



Reliable Materials Expert

GUIDANCE

Explore Hybrid



CONTENT

CAM Nesting	02
Separating holding bars	03
Staining	04
Sintering	06
Trimming	07
Preparation before glazing	07
Glazing	08

01

CAM Nesting

Select the indication as "Hybrid Bridge", set the milling space between the bridge and disk over 5mm and add the holding bar after placing the sintering stabilizer.

Size settings:

Size settings:

1.Internal holding bar: \varnothing 2mm

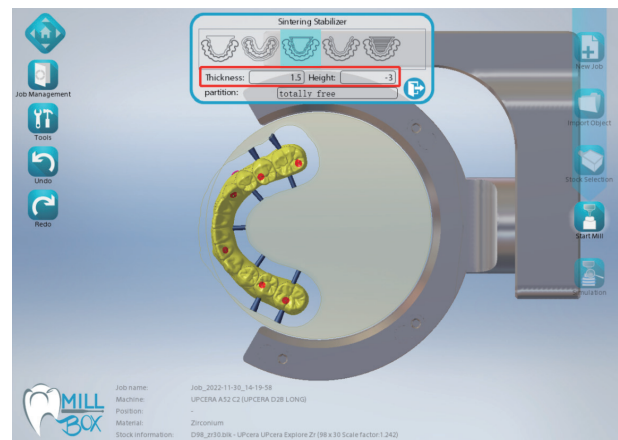
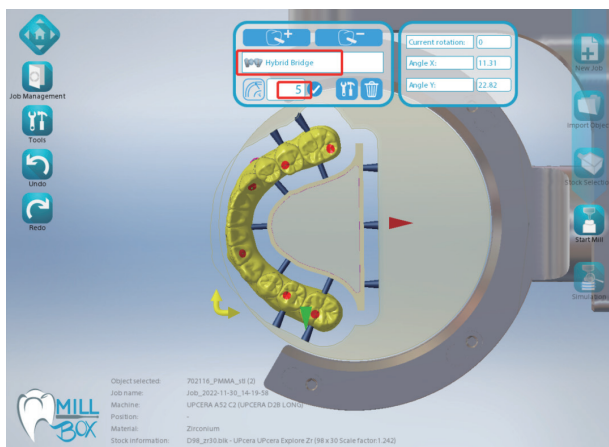
2.External holding bar: crown-side: \varnothing 2mm, disk side: \varnothing 3mm

Click "Tools" - "Sintering Stabilizer", select No.3 stabilizer type and set the thickness to 1.5mm, height -3 to -4mm and click the bridge to add the sintering stabilizer.

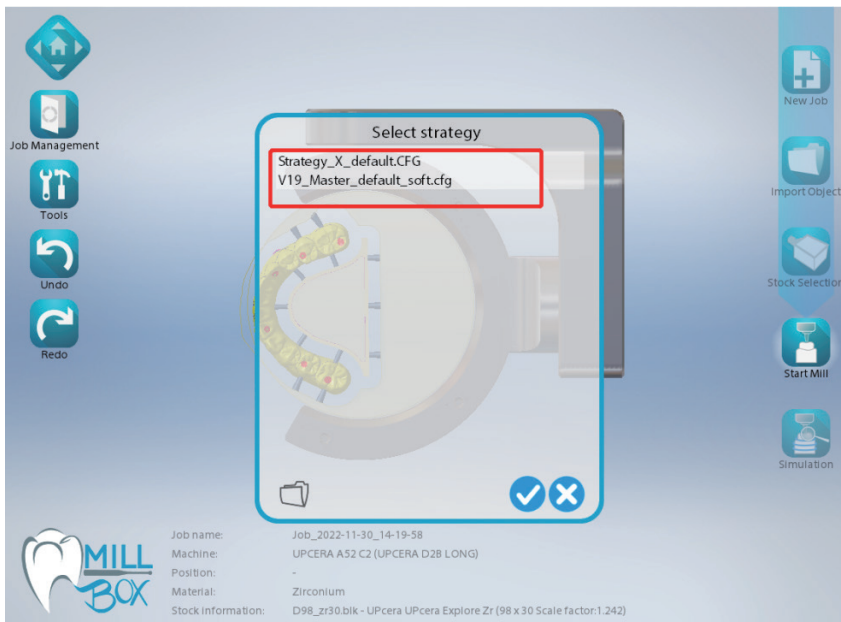


ATTENTION

1. To avoid the deforming, do not separate the bridge and stabilizer when sintering.
2. Do not create too much holding bar to avoid fracture by overstress.
3. Each implant hole should have red cap and hole's axis.
4. Each cavity should have margin line.



