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“NS” C&B CERAMIC ALLOY

REF. Metal 50

Waxing: Minimum metal thickness (after grinding) for ceramic veneers is 0.3mm, therefore the minimum thickness of the wax up should no less than 0.4mm.

Spruing: The indirect spruing method is recommended for multiple units. The direct method may be used for single units.

Investing: Use a phosphate-bonded investment.

Burnout: After investment has set properly (following manufacturer recommendations) place rings in a room temperature oven and raise temperature to 1600°F (871°C). Heat soak for one hour, adding an additional 10 minutes of burnout time for each additional ring in the oven. If using a rapid burnout technique, follow manufacturer instructions.

Torch Casting: Use one turn more than normally used for precious ceramic alloys. Use a propane/oxygen torch

with a multi-orifice tip. Do not use flux. Keep torch in motion to avoid burning the alloy.

If you reuse alloy, use at least 50% new alloy. Individual ingots will not merge together into a single mass. Do not use acetylene fuel or a graphite crucible.

Induction Casting: It is best to preheat crucibles if using induction. Your induction machine should be set to 400 – 450 rpm, use a high power setting for the melt. The casting may be set to a temperature 2500°F (1370°C)

with about a five second heat soak, or when observing the alloy in the crucible, it will slump and pulsate when ready to

cast. If you reuse alloy, use at least 50% new alloy. Individual ingots will not merge together into a single mass.

Preparation: Alloy may be divested and sandblasted using 50 micron Aluminum Oxide abrasive in the sand blaster. Set the blaster at 4 bars or 60 psi. Grind on the surfaces as necessary using non contaminated

aluminum oxide stones. When grinding on surfaces to receive porcelain keep the wheels and stones moving in the

same direction, avoid crisscrossing.

Degassing: Place the framework in a porcelain furnace at 1200°F (650°C); vacuum fire to 1825°F (995°C) and hold

for 3 minutes. Allow cooling, casting will exhibit a gray oxide layer. Do not remove the oxide; porcelain will be fired to

the oxide layer.

Porcelain Applications: Follow porcelain manufactures instruction for application of porcelain.

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