

# ALPHA™ ARCH

BRIDGING STABILITY, ESTHETICS  
AND CONFIDENCE

## STEP-BY-STEP INSTRUCTIONAL GUIDE FOR MULTI-UNIT RESTORATION TECHNIQUES

Alpha Arch is a comprehensive solution for full and partial arch restorations—amplifying stability, esthetics, and clinical confidence. Designed to meet the highest standards of modern implant dentistry, Alpha Arch enhances esthetics, durability, and soft tissue management while ensuring a precise, stable, and secure fit. With a wide range of gingival heights, angulation options (0°, 17°, 30°), and two platform diameters (Ø3.5 mm and Ø4.8 mm) compatible with all implant-abutment connections, Alpha Arch delivers a streamlined workflow with predictable, efficient clinical outcomes.

### DESIGN FEATURES & CLINICAL BENEFITS



Prosthetic flexibility  
& versatility



Predictable & improved  
esthetics



Improved tissue  
stability



Simplified & efficient  
workflow





## AVAILABLE IMPLANT-ABUTMENT CONNECTIONS



## COLOR-CODED SCREWS FOR EASY IDENTIFICATION

CS - Anodized green screw    CHC - Anodized gold screw    IH - Anodized blue screw



### NARROW CONCAVE EMERGENCE PROFILE

Enhanced soft tissue management & improved esthetics

Enables subcrestal placement



### PROSTHETIC COMPATIBILITY

Same prosthetic components across all implant-abutment connections



### GOLD ANODIZED BODY

Improved esthetics & a more natural appearance

- Standard Ø4.8 mm abutment compatible with commonly used Multi-Unit prosthetic components

## AVAILABLE DIAMETERS

- **NEW!** Narrow Ø3.5 mm abutment suitable for limited spaces and tight restorative areas

- Standard Ø4.8 mm abutment compatible with commonly used Multi-Unit prosthetic components

- Available heights: 1.5 mm, 2.5 mm, 3.5 mm
- Versatile treatment options

## WIDE RANGE OF GINGIVAL HEIGHTS

- Available heights: 1.5 mm, 2.5 mm, 3.5 mm, 4.5 mm & 5.5 mm
- Versatile treatment options



## SYSTEM COMPONENT OVERVIEW

MULTI-UNIT ABUTMENTS



HEALING ABUTMENTS



TEMPORARY ABUTMENTS



SCAN BODIES



DRIVERS



ADHESIVE COPINGS



OPEN TRAY TRANSFERS



CASTING SLEEVES



CLOSED TRAY TRANSFERS



# ALPHA ARCH | WORKFLOW

**∅4.8 mm**

Gingival Height	1.5 mm	2.5 mm	3.5 mm	4.5 mm	5.5 mm
CS	5701	5702	5703	5704	5705
CHC	5721	5722	5723	5724	5725
IH	5711	5712	5713	5714	5715

**∅3.5 mm**

Gingival Height	1.5 mm	2.5 mm	3.5 mm	4.5 mm	5.5 mm
CS	5601	5602	5603	5604	5605
CHC	5621	5622	5623	5624	5625
IH	5611	5612	5613	5614	5615

