



# Technique Guide for Extra-oral Cementation of Hybrid Abutments with **G-CEM ONE™**

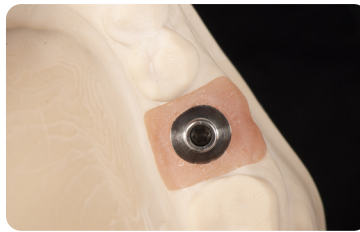
G-CEM ONE™ is a dual-cure self-adhesive universal resin cement, designed for the luting of zirconia, glass-ceramics, metal or composite indirect restorations. Its features and properties make it an ideal option for the cementation of abutments at the laboratory side. Offering a high polymerization in self-cure mode, G-CEM ONE™ ensures perfect results, even in cases in which the transmission of light cannot be assured. The presence of MDP in G-CEM ONE™ guarantees excellent bond strength and durability to both Titanium and Zirconia, without the need of pre-treatment with primers. However, when used with Glass Ceramics, the use of a silane containing primer is recommended. G-CEM ONE™ is available in a double barrel automix syringe which facilitates the handling with minimal waste. It also exhibits very thin film thickness (5 µm) for a perfect fit of prosthetic parts\*.

\*All data available on request

## Components



Ti-base abutment + screw



Model with implant analog + Ti-base abutment + gingival collar (occlusal view)



Implant analog + gingival collar (lateral view)



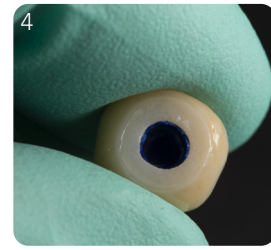
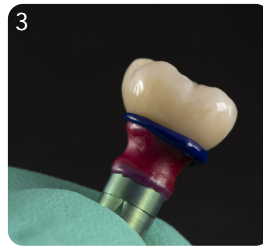
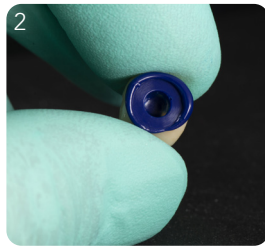
Implant analog + Ti-base abutment



Implant analog + Ti-base abutment + Full Ceramic crown (Zirconia base)



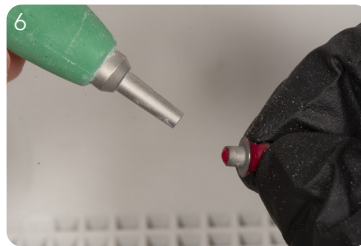
## Step by Step



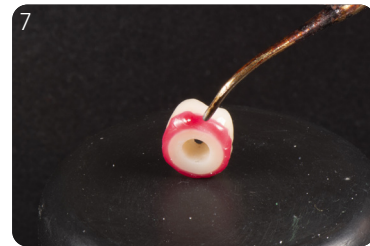
Hold the Ti base abutment and check the fit of the Full Ceramic crown. Color spray can be used. We do recommend FIT CHECKER™ ADVANCED BLUE which is simpler to handle and delivers higher precision on the visualization of pressure spots. If necessary, adjust the fit by grinding the inner part of the Full Ceramic crown.



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



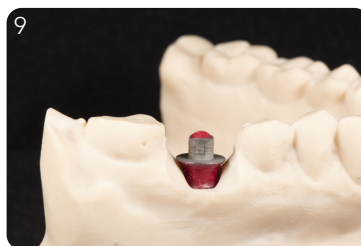
Sandblast the bonding surface of the Ti-base abutment with 50 µm Al<sub>2</sub>O<sub>3</sub> and maximum 2 bars maintaining around 1 cm distance from the abutment.



Protect the margins of the Full Ceramic crown with wax.



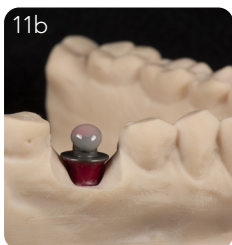
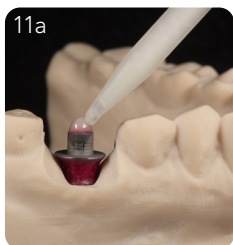
Sandblast the bonding surface (inner part) of the Full Ceramic crown using the same parameters. In case of Glass-Ceramic crown, the substrate should be acid etched with Hydrofluoric acid etched and not sandblasted.



Place the Ti-base abutment in the implant analog.



For the cementation, we recommend either white opaque or AO3 shade. Always check the opening of the tube before attaching the mixing tip. Bleed a small amount of the pastes to level them if needed. Depending of your esthetic requirements, G-CEM ONE™ is also available in a White Opaque shade.



Using the automix tip, extrude the cement around the upper circumference of the Ti-base 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.

In case of a glass-ceramic substrates, it is recommended to prime the restoration with Silane (G-Multi PRIMER or CERAMIC PRIMER II). In case of Zirconia, no pre-treatment of the restoration is required.

Place the Full Ceramic crown in position. The working time of the cement is 2'45" from start of mixing. Do not allow any movement of the Full Ceramic crown, while applying pressure.



Remove excess cement. Wait until the cement reaches a rubbery consistency for easy excess removal.



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).



For optimal light-curing, we recommend Labolight DUO in full mode.



Polish the margins with a polishing rubber and use DIAPOLISHER PASTE.

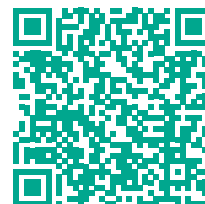


Place the completed hybrid abutment on the implant analog. Final view.



In case of two-stage hybrid abutment technique, cementation can be done with G-CEM ONE™. In case of Glass-ceramic, pre-treatment of the restoration is required with Silane (G-Multi PRIMER or CERAMIC PRIMER II). In case of Zirconia, no pre-treatment of the restoration is required.

Discover all GC Primers



## GC Products for Cementation of Hybrid Abutments

G-CEM ONE™	
013675	G-CEM ONE™ Single Refill AO3, 1x Syringe AO3 (4.6 g), 8x GC Fuji® Automix LC Tips Regular, 2x GC Automix Tip Endo
013676	G-CEM ONE™ Single Refill White Opaque, 1x Syringe White Opaque (4.6 g), 8x GC Fuji® Automix LC Tips Regular, 2x GC Automix Tip Endo
002902	20x regular automix tips (Compatible with G-CEM LinkForce®)



FIT CHECKER™ ADVANCED BLUE	
004905	Blue, 2 x 56g (48ml) Cartridges, 3 Mixing Tips IIS (rosa), 3 Mixing Tips IIS (yellow)



METAL PRIMER Z	
009295	METAL PRIMER Z, 5ml Liquid



CERAMIC PRIMER II	
008551	CERAMIC PRIMER II, 3ml Liquid
008620	CERAMIC PRIMER II, Unit Dose pack, 10 pcs



G-Multi PRIMER	
009553	G-Multi PRIMER, 5ml Liquid



GC DIAPOLISHER PASTE	
004415	GC DIAPOLISHER PASTE, 2gr



LaboLight DUO	
010077	Labolight DUO



For more information on GC products, please visit our website:  
<https://www.gcamerica.com>

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