Shofu offers BEAUTIFIL Bulk Flowable and BEAUTIFIL Bulk Restorative

By Shofu Staff

Bulk fill resin-based composites are continuing to evolve and improve in terms of quality and esthetics, but despite their growing recognition, many dentists continue to be weary of embracing these newly emerging products. Recent research shows their performance has proven to be comparable to traditional multi-increment resin-based composites. So why not switch?

Obvious advantages are available with bulk filling, including faster technique, fewer incremental steps, which allow easier placement, and potentially less voids because of mass placement. However, on the opposite side of the spectrum, there could more voids present because of lack of control when the material is placed at one time. Adequate contact, shrinkage stress and polymerization in the deepest portions of the restoration are additional challenges that have made many dentists concerned.

Such complications can result in serious consequences, including debonding of restorations, marginal gaps, discoloration, recurrent caries and patient discomfort because of post-operative sensitivity.

Thanks to advances in technology, professionals are now being offered two alternatives, BEAUTIFIL Bulk Flowable and BEAUTIFIL Bulk Restorative. These bulk fill materials offer a filler technology that addresses these legitimate concerns.

Preventative properties

Shofu's new BEAUTIFIL Bulk Flowable and BEAUTIFIL Bulk Restorative incorporate giomer technology, surface pre-reacted glass filler particles (S-PRG), known to provide continual fluoride release and high recharge when fluoride concentrations are present in the mouth.

In addition to fluoride, S-PRG filler also releases five other ions: sodium, strontium, aluminum, silicate and borate, all with known bioactive properties. When exposed to concentrations of lactic acid, these ions contribute to an acid neutralization effect, helping to reduce the occurrence of secondary caries and extend the life of the restoration.

Depth of cure

The giomer (S-PRG) filler particles in BEAUTIFIL Bulk Flowable and BEAUTIFIL Bulk Restorative provide an ideal balance of light diffusion and transmission that allows the material to be completely light cured up to 4 mm of depth without being too translucent, a known shortfall of other bulk fill composite material. These unique optical characteristics are derived from the tri-laminar structure of the S-PRG filler.

Incoming light goes through the glass core but scatters on the surface, allowing an outstanding depth of cure and an opacity that matches the surrounding tooth structure. Finally, there's a material that can have both complete depth of cure and an aesthetic, natural look when placed in the patient's mouth.

Polymerization shrinkage and shrinkage stress

The varied particle size of giomer filler allows a dense distribution within the resin matrix. Thus, a high filler load can be achieved with BEAUTIFIL Bulk Flowable (72.5 wt percent) and BEAUTIFIL Bulk Restorative (87 wt percent), which helps to reduce polymerization shrinkage and shrinkage stress.

Test results reveal that BEAUTIFI- FIL Bulk Flowable and BEAUTIFIL Bulk Restorative have the lowest shrinkage stress among their leading competitors. Lower shrinkage stress can help to prevent postoperative sensitivity, marginal leakage and secondary caries.

Mechanical properties

BEAUTIFIL Bulk Flowable and BEAUIFIL Bulk Restorative were cut and tested at 1 mm up to 4 mm depths to measure the Vickers Hardness number. The results presented more than 90 percent hardness at the top surface of each part—outperforming competitive products—and showed excellent curing properties to ensure complete polymerization when filled in 4 mm increments.

The materials also exhibit impressive flexural and compressive strength and high radiopacity to enable accurate diagnosis.

An excellent choice

BEAUTIFIL Bulk Flowable and BEAUTIFIL Bulk Restorative address dental professional’s concerns and overcome the challenges associated with the bulk fill materials that were first introduced into the marketplace.

Combining bioactive benefits of giomer, low-shrinkage stress, high depth of cure and a fast and easy placement technique, BEAUTIFIL Bulk Flowable and BEAUTIFIL Bulk Restorative are the new bulk fill restorative you can trust.

An EDS Tip Introductory Kit is available in 2.4 g syringe in universal and dentin shades and is valued at a suggested retail price of $37.44. BEAUTIFIL Bulk Restorative is available in 4.5 g syringe in shades A and Universal and is valued at a suggested retail price of $35. Stop by Shofu's booth, No. 2411, for a live demonstration of each product!