**17°**

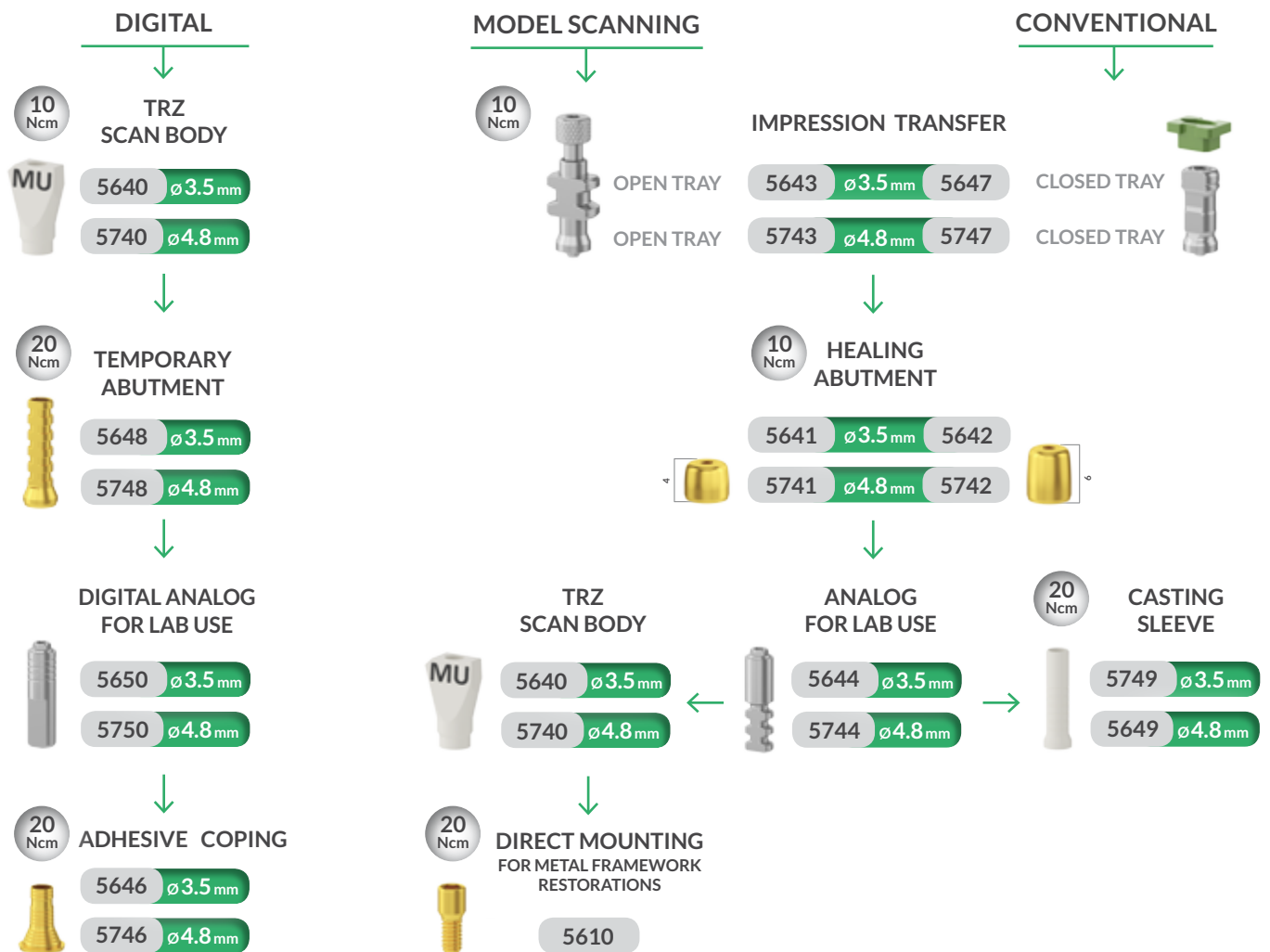
**∅4.8 mm**

Gingival Height	1.5 mm	2.5 mm	3.5 mm
CS	5661	5662	5663
CHC	5681	5682	5683
IH	5671	5672	5673

**30°**

**∅4.8 mm**

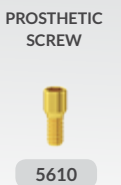
Gingival Height	1.5 mm	2.5 mm	3.5 mm
CS	5761	5762	5763
CHC	5781	5782	5783
IH	5771	5772	5773



## DRIVERS & ACCESSORIES

DRIVERS FOR STRAIGHT MUA (∅4.8 mm & ∅3.5 mm)

1.25 mm DRIVERS FOR ANGLED MUA (∅4.8 mm)



## STEP-BY-STEP INSTRUCTIONAL GUIDE

### STEP 0 REMOVAL OF COVER SCREW OR HEALING ABUTMENT

If the Multi-Unit Abutment (MUA) was not placed during the surgical procedure, remove the implant cover screw and/or healing abutment, before proceeding with Multi-Unit Abutment placement.

Use a prosthetic screwdriver to remove the cover screw or the healing abutment (HA) by turning it counterclockwise.

