zubler CONCEPT VEST™ $LiSi_2$

Speed Investment material for Lithium Disilicate Press ceramics .en

INSTRUCTIONS:

1. *Measure Distilled Water & Special Liquid in a mixing bowl and add investment powder.*
2. *Start timer for TOTAL TIME (30 min) in the BENCH SET chart.*
3. *Mix the investment by hand with a spatula for 5 sec.*
4. ***(Pre-Vac)** Add vacuum to the bowl for 15 seconds.*
5. *Mix for 30 seconds under vacuum at 350 RPM. (Do not exceed the 30 second mix time!)*
6. ***(Post-Vac)** Add Vacuum to the bowl for 5 seconds.*
7. *Fill ring carefully, adapting the investment to patterns under vibration.*

Do not put rings in a pressure pot!

8. ***Bench Set:** Part of the bench set time must be outside of the ring former. See the BENCH SET chart for times. **Note:** During the Bench set time, protect the ring from movement in a vibration free area.*
9. *Dry scrape the bottom of the ring to break the surface tension. Do not let the rings come into contact with moisture prior to burnout.*

PRE-HEATING (BURNOUT)

Note: Burnout temperature is for pressing lithium disilicate materials is 1562°F (850°C)

10. *Place rings in a pre-heated oven at 1562°F (850°C)*
    - *Ensure your burnout oven is clean & free of debris.*
    - *Rings must be placed with the sprue hole down.*
    - *Position a single ring to the center of the oven.*
    - *position multiple rings by staggering them so that all sides of the rings can be exposed to the heating elements, while maintaining a minimum distance of 2.5cm (1-Inch) between the rings, the insulation walls, and heating elements.*
    - *See "Burnout Configuration" for details.*
    - *Make sure the wax can flow out unhindered in the burnout furnace.*

INSTRUCTIONS CONTINUED:

11. *If you have more than one ring, wait 10 minutes before the next ring is placed in the oven or place them into the oven at the same time.*
12. *Burnout times vary by rings size:*

Ring Size:	100g	200g
Minimum Time:	45 Min	60 Min

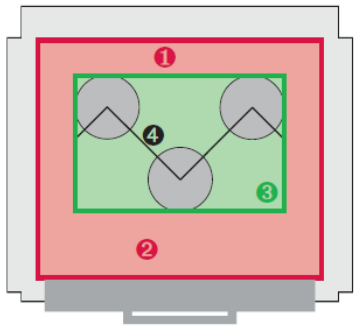
Additional rings add:

- *10 minutes per 60/100 gram ring.*
- *15 minutes per 200 gram ring.*
- *20 minutes per 300 gram ring.*

PRECAUTIONS:

- *Burnout time starts when oven has reached the final temperature (850°C / 1562°F).*
- *Shorter pre-heating causes incomplete pressings, rough surfaces and micro bubbles.*
- *Overnight technique, use a heat rate of 15-20°F per minute, up to 570°F and hold for 45-60min. Then 15-20°F per minute, up to 850°C / 1562°F and hold for 45-60min (Add additional time for more rings).*
- *To achieve the same results as the speed technique, decrease the liquid ratio 10%.*
- *Resin wax, place the ring into the furnace at 750°F and heat up to final temperature.*

BURNOUT CONFIGURATION:



1. *Red zone 2.5 cm from back wall*
2. *Red zone 5 cm from the door*
3. *Green safe zone*
4. *2.5 cm between rings*

TECHNICAL REFERENCE:

RATIOS FOR PRESSING:

	Powder	Ratio	Liquid		Dist. Water
Crowns + Veneers	100gr	60%	16 ml	-	10 ml
Inlays	100gr	50%	13 ml	-	13 ml
Press-to	100gr	60%	16 ml	-	10 ml

All data are recommendations. Different mixing machines, working procedures and materials can yield different results.

MIXING:

Pre Vac	MIx Speed	Mix Time	Post Vac
15 Sec	350 Rpm	30 Sec	5 Sec

Do not exceed 30 Second Mix time!

BENCH SET:

Wax Type	Ring Size	Inside	Outside	Total Time
Hand Wax	100gr	20 min	10 min	30 min
Hand Wax	200gr	15 min	15 min	30 min
Milled High Resin	100gr	25 min	5 min	30 min
Printed High Resin	200gr	12 min	18 min	30 min

Bench set times start when powder is added to liquid
Inside = Bench set time inside the ring former
Outside=Bench set time outside of ring former

Processing investment should take place in a 68°-75°F room. When storing the investment, please be sure the temperatures are between 45°-80°F. Please allow investment powder and liquid to reach room temperature before processing.

***WARNING:** Investments contain free silica **DO NOT BREATH DUST.** May cause delayed lung injury (silicosis/lung cancer).*

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