FINISHING AND POLISHING GUIDE - YELLOW CERAMIC ALLOYS

FINISHING SURFACES TO RECEIVE PORCELAIN:

To avoid bubbling of your porcelain, do NOT use diamonds to finish these soft alloys.

Use a two-step finishing technique as follows. Do bulk metal removal with a coarse, fast cutting stone such as a Mizzy. Then go over all porcelain receiving surfaces with a fine aluminium oxide stone, such as the Shofu Lab Series Pink or White, and dress the stone often as it becomes clogged with metal.

POLISHING TECHNIQUE #1:

• Pre-polish with a conventional rubber wheel. Finer grit rubber wheels are better.
• Use a brown rubber point to pre-polish occlusal grooves.
• Mix tin oxide powder with denatured alcohol to a paste consistency.
• Apply the paste to a soft Robinson-style bristle brush, or dip the crown in the paste.
• Using Low speed and Light pressure (use a handpiece rather than a polishing lathe), polish the crown with the tin oxide paste.
• Using Low speed and Light pressure (use the handpiece rather than a polishing lathe), polish the crown with the tin oxide paste. A high shine should be achieved without much time spent.

NOTES:
• Some technicians insert a step of tripoli, red rouge, Jelenko Buffing Bar Compound, or Denerica “Sapphire” compound in between the rubber wheel step and the tin oxide step.
• The quality of the final finish is dependant upon the quality of the pre-polish job.
• Fine sandpaper disks such as Moore’s disk can be used extremely effectively on yellow ceramic alloys. Substitute disks for rubber wheels.
• Diamond pastes can be very effective for final polish. Substitute for tin oxide.
• Mixing the tin oxide with a ammoniated cleaner (e.g. Windex) rather than alcohol can be extremely effective. Mixing tin oxide with plain water is not recommended.

POLISHING TECHNIQUE #2:

• Pre-polish with a conventional rubber wheel.
• Use the “Gold Flash” high shine wheels from Pacific Abrasives to bring the metal to a high shine almost instantly.

NOTE:
We are told that other high shine wheels, such as the Ney “Sparkle” wheels, work very well also. Both the Ney and the Pacific Abrasives products are available as polishing points as well.

COMMENTS:

We use both of these techniques together. For example, if the case has no metal occlusion but simply gold collars, we will use Technique #2 and skip the tin oxide. If, on the other hand, the case has metal occlusal and metal lingual, we will do the smooth lingual aspect with Technique #2, and the occlusal with Technique #1.

Finally, we find that a clean rag wheel with no polishing compound applied to it can be a valuable tool for removing any “stuck” polishing materials, and leaves the metal with a nicely buffed luster.