

**18.12 Finishing**

Only grinding instruments suitable for glass ceramics may be used for finishing Livento® press. Otherwise this can lead to chipping at the edges as well as to overheating.

- Limit grinding to an absolute minimum, i.e. avoid over-sizing when waxing the press object.
- Operate at low speed and with little force.
- Overheating of the ceramic is to be avoided under all circumstances.
- Rework the connection point of the press channel after separation.
- In the case of bridges, the connections may not be separated afterwards to avoid predetermined breaking points.
- When cleaning with steam, avoid overheating at the contact point between metal holder and ceramic.



Result of a crown after cleaning, without any finishing, with attached stump.



Separation from cone with diamond cutting disk.

Finishing of the crown is performed with grinding instruments suitable for glass ceramics.

Briefly blast the finished press restoration with Al<sub>2</sub>O<sub>3</sub> and 1 bar pressure and then clean thoroughly with a steam jet prior to staining or applying the veneer ceramic.

**18.13 Livento® press and staining technique**

Stain&Glaze shade table



Flu-Shade A



Flu-Shade B



Flu-Shade C



Flu-Shade D



Flu-Stain white



Flu-Stain yellow



Flu-Stain orange



Flu-Stain intense-orange



Flu-Stain dark-blue



Flu-Stain navy-blue



Flu-Stain brown




Flu-Stain black



Flu-Stain gray

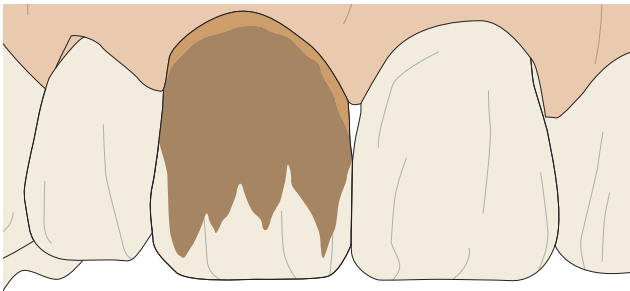


Flu-Stain pink



 Staining pastes separate after longer non-use. Prior to application it is essential to mix well with the spatula included in the kit until homogenous and no more grains are visible. The surface then displays an even satin glow.

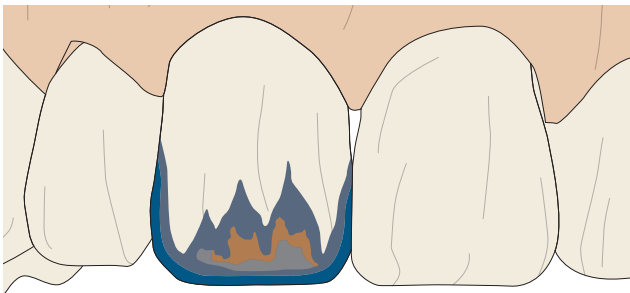
#### 18.14 Basic instructions for staining (according to Robert Arvai, Chur)

##### Procedure in anterior region







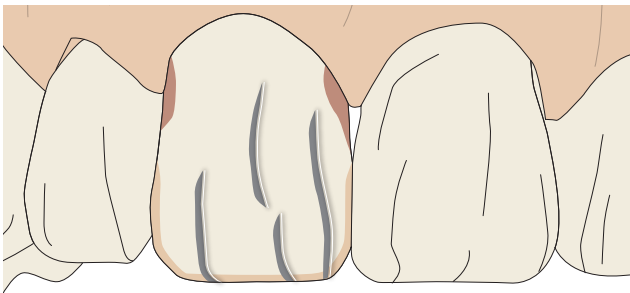
##### Step 1

-  Flu-Shade A, B, C or D
-  Flu-Stain orange or intense-orange







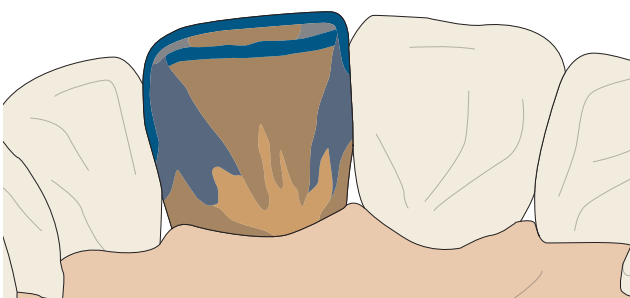
##### Step 2

-  Flu-Stain navy-blue
-  Flu-Stain dark-blue
-  Flu-Stain intense-orange
-  Flu-Stain gray








##### Step 3

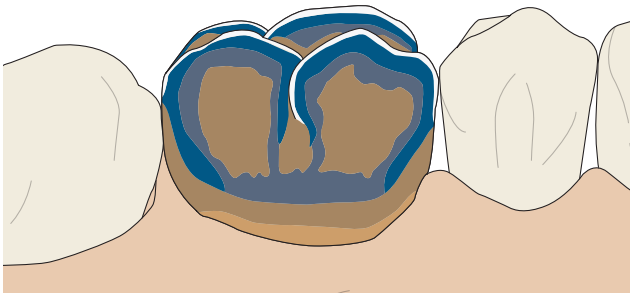
-  Flu-Stain grey, staining direction distal
-  Flu-Stain white and Flu-Stain orange mixed at 50 % each
-  Flu-Stain pink, applied very thinly
-  Flu-Stain white for enamel cracks








