

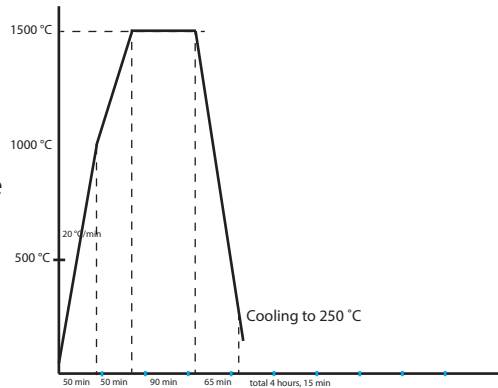
Program A. Single Crowns (up to 15 per batch)

	Stage	Rate / min	Ramp Time	Hold Time
1	Ramp to 1000 °C	20 °C / min	50 min	0 min
2	Ramp to 1520 °C	10 °C / min	50 min	90 min at 1520 °C
3	Cooling to 250 °C	20 °C / min	65 min	n/a
Total time		4 hours, 21 min		

Optimal program for quick sintering of single crowns.

The maximum 15 crown recommendation is based on molars averaging 1.8 grams, totalling about 30 grams (the weight before and after sintering does not change).

3 unit bridges with a small pontic can also be sintered with this program.



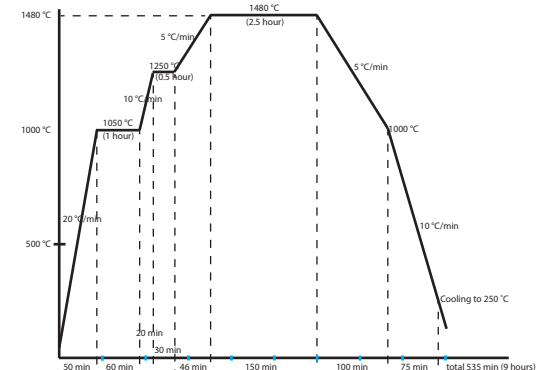
Program C. Bridges (over 3 units)

	Stage	Rate / min	Ramp Time	Hold Time
1	Ramp to 1050 °C	20 °C / min	50 min	60 min
2	Ramp to 1250 °C	10 °C / min	20 min	30 min at 1250 °C
3	Ramp to 1520 °C	5 °C / min	46 min	150 min at 1520 °C
4	Cooling to 1000 °C	5 °C / min	100 min	n/a
5	Cooling to 250 °C	10 °C / min	75 min	n/a
Total time		9 hours		

This is the universal program for single crowns and bridge cases.

The extended cooling time will ensure minimal distortion and stress-free cooling of the bridge restorations.

(2.5 hours of holding time will produce a pontic area with much better aesthetics than a 2 hour holding time since the white L* value is decreased)

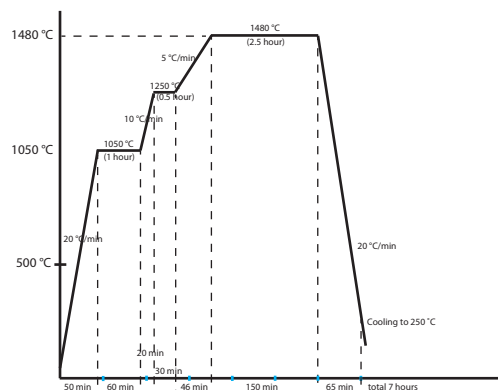


Program B. Single Crowns (exceeding 15) & 3 Unit Bridges

	Stage	Rate / min	Ramp Time	Hold Time
1	Ramp to 1050 °C	20 °C / min	53 min	60 min
2	Ramp to 1250 °C	10 °C / min	20 min	30 min at 1250 °C
3	Ramp to 1520 °C	5 °C / min	46 min	150 min at 1520 °C
4	Cooling to 250 °C	20 °C / min	65 min	n/a
Total time		7:16 hours		

Optimal program for single crowns exceeding quantities of 15 as well as 3 unit bridges with thick pontics (since large mass pontics require increased amounts of heat).

