A Fresh Start

To start the process properly, preliminary impressions were taken and casts were poured with a high strength yellow gypsum product such as DENTSPLY Castone, or DENTSPLY Labstone Dental Stone and allowed to fully set. The models were subsequently used to begin setting the ground work for a well-fitting denture by using DENTSPLY Triad® denture base material to fabricate the base plate. Triad® Light Cure materials are optimal for these indications due largely in part to their unique formulations, which yield low shrinkage, high accuracy and exhibit superb strength. They are packaged as pre-mixed sheets and ropes, which adapt easily to assure consistency. A Model Release Agent (MRA) was applied to the preliminary gypsum models, followed with adapting a sheet of Triad®, which was cut to conform to the anatomical landmarks, resulting in base plates ready for try-in. Air Barrier Coating (ABC) was applied to allow final curing of the Triad® baseplate material. Conventional methods were used to hold fast the wax rims to the base plates, creating a conduit for attaining pertinent information from the patient’s oral situation.

The patient was seen at the Denture Center and bite rims with the Triad® Base Plate were tried in for assessment of proper fit, and all the necessary oral information was attained. The maxillary wax rim was verified to be leveled and then markings were indicated for patient’s midline, cuspid area and smile line. The fit was deemed excellent and a proper bite was taken and transferred to an Artex Articulating System. From there, appropriate moulds and shade were selected and set-up was initiated. DENTSPLY’s TruExpression® Teeth were selected in Shade (A1) in Moulds 75E for Maxillary anterior and N for the Mandibular anterior and 32M posteriors were used for both arches; these teeth are custom deluxe teeth that exhibit high wear-resistance, multi cross-linked materials with variegated shade blend, 26 upper and 15 lower anterior moulds and 24 upper and lower posterior moulds with 16 A-D and 2 bleach shades, made in the USA. Cynthia Rohrer states that “TruExpression® teeth really interdigitate perfectly; when they are set up correctly with basic bilateral Case Study: Custom Deluxe Denture

In the US, there are well over 8 million people wearing dentures and those numbers are steadily increasing, according to a study completed by iData in 2011. The main complaints among denture wearers lies in comfort, fit and mastication, as well as esthetics. This was exactly the situation for a patient who came into Roar Denture Center in Prineville, OR, to see Cynthia Rohrer LD, a Licensed Denturist. The patient had 3 sets of dentures over the course of 27 years and came in with a set that was broken and repaired several times. Clinical assessment was performed and a new treatment protocol was established in order to fabricate a new set of dentures for the patient, utilizing first in class materials to achieve optimal results in fit, function and esthetics.
balancing occlusion, both in working and balancing, they just interdigitate effortlessly ....they are easy to set-up and are simply great looking teeth.”

**Trying-in the set-up**

The patient was appointed for a try-in assessment with the set-up and final impressions to achieve the best fit. Rohrer adds, “Establishing the bite could not have been any easier, the teeth’s anatomy just made it so simple. The patient was very happy with the way they looked and felt.” In order to capture the final impression, the Triad® base plates were used, in conjunction with Aquasil® impression material, to capture the intimate details of the oral environment in order to assure optimal fit. DENTSPLY’s Aquasil® Impression Material was used by placing a small uniform amount of material and reinserting into the patient’s mouth. The excess impression material was displaced and removed, leaving an extremely accurate rendering of the hard and soft tissue. A bite was taken and new final models were poured and rearticulated to the new bite. The models were subsequently sealed down with wax and invested for the boil out process and packed using DENTSPLY’s Characterized Lucitone® Denture Base Resin, overnight at 163 F˚. The following morning, the flasks were allowed to cool and then divested and the processed dentures were returned to their articulation. Very little adjustment was necessary when verifying proper bite in right, left and protrusive movements, followed by polishing with milling paste and high shine. Rohrer said, “Lucitone® was very nice, mixed and packed easily, while exhibiting a smooth finish; pumicing and achieving high shine was remarkably easy to accomplish.”

**Patient Satisfaction**

The patient was extremely happy upon delivery of her dentures and stated that she is totally able to chew, eating everything under the sun; something that her previous dentures did not allow. Rohrer stated that “the look and feel of the combination of TruExpression® teeth and the gingival Characterized Lucitone® Denture Base Resin, was perfect for achieving natural looking dentures; using best in class materials from Dentsply, allow us to provide our patients with the best that we can provide...it’s a win-win for both dental professionals and their patients.”

**About the Author:**

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