

Laser Instructions

Processing the standard external hex cylinder

Place the plastic extension on the brass Preci Disc space maintainer and secure it with a cylinder screw to the abutment analogue. Wax up the bridge, remove the brass space maintainers from the wax pattern, and cast in titanium. Remove any bubbles or inaccuracies from the casting. Place the titanium Preci Disc cylinder in the casting and seat it on the working model.

The titanium Preci Disc cylinders for the laser technique are 0.1mm thinner than the brass cylinders to allow for an easy fit in to the casting. Fix the titanium Preci Disc cylinder with the cylinder screws. Stabilize under finger pressure and laser weld the titanium Preci Disc cylinder to the titanium casting. Provide each cylinder with at least 4 opposing laser welding points. Remove the casting and laser weld completely surrounding each cylinder. You now have the option to prepare a finish line underneath the laser welding zone to allow for porcelain firing below the welded joint.

Processing the conical and mini conical cylinder

Place the plastic extension on the brass Preci Disc (mini) conical space maintainer and secure both parts on the abutment analogue. Wax up the bridge, remove the brass space maintainers from the wax pattern, and cast in titanium.

Remove any bubbles or inaccuracies from the casting. Completely remove the stop for the screw head in the casting with a burr. Place the titanium Preci Disc cylinder in the casting and seat it on the working model. The titanium Preci Disc cylinders for the laser technique are 0.1mm thinner than the brass cylinders to allow for an easy fit in to the casting. Fix the titanium Preci Disc cylinder with the cylinder screws. Stabilize under finger pressure and laser weld the titanium Preci Disc cylinder to the titanium casting. Provide each cylinder with at least 4 opposing laser welding points. Remove the casting and laser weld completely surrounding each cylinder. You now have the option to prepare a finish line underneath the laser welding zone to allow for porcelain firing below the welded joint.