**Note:** This step applies only if a Multi-Unit Abutment was not placed during the surgical procedure.

### STEP 1 MULTI-UNIT ABUTMENT SELECTION

#### IMPLANT ABUTMENT CONNECTIONS

##### CONICAL STANDARD CONNECTION

CS

##### Implants:

- MultiNeO™
- MultiNeO™ powered by NiNA™
- DFI™

##### CONICAL NARROW CONNECTION

CHC

##### Implants:

- MultiNeO™
- MultiNeO™ powered by NiNA™
- NICE™

##### INTERNAL HEX CONNECTION

IH

##### Implants:

- MultiNeO™
- DFI™
- SPIRAL™
- ICE™

#### GINGIVAL HEIGHTS & ANGULATIONS

##### ONE-PIECE STRAIGHT MULTI-UNIT ABUTMENTS

Available in 5 gingival heights: 1.5 mm, 2.5 mm, 3.5 mm, 4.5 mm & 5.5 mm

##### ONE-PIECE ANGLED MULTI-UNIT ABUTMENTS

Available in 3 gingival heights: 1.5 mm, 2.5 mm & 3.5 mm, with angulation options of 17° and 30°





## STRAIGHT MULTI-UNIT ABUTMENTS DIAMETERS

- **STANDARD (Ø4.8 MM) ABUTMENTS** - For all implant-abutment connections (CS, CHC & IH)
- **NARROW (Ø3.5 MM) ABUTMENTS** - For all implant-abutment connections (CS, CHC & IH).

Narrow abutments are specifically designed for use in esthetic zones and areas with limited restorative space, offering a better fit in tight or cosmetically sensitive regions.

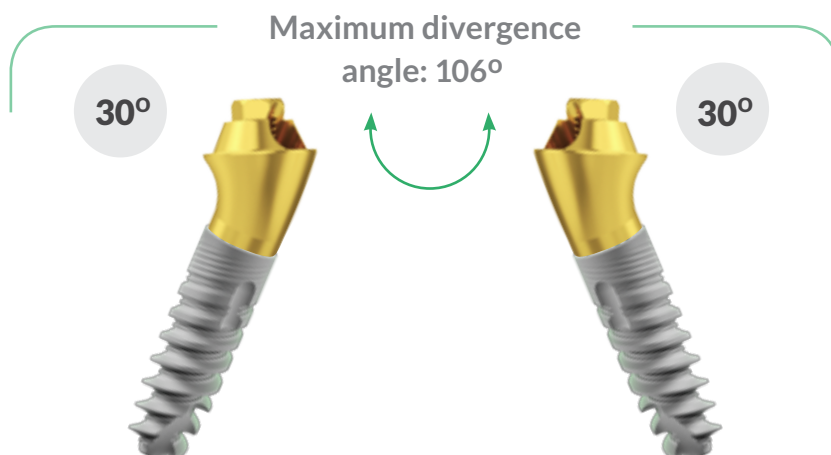
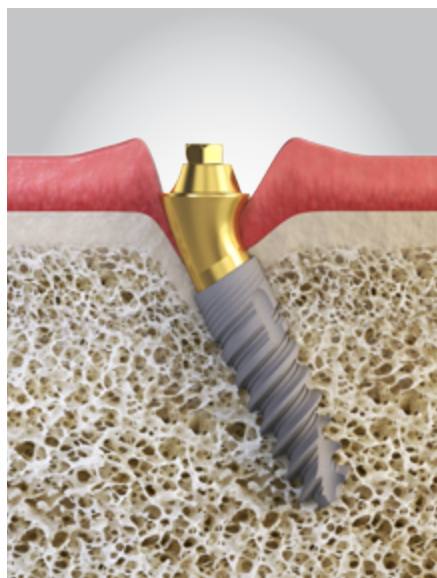


## CHOOSING ANGULATION & GINGIVAL HEIGHT

- Choose the suitable straight or angled Multi-Unit Abutment, based on the implant position and the soft tissue height.

