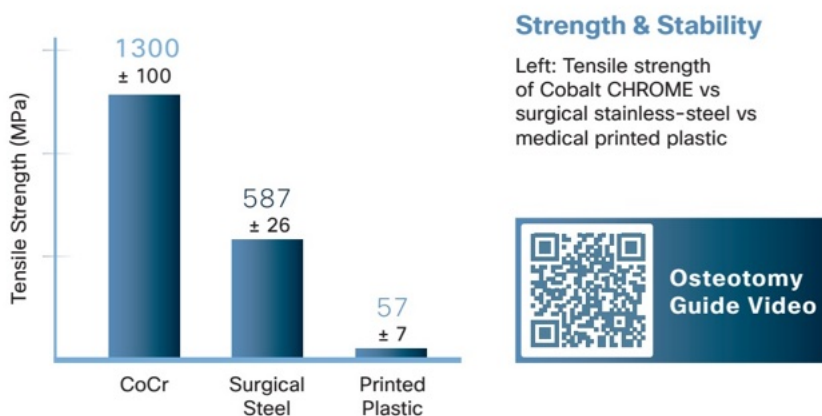
SURGICAL COMPONENTS

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.



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SURGICAL COMPONENTS

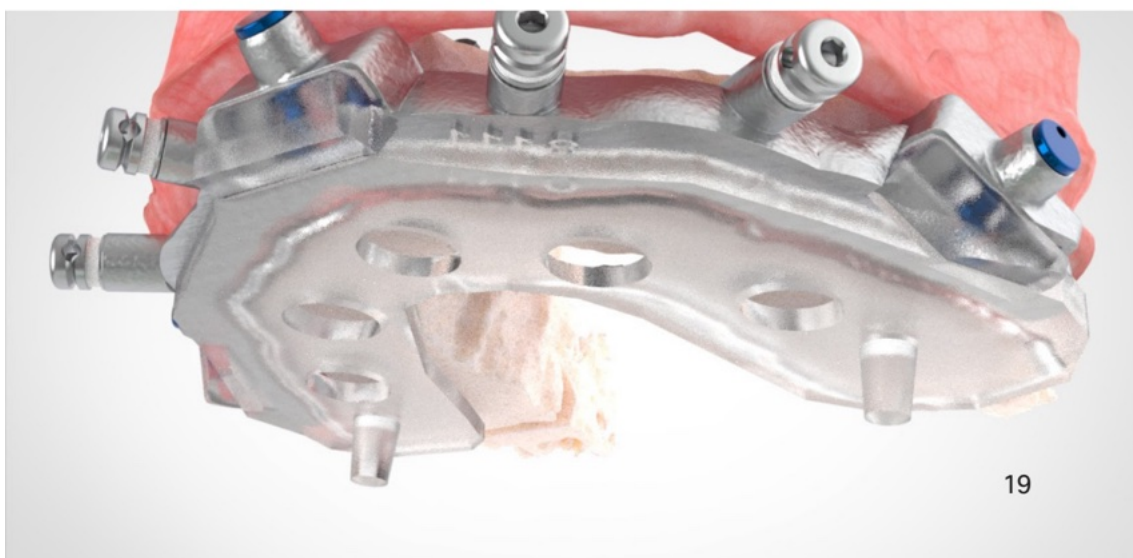
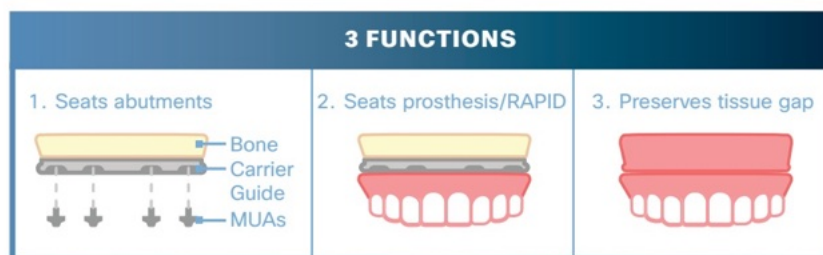
Carrier Guide

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 prosthesis conversion. The two transparent plastic pegs on the Carrier Guide deliver the Provisional Prosthesis 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 prosthesis 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.



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SURGICAL COMPONENTS

Provisional Prosthesis

The **Provisional Prosthesis** is a strong and esthetic 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 prosthesis delivery.

We are proud to offer two alternative modalities for improved provisional prostheses: C2F and Smileloc.

- C2F provisionals have small 2.5mm holes, similar to final restorations, and are compatible with all implant systems (see page 22 for more details).
- Smileloc provisionals are hole-free, cement-free, and screw-free, and are compatible with major implant systems (see page 23 for more details).



SURGICAL COMPONENTS

RAPID Appliance

The **RAPID Appliance** 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 CHROME with bite opposing and photographs.
2. Serves as a back-up indexed prosthesis in case the surgical prosthesis 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.