##### Step 4

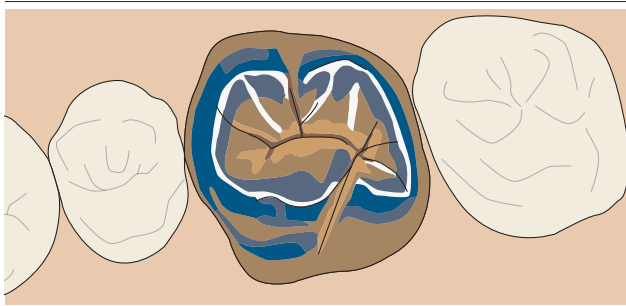
-  Flu-Shade A, B, C or D
-  Flu-Stain navy-blue
-  Flu-Stain dark-blue
-  Flu-Stain gray
-  Flu-Stain orange or intense-orange

##### Procedure in posterior region



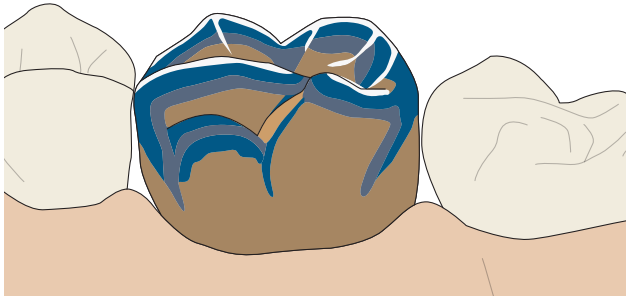
##### Step 1 (buccal)

-  Flu-Shade A, B, C or D
-  Flu-Stain orange or intense-orange
-  Flu-Stain navy-blue
-  Flu-Stain dark blue (grey for A3.5 and A4)
-  Flu-Stain white



**Step 2 (occlusal)**

- Flu-Shade A, B, C or D
- Flu-Stain orange or intense-orange
- Flu-Stain navy-blue
- Flu-Stain dark blue (grey for A3.5 and A4)
- Flu-Stain white
- Flu-Stain brown



**Step 3 (palatal)**

- Flu-Shade A, B, C or D
- Flu-Stain orange or intense-orange
- Flu-Stain navy-blue
- Flu-Stain dark blue (grey for A3.5 and A4)
- Flu-Stain white

**Tips**

- Prior to staining, blast the crown matt with 50 µm Al<sub>2</sub>O<sub>3</sub> and a maximum of 1 bar pressure.
- Apply colours (Shade and Stain) without the addition of glazing liquid if at all possible. This avoids clouding or washing of the colour towards the edge.
- Mix glazing material with a little glazing liquid.
- Suction the excess glaze from the posterior teeth occlusally from the fissures with a blotting paper point. Apply the shades from incisal to gingival in thin layers.

	Closing time	Starting temperature	1st firing	2nd firing	Temperature rise	Vacuum start	Dwell time
	min	°C	°C	°C	K/min	°C	min
Stain	4	450	750	750	45	without	1
Glaze	4	450	750	750	45	without	1

The firing temperature depends on the framework material and the desired degree of gloss. The firing temperature can be increased up to 810° C.

**18.15 Livento® press veneered with Soprano® 10**

Shake tin well before every use. The mentioned firing temperatures are reference values and can differ by type of furnace and age of the device. Recommendation: conduct a firing trial.

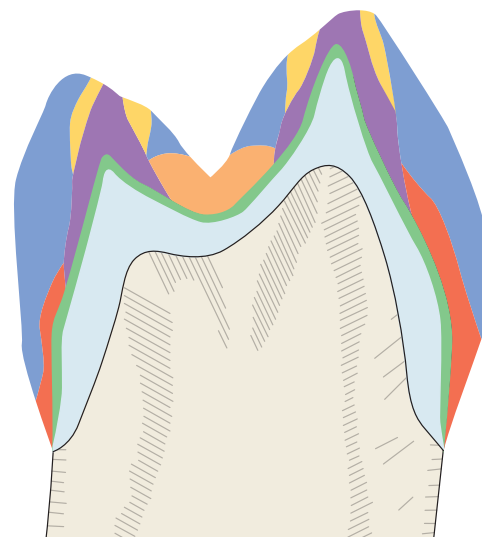
The stains can also be applied to the Livento® press framework prior to layering. Avoid any sharp edges when using the reduced layering technique (cut-back).

The ceramic material Repair (Enamel E2) can be used for small repairs of the reconstruction after glaze firing. Firing temperature is 720° C.

**Combination table Enamel**

	A				B				C				D			
	A1	A2	A3	A3,5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
Enamel	1	2	2	4	4	1	2	3	4	2	2	3	4	1	2	3

**Layer pattern using molar as example**



- Dentine
- Dentine-Enamel mixture, mixed at 50 % each
- Enamel Effect
- Enamel
- Dentine-Fossa mixture, mixed at 50 % each
- Framework in Livento® press
- Wash with Stains + Dentine