There are 2 strategies to calculate toolpath, Strategy X and V19. V19 is a common strategy for regular milling while Strategy X is newer version, whose toolpath is more complex and requires longer milling time.



02

Separating holding bars

- Handle with gloves or keep your hands dry.
- To avoid breaking the bridge, cut 0.5mm of the external holding bar each time in order and repeat till the bridge completely separated from stablizer.
- Cut 1/3 of the internal holding bar to avoid fracture by overstress during sintering.
- Polish the residual of rods.
- Crave the cervical margin and cusp if necessary.
- Keep the RPM lower than 10,000 and tungsten steel tools are recommended.

10000 rpm/min

item No.	HP G33-009	31L010	257 CF 023
Purpose	Deepen fossa	Seperating restoration	Grinding holding bar

03

Staining



Pen#1



Pen#6

1. Pen # 1 was applied to the cervical margin, the abduction space (triangular space), and pen # 6 was applied to the gingiva.
2. Do not saturate the brush with the coloring liquids, the liquids should not drip from the tip of the pen, and the coloring liquids should be applied evenly at each position
3. After brushing the tooth surface, wait about 10 seconds for the coloring liquids to be absorbed.
4. After finishing the first brush, apply the second brush.(The number of brushing times is determined according to the depth of gum color)
5. The gingival stain should not exceed the cervical margin to avoid absorption of the stain by the crown
6. The inner and outer sides of the gingiva should be brushed, and the internal holding bar part should be dipped in the coloring liquids with a thick brush for many times to make the liquids absorbed into the interior and avoid the exposure of white part when polishing the internal holding bar.

04

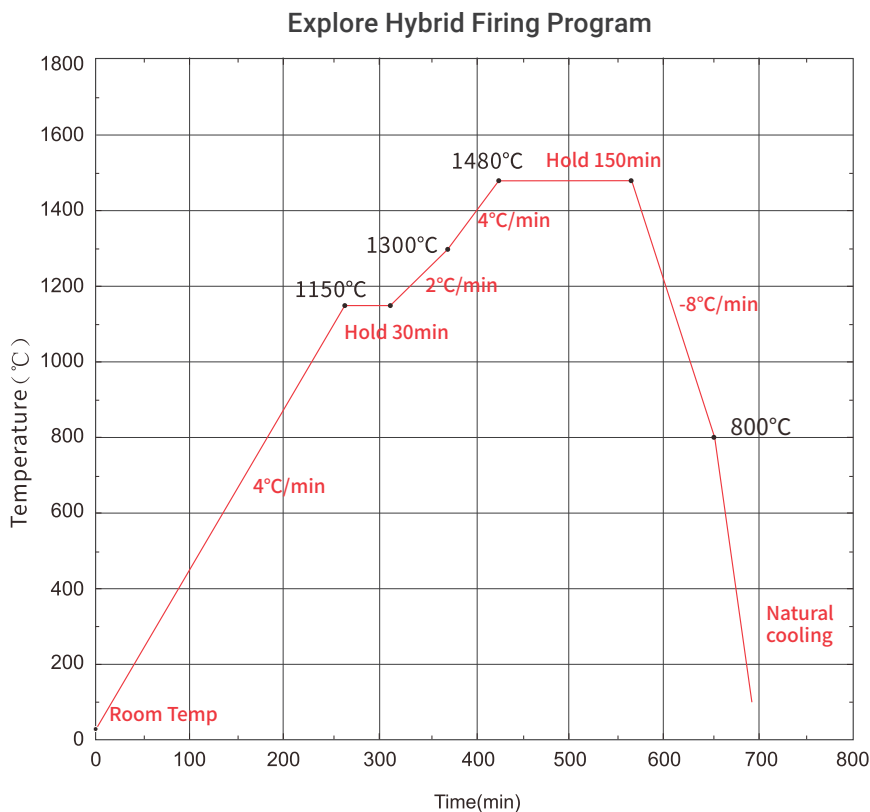
Sintering

Based on the standard curve of the Explore, the heating rate to 1150°C is reduced from 8 °C/min to 4°C/min, and the holding time of 1480°C is extended from 120min to 150min. The cooling rate is constant. The purpose is to avoid teeth crack caused by fast heating speed and poor translucency caused by insufficient holding time.