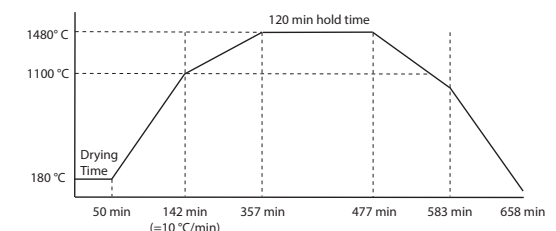
(2.5 hours of holding time will produce a pontic area with much better aesthetics than a 2 hour holding time since the white L* value is decreased)



Program D. Full Mouth Case

- Consistent and extended drying is necessary for the pink tissue area. (The pink color element takes more time to completely dry compared to the regular tooth body shades)
- Large zirconia masses such as the tissue area take longer to dry than crowns. Cracks may occur during sintering if not completely dried ahead of time.
- The bigger the case (especially for full mouth cases), the slower the ramp speed, particularly for Stage 2 ramp.
- For better drying of the Pink Tissue area, place the restoration with the pink side up.

Rate/min	Temperature	minutes	Notes
3 °C	300 °C	50	Holding Time Drying Time for Pink Tissue Area
10 °C	1100 °C	92	Ramp up 1
2 °C	1480 °C	215	Ramp up 2
-	1480 °C	120	Holding time
5 °C	1000 °C	106	Cooling
10 °C	250 °C	75	Cooling
Total time		658	about 11:37 hours

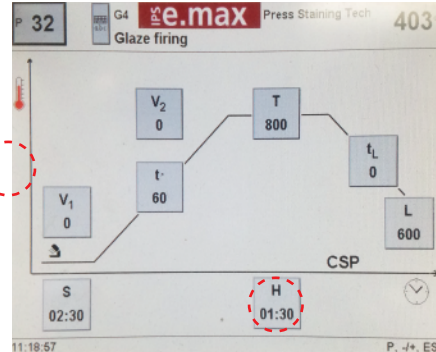


Parameters for GenesisZr LVHT Zirconia Glaze Firing

	Preheating Temp B [C/F]	Drying Time S [min]	Temp Speed (Heat Rate) t ↗ [C/F/min]	Final Temp T [C/F]	Holding Time H [min]	Vacuum Start V1 [C/F]	Vacuum End V2 [C/F]
Glaze Firing	403 / 757	6:00	60 / 108	<u>800</u> / 1472	1:30	None	None

To the right is a typical example of the screen copy for the Hot Clear glaze program adjusted for Origin Beyond Plus zirconia glazing.

No Vacuum



GenesisZr LVHT

Indications	Anterior & Posterior Crown, Veneer, > 4 unit bridges
Flexural Strength	1100 MPa : up to 14 mm, 1250 MPa: over 16 mm
Fracture Toughness	> 5 MPam ^{0.5}

As measured according to ISO 6872:2015

For Optimal results, GenesisZr LVHT uses 6.1 liquids, though 6.1 and 6.0 liquids can be used and still produce acceptable results.

Origin Chroma liquids are available in 3 intensity levels: 60, 70 & 80. 60 produces the darkest result and 80 produces the lightest result.

Complete Origin Chroma instructions are available on our website or upon request.

CHROMA[™] Incisal Enhancer Intensity & Recommended Application

16 CLASSIC SHADES

3D MASTER SHADES & BL1

- ◀ 1.5 ▶ OM1, OM2, OM3, BL1
- A1, B1, C1 ◀ 2.0 or 2.5 ▶ 1M1, 1M2, 2L1.5, 2M1, 2R1.5
- A2, A3, B2, B3, C2, D2, D3 ◀ 2.5 ▶ 2L2.5, 2M2, 2R2.5, 2M3, 3L1.5, 3M1, 3R1.5
- A3.5, B4, D4 ◀ 3.0 ▶ 3L2.5, 3M2, 3R2.5, 3M3
- A4, C3, C4 ◀ 3.5 ▶ 4L1.5, 4M1, 4R1.5, 4M2, 4R2.5, 4M3, 5M1, 5M2, 5M3

