



# Technique Guide for Extra-oral Cementation of Hybrid Abutments with **G-CEM LinkAce<sup>®</sup>**

GC G-CEM LinkAce is a dual-cure self-adhesive universal resin cement, designed for the adhesive luting of all-ceramic, metal or composite indirect restorations. Its features and properties make it the ideal option for the cementation of hybrid abutments at the laboratory side. Offering the highest polymerization in self-cure mode, G-CEM LinkAce ensures perfect results, even in cases in which the transmission of light cannot be assured. The peculiar phosphate monomers of G-CEM LinkAce guarantee an unsurpassed bond strength and durability to both titanium and zirconia, without the need of pre-treatment with primers. G-CEM LinkAce is delivered in a double barrel automix syringe which facilitates the handling with minimal waste. It also shows one of the thinnest film thicknesses in the market (3 µm) for a perfect fit of prosthetic parts\*.

\*All data available on request

## Components



Ti abutment + screw



Implant analog in position



Implant analog + gingival collar  
(occlusal view)



Implant analog + gingival collar  
(lateral view)



Implant analog + Ti abutment



Implant analog + Ti abutment +  
Zr abutment



Implant analog + Ti abutment +  
Zr abutment + Ceramic Crown



## Step by Step



Hold the Ti abutment and check the fit of the Zr abutment. Color spray can be used. We do recommend GC Fit Checker™ Advanced Blue which is simpler to handle and delivers higher precision on the visualization of pressure spots. If necessary, adjust the fit by grinding the inner part of the Zr abutment.



Block the screw channel and protect the margins with wax. Only the bonding surface should be exposed.



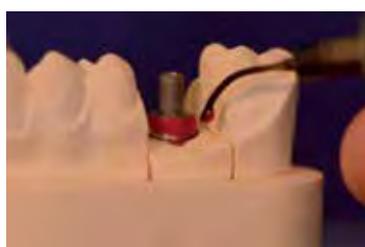
Sandblast the bonding surface of the Ti abutment with 50  $\mu\text{m}$   $\text{Al}_2\text{O}_3$  and maximum 2 bars maintaining around 1 cm distance from the abutment.



Protect the margins of the Zr abutment with wax.



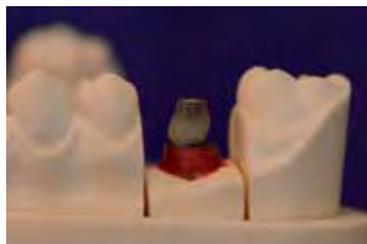
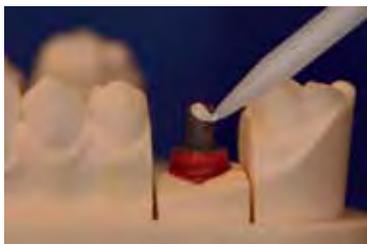
Sandblast the bonding surface (inner part) of the Zr abutment using the same parameters.



Place the Ti abutment in the implant replica and protect the margins with wax.



For the cementation, we recommend G-CEM LinkAce, shade AO3 (opaque). Always check the opening of the tube before attaching the mixing tip. Bleed a small amount of the pastes to level them if needed.



Using the automix tip, extrude the cement around the upper circumference of the Ti abutment. The cement will slowly flow down. This will help to avoid bubbles in the cement line.  
Important: always discard the very first paste extruded from the mixing tip as it may not present an ideal proportioning of pastes A and B.

Place the Zr abutment in position. The working time of the cement is 2'45" from start of mixing. Do not allow any movement of the Zr abutment.



Light cure each side for 20 seconds with a Halogen/ LED lamp with minimum of 700 mW/cm<sup>2</sup> (wavelength between 430 and 480 nm).

Remove excesses. Alternatively, this can be done before light curing. For that, wait until the cement reaches a rubbery consistency to remove excesses.

Hybrid abutment after cementation.



Polish the margins with a polishing rubber and Gradia Diapolisher.



Replace the hybrid abutment on the implant analog.

Proceed with the preparation of the crown. For the cementation of the crown on the hybrid abutment, we also recommend G-CEM LinkAce.

## GC Products for Cementation of Hybrid Abutments

G-CEM LinkAce AO3	
004859	AO3, 2 syringes, 15 Automix Tips Regular, 5 Automix-Endo-Tips
900668	GC Automix Tips Regular, 10 pcs

Fit Checker Advanced Blue	
004905	Blue, 2 x 56g (48ml) Cartridges, 3 Mixing Tips IIS (rosa), 3 Mixing Tips IISS (yellow)
800006	Cartridge Dispenser

Metal Primer II	
000554	GC Metal Primer II, 5 ml Liquid & 1 Brush

Ceramic Primer II	
008551	GC Ceramic Primer II, 3 ml Liquid
008620	GC Ceramic Primer II, Unit Dose pack (10pcs)

GC Gradia Diapolisher	
001516	GC Gradia, Diapolisher, Dose with 8g

GC DiaPolisher Paste	
004415	GC DiaPolisher Paste, 2g Syringes



For more information on G-CEM LinkAce, GC Fit Checker Advanced Blue or other GC products, please visit our website: [www.gceurope.com](http://www.gceurope.com)

GC EUROPE N.V.  
 Head Office  
 Researchpark Haasrode-Leuven 1240  
 Interleuvenlaan 33  
 B-3001 Leuven  
 Tel. +32.16.74.10.00  
 Fax. +32.16.40.48.32  
 info@gceurope.com  
<http://www.gceurope.com>