

# Use of Prepregnated Fibers in implant-retained and implant hybrid dentures

**Removable implant retained overdentures** on two to four attachments provide a much improved removable solution for patients. Yet due to the increased masticatory forces applied, these overdentures are prone to breakage. The fractures are being caused by shearing forces and fatigue, especially at the attachment sites. The traditional method to strengthen them is by incorporating a cast metal framework. While this approach works, it adds bulk and weight to the denture, and in many cases is not feasible due to the limited available vertical space.

Using FIBER FORCE® pre-impregnated glass fiber mesh, you can now create a custom-fitted fiber mesh framework that is chemically bonded to acrylic and will provide a superior level of reinforcement to a casting, without adding any thickness or weight to the denture. Because FIBER FORCE® mesh frameworks are only 0.5mm thin, a FIBER FORCE® mesh framework can fit into even the most “vertically challenged” denture. FIBER FORCE® mesh frameworks can be made in about 20 minutes and in most cases cost less than outsourcing a casting made, which means you don’t have to delay the case while waiting. You can offer a FIBER FORCE® mesh framework to your clients at a reasonable price.

Fully edentulous patients looking for **fixed denture solutions** are sometimes held back by the cost of providing metallic or zirconia sub-structures. CST®, a FIBER FORCE® product, allows you to offer your customers a more accessible solution, without compromising durability. CST® creates a strong glass fiber sub-structure to support fixed hybrid dentures. It is indicated as a part of a permanent appliance, replacing milled titanium or cast bars. Its low cost makes a fixed solution more affordable and therefore more accessible to more patients. CST® glass fibers are also ideal to incorporate into transitional dentures in ALL-ON type cases to eliminate pre-mature breakage problems and the hassles that come with them.

A recent study\* has shown that CST® reinforced fixed hybrid dentures have 85% of the fracture resistance of milled titanium bars in the weakest part of the denture, the distal extension or cantilever, and have a level of fracture resistance that far exceeds the biting forces that can generated intra-orally. This innovative solution is inspired by the Cable Stayed Technology that is used in modern bridges, and the FRC (fiber reinforced composites) used in the modern aircraft industry.

\*To learn more about these products and review studies, visit: [fiberforcedental.com/cst](http://fiberforcedental.com/cst)

## Triple your success with FIBER FORCE® & CST®



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