

## ELITE CERAMIC ALLOY TECHNIQUE OUTLINE

**Elite** is a yellow premium alloy for metal bonded to porcelain restorations. Its formulation permits easy polishing with Aurident's Polishing Kit and Compound.

**Wax-up:** Sprues should be no smaller than 10 gauge and no longer than 1/4". Minimum thickness of wax should be no less than 0.3 mm. for single units and 0.4 mm. for bridges.

**Investing and Burnout:** Aurivest investment or equivalent is recommended. No more than 1/4" of investment should cover highest point of wax pattern. Ring should be burned out at 1400° F for a minimum of 45 minutes or according to manufacturer's recommended time.

**Casting:** Centrifugal type casting machines should be wound 3 1/2 to 4 turns. A sufficient amount of metal should be used to leave a button of 8 dwt. At least 2 dwt. of new metal should be added for each casting using a previously used button. No asbestos or flux should be used in crucible. A hot gas-oxygen torch flame should be used with the inner cone of the flame at least 1/2 to 3/4 inches long to avoid excessive oxidation during melting. The metal should be heated to approximately 2400° F before casting. At the casting temperature, the metal appears fluid and will vibrate if the casting machine arm is tapped gently.

**Cleaning and Finishing:** The investment should be removed by sandblasting and/or a chemical reagent. All traces of chemicals should be removed by rinsing in tap water followed by cleaning in distilled water in ultrasonic cleaner. All surfaces to which porcelain is to be applied should be rough ground with an aluminum oxide disc or red stone. **DO NOT USE HEATLESS STONES.** After grinding, metal should be cleaned in distilled water in ultrasonic cleaner.

**Degas:** Casting should be heated at 1850° F for 2 minutes in air and 2 minutes in vacuum, for a total of 4 minutes (either the air exposure or the vacuum exposure may be done first). Gold coating agents are not essential but if used, can be applied and fired in place of degassing. After this step, care should be taken to avoid contact with fingers or any object that could contaminate surface. Surface is then ready for application of opaque according to porcelain manufacturer's instructions.

**Recommended Solder:** Yellow Ceramic Solder