Overview of Matchmaker MC and Propaque Firing Instructions

Matchmaker MC	Start Temp °C	Minimum Drying Time	Temp Rise °C / Min	Vacuum	High Temp °C	Hold Time Without Vacuum	Appearance
Oxidation	Refer to the alloy manufacturer's instruction						
Pontic Fill	550	6 min	80	Yes	980	1 min	
Propaque 1st firing	550	8 min	80	Yes	980	1 min	Slight sheen
Propaque 2nd firing	550	8 min	80	Yes	960	1 min	Textured, slight sheen
Powder Opaque 1st firing	580	2 min	80	Yes	980	1 min	Textured, slight sheen
Powder Opaque 2nd firing	580	4 min	80	Yes	950	1 min	Textured, slight sheen
Shoulder 1st firing	600	2 min	80	Yes	950	1 min	Slight sheen
Shoulder 2nd firing	600	4 min	80	Yes	940	1 min	Slight sheen
Dentine, Enhancer, Enamel etc 1st firing	580	6 min	60	Yes	930	1 min	Textured, slight sheen
Dentine, Enhancer, Enamel etc 2nd firing	580	6 min	60	Yes	920	1 min	Slight sheen
Glaze with Glaze Powder	580	6 min	60	No	920	1-2 min	Glaze
Glaze without Glaze Powder	580	6 min	60	No	930-940	1-2 min	Glaze depending on requirements
Post Ceramic Soldering* (780°C solder)	600	2 min	60	–	830	–	

* The soldering investment model should be as small as possible. Dry it in a preheating furnace for 10-20 minutes at 200°C. Then transfer the model to the porcelain furnace to complete the soldering cycle, and cool the soldered restoration in accordance with the alloy used.

All temperatures given are based on an accurately calibrated vertical muffle furnace. Individual furnaces and operating conditions vary. Temperatures are based upon precious and semi-precious alloys with good thermal conductivity. If non-precious alloys are used an increase in temperature may be necessary. Shake all powder bottles before use.

It is important to ensure that ceramics are fired at the correct temperatures in furnaces that are regularly calibrated, carefully following the instructions of the furnace manufacturer concerned. The following are some additional tips that customers have found helpful:

1. Silver calibration provides a visual indication at 961°C. However in many furnaces lower temperatures may still be inaccurate.
2. Adjust the high temperature until the visual appearance of the fired ceramic is in accordance with that shown in the manual, i.e. a correctly fired first opaque layer should exhibit a slight sheen. Adjustments of the same proportion should be made to other firing cycles.
3. In order to achieve the above appearance when using non precious alloys it is frequently necessary to increase the High Temperature of the first opaque firing by approx 20°C. The second firing should be made at the normal temperature for precious alloys.
4. Select a firing tray that is routinely used, Schottlander honeycomb trays and pins absorb less heat and are recommended for all ceramic crowns.
5. Always use the firing tray when calibrating your furnace.