Ø4.8 mm STRAIGHT & ANGLED  
MULTI-UNIT ABUTMENTS

Ø3.5 mm STRAIGHT  
MULTI-UNIT ABUTMENTS



## STEP 2

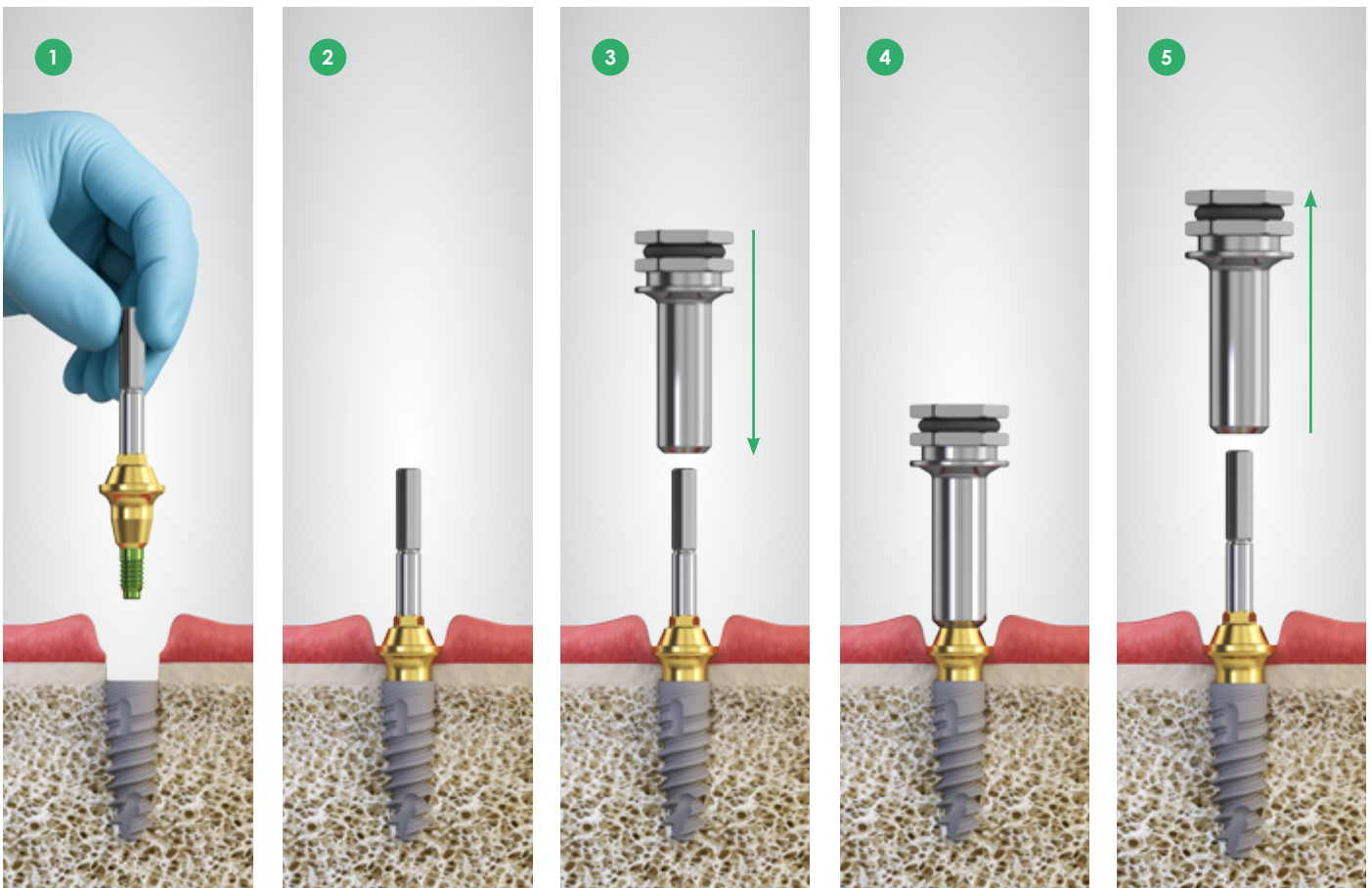
## ABUTMENT PLACEMENT



### STRAIGHT MULTI-UNIT ABUTMENT PLACEMENT

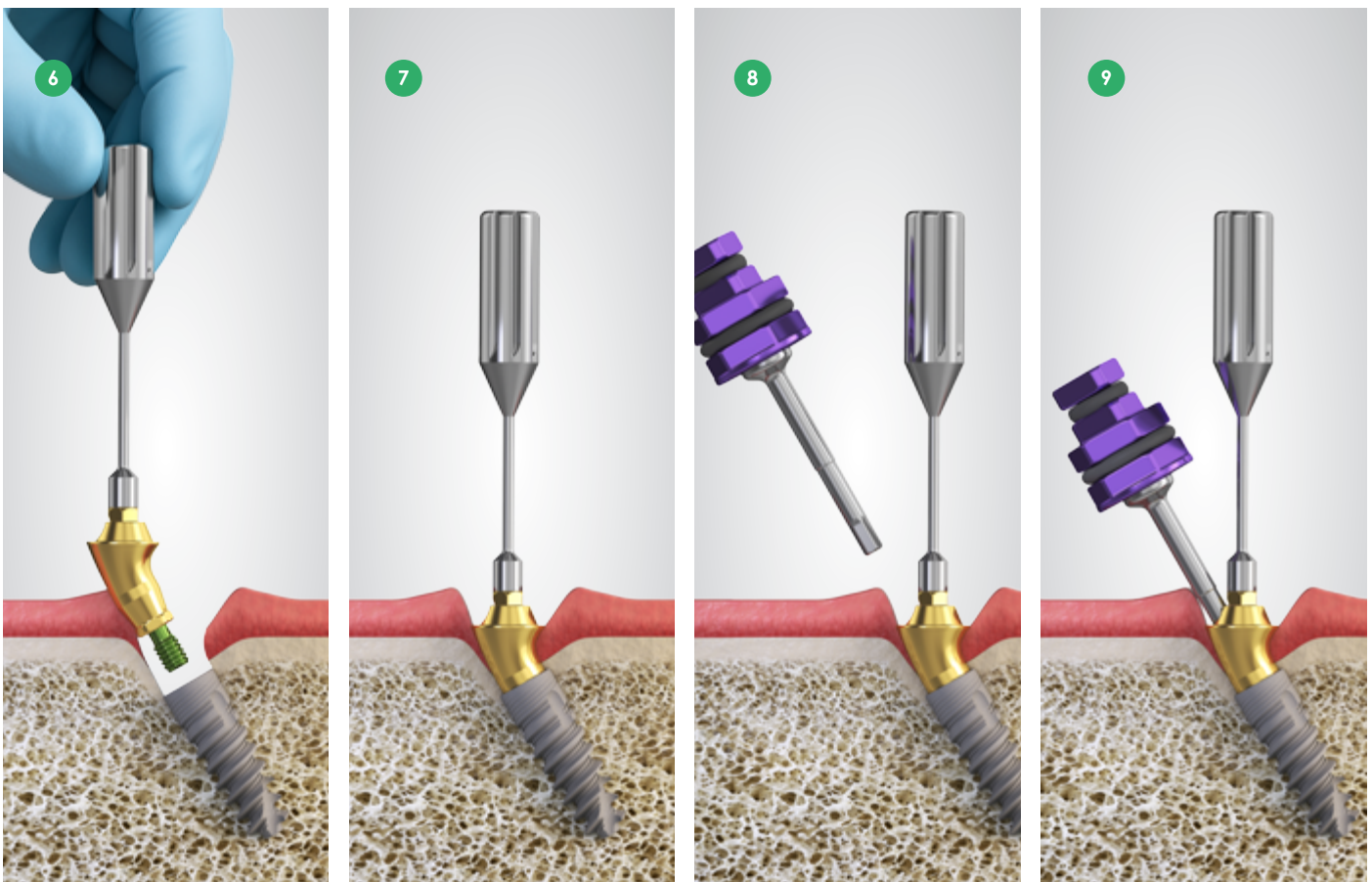
Place the selected Multi-Unit Abutment as described below.

- Use the handle (supplied with the abutment) to position the Multi-Unit Abutment onto the implant.
- Manually tighten the abutment into the correct position.
- Once the abutment is seated, utilize a straight multi-unit driver (Ref. # 5600) to tighten the abutment.
- To attach the driver, insert the driver access hole on the handle.
- Manually rotate the driver clockwise until the hex is properly positioned, then apply a torque of 30 Ncm.
- Remove the driver.
- Manually unscrew the handle.
- It is recommended to verify the final abutment seating using radiographic imaging.