Ensure stable furnace temperature, heating elements, refractory, sintering bead in good condition. Temperature instability will cause color and translucency errors, aging and pollution of furnace accessories, resulting in poor sintering result and even pollution of teeth.

The bridge should be vertically placed in the crucible. Don't put other teeth inside the crucible. The weight of the 30mm full arch is very large, and the heat occupied by other teeth will cause the bridge sintered incompletely.

The function of the sintering bead is to support and heat insulation, finer particle size sintering bead effect is better.



Explore Hybrid Firing Program

1150°C	4°C/min	30min
1300°C	2°C/min	
1480°C	4°C/min	150min
800°C	-8°C/min	
Open at 500°C		



(The bridge should be vertically placed in the crucible)

05

Trimming

Trim morphological features, including fossa, transverse texture, longitudinal texture, etc. Select the ultrafine particle grinding tool shown in the figure and follow the grinding speed. Substandard grinding tools will cause tooth fracture, do not use emery cutting tools.

After trimming, polish to smooth the restoration surface. Reduce the bite tooth wear.

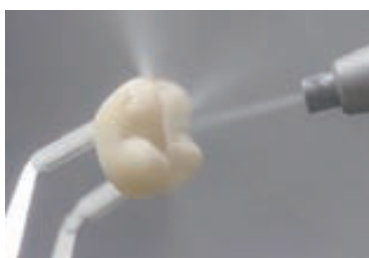
- ⊕ Extra Fine
- ⊙ 8000-15000rpm
max:25000rpm
- ⊖ 1pc



Item No.	UPTF 10	UPTF 02	UPTF 03
Size:φ mm	13	5	4.5
Length:mm	2.0	13.0	13

06

Preparation before glazing



Sandblast under 2-2.5Bar with 50μm AL₂O₃ sand.

1. Clean the residues from polishing and bite paper
2. Resume the strength of the restoration, there might be some invisible cracks. Stress-induced phase transformation.
3. The matte surface after blasting is much easier to be attached by stain paste
4. Using ultrasonic to clean the residual aluminum oxide sand at groove area



07

Glazing

Realism Glaze Kit

- UPCERA Independent R&D
- Optimized for Zirconia and Lithium Disilicate



BASIC						
	BASE A	BASE B	BASE C	BASE D		
INCISAL						
	BASE0	GREY	GREY BLACK	BLUE	BLUE GREY	
FOSSA						
	ORANGE	BROWN	REDDISH BROWN			
EFFECT						
	BLACK	WHITE	YELLOW	PURPLE	OLIVEYELLOW	OLIVEGREEN
GINGIVAL						
	PINK	DARKPINK				
GLAZE						
	GLAZE	GLAZE FIUO				



Process of gingiva glazing

- 01 Mix the gingiva paste PINK and DARK PINK at ratio of 2:1
- 02 Apply a small amount of glaze liquid at the gingiva area to make the surface matte before \ starting to paint the body, it will make the stain more evenly.
- 03 Paint the gingiva top 2/3 with the mixed paste (PINK+DARK PINK 2:1)
- 04 Paint the gingiva bottom 1/3 with the DARK PINK paste
- 05 Paint the gingiva bottom 1/3 with the DARK PINK paste
- 06 Paint the gingiva with minor amount of REDDISH BROWN to imitate bloodshot labial frenulum
- 07 Thin layering each time to avoid bubbles during the sintering process (1st sintering)
- 08 Paint the second layer on gingiva body with mixed paste (PINK+DARK PINK 2:1, 2nd sintering)
- 09 PINK + WHITE 1: 1. Paint the area of triangular gap, gingival papilla, cervical margin and create a bulge along the cervical margin as natural gingival(3rd sintering)

Brush: Upcera # 0 brush



0 brush

Set the heating rate as slow as possible to homogenize the temperature changes inside restoration and minimize the risk of fracture, especially for the large size restoration

Initial temp (°C)	Preheat time (min)	Drying Time (min)	Heating rate (°C/min)	Hold temp (°C)	Hold time (min)	Cooling rate (°C/min)	Open temp (°C/min)
400	4:00	2:00	25-30	760-830	60	25-30	400