Carrier Guide, Provisional
Prosthesis, & RAPID
Appliance Video



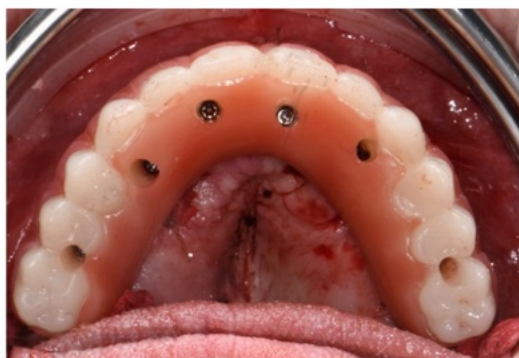
CHANGING THE HOLE INDUSTRY

C2F – Conversion to Final

C2F (Conversion to Final) is a system which integrates Small Hole Technology for immediate load prostheses. C2F immediate prostheses have just 2.5mm diameter holes, rather than the typical industry-standard larger holes (6-8mm), making for a stronger, more esthetic provisional.

Features

- Superior strength vs. conventional provisionals
- Simplified extra-oral conversions
- Maintains lab-developed occlusion
- Compatible with any implant system



Small Hole Technology

2.5mm prosthesis holes on the day of surgery are the new C2F standard



Extra-oral Conversions

C2F prostheses are converted and equilibrated extra-orally



C2F
Video

CUSTOMER RESOURCES

CHROME University

CHROME University for Labs is an on-demand educational curriculum designed specifically for CHROME partner labs. This curriculum covers all aspects of the day-of-surgery componentry, the complete surgical protocol, and conversion processes to name but a few.

These 8 hours of certified education are free to all CHROME-certified lab employees. It allows labs to onboard new or current employees and enhance your in-house GuidedSMILE team.



CUSTOMER 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

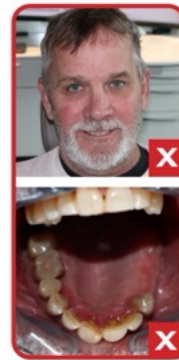
CHROME requires six photographs to start a case:

- | | |
|----------------------------------|-----------------------------------|
| 1. Full face full smile | } <i>For ideal smile design</i> |
| 2. Full face exaggerated smile | |
| 3. Full face profile | |
| 4. Center retracted in occlusion | } <i>For verification of bite</i> |
| 5. Left retracted in occlusion | |
| 6. Right retracted in occlusion | |

- 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 stabilize 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

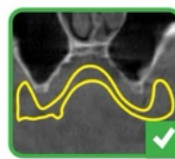


Bite is closed

Edentulous (Dual Scan Protocol)



○ Scan markers, placed randomly



Denture fully seated, no voids



Do not place on teeth/intaglio



Not fully seated, black voids

CUSTOMER RESOURCES

About Us

CHROME GuidedSMILE

CHROME GuidedSMILE is your partner in full-arch. More than 40 labs work with CHROME, having delivered over 15,000 arches nationally and internationally.

The CHROME family of products provides clinicians enhanced diagnostics, high-level treatment planning, multi-discipline communication, masterful surgical and restorative protocols, and immediate-load delivery of cutting-edge prosthetics.

With a highly experienced planning team (including CDTs, dentists, and an oral surgeon) who plan over 20 cases a day, a state-of-the-art manufacturing facility, and one the largest chairside support networks in the country, we can provide you with the expertise needed for your most complex full-arch restoration.

Let the expert CHROME team takes your case from record capture to patient surgery in just under a month. To find a CHROME network lab near you, visit www.chromeguidedsmile.com/intro

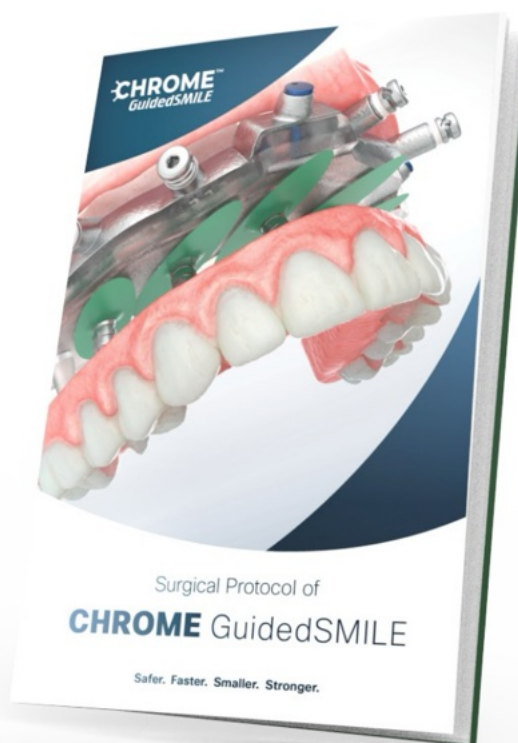


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You've met us... now see us in action!

Interested in learning more about
CHROME GuidedSMILE?

Visit www.chromeguidedsmile.com/surgical
to download the Surgical Protocol eBook.
Includes step-by-step protocol, helpful tips,
QR codes to surgical training videos & more!



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