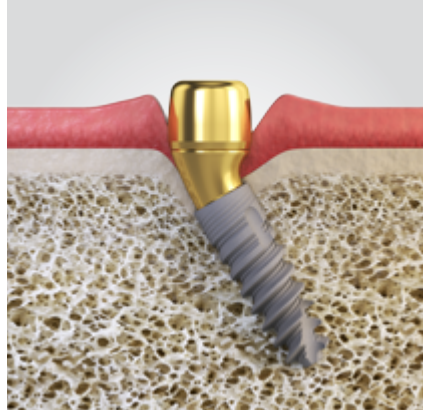
**STEP 2 ABUTMENT PLACEMENT****ANGLED MULTI-UNIT ABUTMENT PLACEMENT**

- Position the appropriate angulated abutment, using the flexible handle (supplied with the abutment).
- Tighten the abutment screw using a 1.25 mm prosthetic driver (manual, ratchet or motor mount).  
Recommended tightening torque:
  - 30 Ncm for IH and CS connections.
  - 20 Ncm for CHC connection.
- Manually unscrew the handle.
- It is recommended to verify the final abutment seating using radiographic imaging.



## STEP 3 HEALING ABUTMENT PLACEMENT

**Height options: 4 mm and 6 mm.**  
 Select the appropriate healing abutment based on the clinical requirements, and manually tighten onto the Multi-Unit Abutment.



## STEP 4 IMPRESSION TAKING

### ◎ ◎ ◎ MULTI-UNIT IMPRESSION PROCESS

1. Ensure the Multi-Unit Abutments are securely placed on the implants.
2. Choose your preferred impression taking technique: digital, conventional or model scanning.

### ◎ ◎ ◎ DIGITAL IMPRESSION TECHNIQUE

Select and place the scan body of your choice as described below.

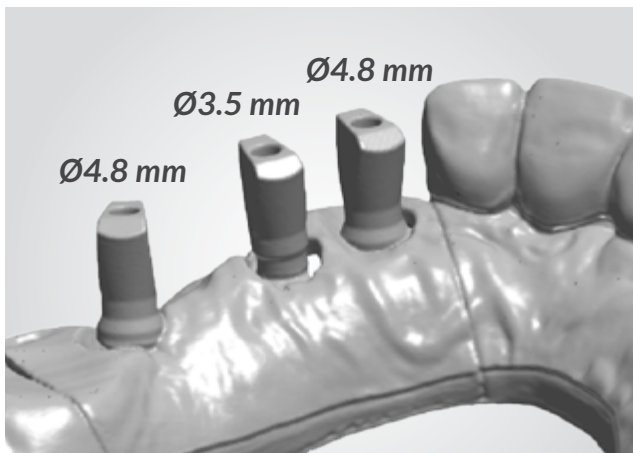
1. Choose the scan bodies which are compatible with the right Multi-Unit Abutment diameter (Ø4.8 mm or Ø3.5 mm)

**Important:**

For the narrow Ø3.5 mm Multi-Unit Abutment, please use Ref. # 5640

For the standard Ø4.8 mm Multi-Unit Abutment, please use Ref. # 5740





## INTRAORAL SCANNING OF Ø3.5 mm & Ø4.8 mm SCAN BODIES

- Attach the scan bodies to each Multi-Unit Abutment and manually-tighten them securely using the 1.25 mm prosthetic driver.
- Ensure they are fully seated and aligned correctly.
- Intraorally scan the patient's mouth while following the manufacturer's instructions for intraoral scanning.
- Send the file to the dental laboratory.



### CONVENTIONAL IMPRESSION TECHNIQUES



### CLOSED TRAY IMPRESSION

1. Manually tighten the closed tray impression coping onto the Multi-Unit Abutment using the 1.25 mm prosthetic driver. Ensure that the flat side is aligned parallel to the buccal surface.
2. Mount the plastic cap onto the impression transfer head and gently press until you feel a "snap" to confirm full seating.
3. Load the tray with the impression material and apply the wash material around the transfer coping. Immediately seat the tray in the mouth and take the impression.
4. Once the impression material has set, remove the impression tray and inspect it for any irregularities, defects or bubbles.
5. Unscrew the coping using the 1.25 mm prosthetic driver and remove it from the mouth.
6. Attach the implant analog to the impression coping, then reposition the coping into the plastic cap within the impression to prepare for model fabrication. The plastic cap will remain in the impression.