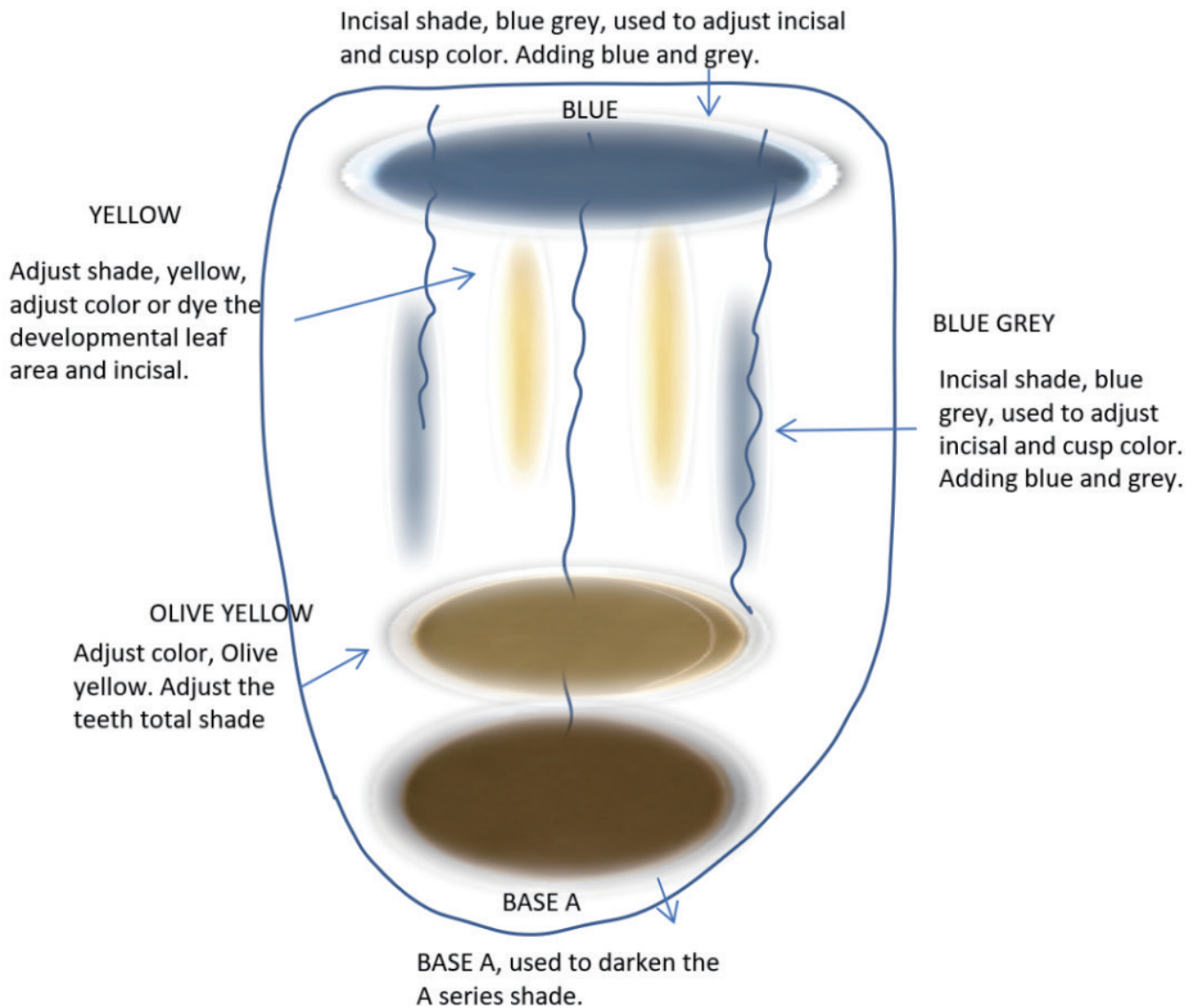
NOTE:

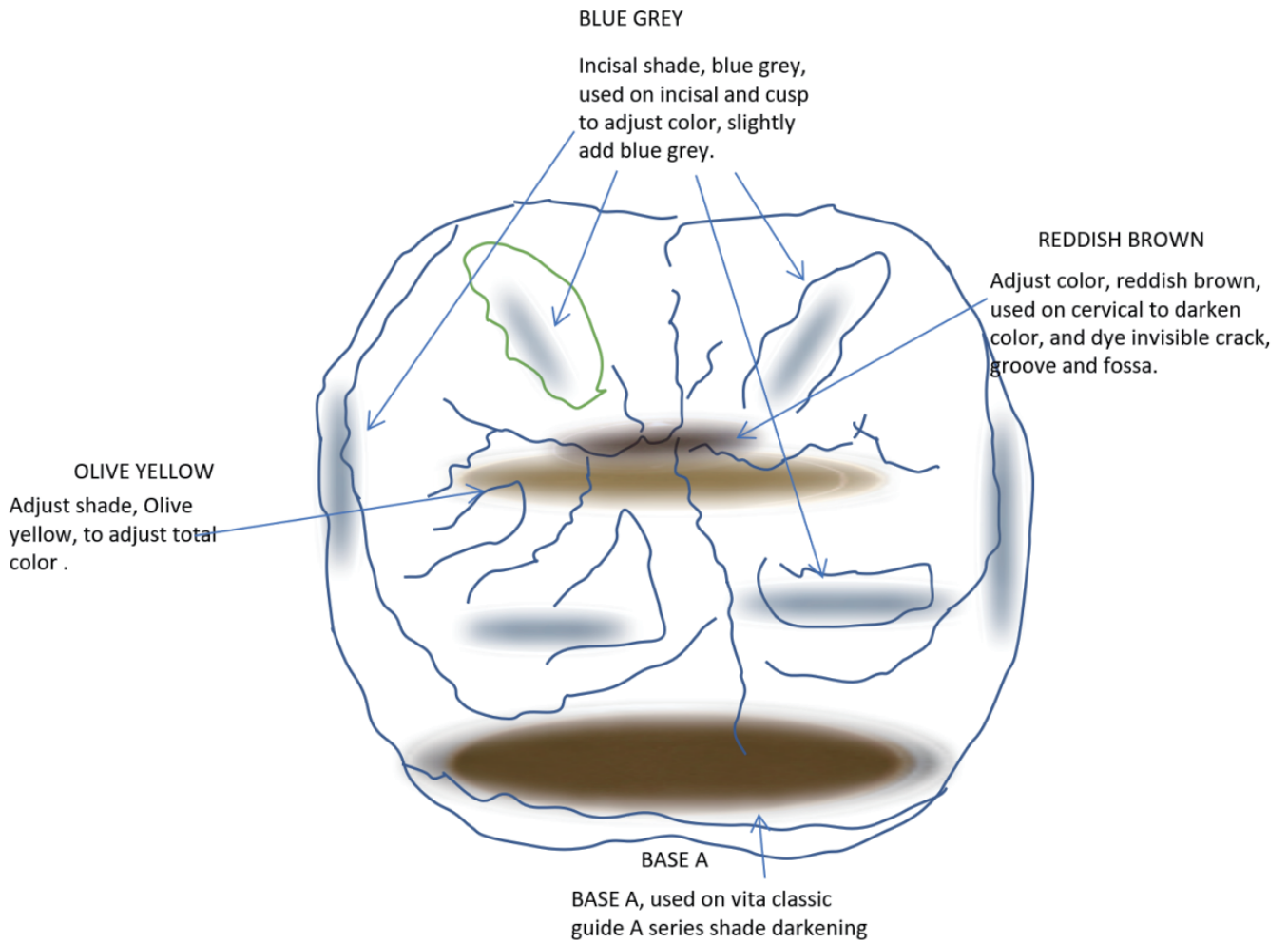
- The saturation of glaze paste can be adjusted by diluting, but the adhesion will be poor if the paste is too thin
- Intense color can be achieved by repeatedly glazing and sintering, rather than thick layering
- It is recommended to separate the gingiva and tooth glazing and sintering to avoid contamination



Glazing and Staining Guidance for Crown

The following 2 pictures shows you where to apply Realism Glaze on incisor and molar.







Shenzhen Upcera Dental Technology Co., Ltd

5th Floor, Tsinghua IT Port R&B Bldg. B, Shenzhen,
Guangdong, China

+86 755-8882-0818
services@upcera.com
dental.upcera.com



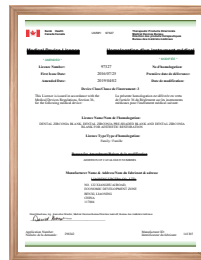
CE



ISO13485



FDA



Health Canada



KFDA



GOST