### 1. TRAY PREPARATION

- Use an open tray with access holes aligned over each implant site.
- Try the tray in the mouth to confirm visibility and access to Multi-Unit Abutment screw channels.

### 2. PLACE IMPRESSION TRANSFERS

- Position the Multi-Unit open tray transfer onto the Multi-Unit Abutment and manually tighten it by using the screws.
- Ensure full seating and correct orientation.

### 3. TAKE THE IMPRESSION

- Inject impression material around the copings.
- Fill the tray and seat it over the arch, confirming that the guide screws protrude through the tray holes.
- Before the impression material has set, clear the head of the transfer coping from excess impression material.

### 4. SECURE AND SET

- Once the impression material has set, unscrew the transfer screws through the tray.
- Carefully remove the tray with the transfers embedded in the impression.

### 5. ATTACH ANALOGS

- Attach Multi-Unit analogs to the transfer copings inside the impression.
- Confirm they are fully seated and stable.

### 6. SEND TO LAB

- Disinfect the impression.
- Send it to the laboratory along with:
  - A detailed lab prescription.
  - Information about the implant system and Multi-Unit type.
  - Antagonist model/scan and bite registration if required.

## STEP 5

## FINAL RESTORATION

FABRICATE A CUSTOMIZED RESTORATION BY ONE OF THE FOLLOWING OPTIONS:

### 1 ADHESIVE COPINGS

Adhesive Coping, which has a 7 mm post, which can be adapted/customized to 5 mm.

20 NCM

∅ 5.1

∅ 4.8 mm



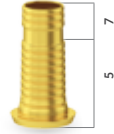
FOR STANDARD MULTI-UNIT ABUTMENTS

5746

20 NCM

∅ 3.9

∅ 3.5 mm



FOR NARROW MULTI-UNIT ABUTMENTS

5646

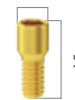
### 2 DIRECT MOUNTING

The restoration based on metal framework is directly screwed onto the Multi-Unit Abutment.

**Important:**

- For direct mounting, please use the prosthetic screw Ref. # 5610.
- Only for metal framework restorations. Not suitable for full Zirconia crowns.

∅ 1.9



5610

### 3 CASTING SLEEVE

Designed for the casting process.

∅ 4.8 mm



FOR STANDARD MULTI-UNIT ABUTMENTS

5749

∅ 3.5 mm



FOR NARROW MULTI-UNIT ABUTMENTS

5649

## STEP 6

## RESTORATION FRAMEWORK FIT & FIXATION

- Remove healing caps or temporary restoration.
- Seat the restoration framework passively over the Multi-Unit Abutment and check the overall fit, occlusion, and proximal contacts.
- Screw the restoration onto the Multi-Unit Abutments.

- Torque occlusal screws to 20 Ncm.
- Seal access holes with Teflon tape and composite.
- Verify occlusion and esthetics.



## TECHNICAL INFORMATION

### ⦿ MATERIALS:

- Multi-Unit Abutments, healing abutments, temporary abutments, adhesive copings, impression transfers, screws - Titanium
- Drivers - Sandvik
- TRZ Multi-Unit Scan bodies - PEEK

COMPONENT	RECOMMENDED TIGHTENING TORQUE	RECOMMENDED DRIVERS
Straight Multi-Unit abutment	30 Ncm for CHC/CS/IH	Straight MU driver (Ref.# 5600)
Angled Multi-Unit abutment	30 Ncm for CS/IH, 20 Ncm for CHC	1.25 mm prosthetic drivers
Healing abutment	10 Ncm	1.25 mm <b>manual</b> prosthetic driver
Temporary abutment	20 Ncm	1.25 mm prosthetic driver
Adhesive coping	20 Ncm	1.25 mm prosthetic driver
Scan body	10 Ncm	1.25 mm <b>manual</b> prosthetic driver