

Firing charts dentCeram LF



HOTLINE: +49 7231 / 803-410

Standard program:

	Base temperature	Drying time	Heat rate/ min.	Vacuum start	Vacuum end	Final temperature	Holding time	Cooling time
Basispaste	500 °C 932 °F	6 min.	75 °C 167 °F	500 °C 932 °F	800 °C 1472 °F	800 °C 1472 °F	1 min.	0 min.
Opaque bake 1	500 °C 932 °F	6 min.	75 °C 167 °F	500 °C 932 °F	800 °C 1472 °F	800 °C 1472 °F	1 min.	0 min.
Opaque bake 2	500 °C 932 °F	6 min.	75 °C 167 °F	500 °C 932 °F	790 °C 1454 °F	790 °C 1454 °F	1 min.	0 min.
Shoulder bake	450 °C 842 °F	6 min.	55 °C 131 °F	450 °C 842 °F	780 °C 1436 °C	780 °C 1436 °F	1 min. under vacuum	0 min.
Dentin bake 1	450 °C 842 °F	6 min.	55 °C 131 °F	450 °C 842 °F	765 °C 1409 °F	765 °C 1409 °	1 min. under vacuum	0 min.
Dentin bake 2	450 °C 842 °F	4 min.	55 °C 131 °F	450 °C 842 °F	765 °C 1409 °	765 °C 1409 °	1 min. under vacuum	0 min.
Glaze bake *	450 °C 842 °F	2 min.	75 °C 167 °F	*	*	765 °C 1409 °	1 min. *	0 min.
Korrekturmaterial CM	450 °C 842 °F	4 min.	55 °C 131 °F	450 °C 842 °F	745 °C 1373 °F	745 °C 1373 °F	1 min.	0 min.

This data is valid for fine-silver calibrated furnaces.
Longer drying times will optimize the results.

Austramat D2

	Starting temperature(°C)	Drying time (min)	Closing time (min)	Vorwärmzeit (min)	Vakuumm-level (0-9)	Temperaturanstiegsrate (°C/min)	Final temperature (°C)	Vakuummhaltezeit V (a bis d)	Holding time (min:sec)	Erste Abkühlstufe (min)	Zweite Abkühlstufe (min)
	START °C	MIN	MIN	MIN	VAC %	°C MIN	END °C	VAC HOLD MIN : SEC	HOLD MIN : SEC	1 MIN	2 MIN
Basispaste	500 °C 932 °F	0	6	0	100	75 °C 167 °F	800 °C 1472 °F		01:00		
Opaque bake 1	500 °C 932 °F	0	6	0	100	75 °C 167 °F	800 °C 1472 °F		01:00		
Opaque bake 2	500 °C 932 °F	0	6	0	100	75 °C 167 °F	790 °C 1454 °F		01:00		
Shoulder bake	450 °C 842 °F	1	5	0	100	55 °C 131 °F	780 °C 1436 °F	01:00	01:00		
Dentin bake 1	450 °C 842 °F	0	5	1	100	55 °C 131 °F	765 °C 1409 °F	01:00	01:00		
Dentin bake 2	450 °C 842 °F	0	3	1	100	55 °C 131 °F	765 °C 1409 °F	01:00	01:00		
Glaze bake *	450 °C 842 °F	1	2	0	*	75 °C 167 °F	765 °C 1409 °F		01:00 *		
Korrekturmaterial CM	450 °C 842 °F	0	3	1	100	55 °C 131 °F	745 °C 1373 °F		01:00		

* The glaze bake can be carried out under or without vacuum. The grade of glaze can be increased by prolonging the holding time.

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Austramat D4

T						--:--	min.
S						06:00	min.
V	500 932°F	°C			--:--	min.	
Temp 1	800 1472°F	°C	75 167°F	°C/min	01:00	min.	
Temp 2	--	°C	--	°C/min	--:--	min.	
Temp 3	--	°C	--	°C/min	--:--	min.	
VAC	800 1472°F	°C	100	%	--:--	min.	
Basispaste							

T						--:--	min.
S						06:00	min.
V	500 932°F	°C			--:--	min.	
Temp 1	800 1472°F	°C	75 167°F	°C/min	01:00	min.	
Temp 2	--	°C	--	°C/min	--:--	min.	
Temp 3	--	°C	--	°C/min	--:--	min.	
VAC	800 1472°F	°C	100	%	--:--	min.	
Opaque bake 1							

T						--:--	min.
S						06:00	min.
V	500 932°F	°C			--:--	min.	
Temp 1	790 1454°F	°C	75 167°F	°C/min	01:00	min.	
Temp 2	--	°C	--	°C/min	--:--	min.	
Temp 3	--	°C	--	°C/min	--:--	min.	
VAC	790 1454°F	°C	100	%	--:--	min.	
Opaque bake 2							

T						01:00	min.
S						05:00	min.
V	450 842°F	°C			--:--	min.	
Temp 1	780 1436°F	°C	55 131°F	°C/min	01:00	min.	
Temp 2	--	°C	--	°C/min	--:--	min.	
Temp 3	--	°C	--	°C/min	--:--	min.	
VAC	780 1436°F	°C	100	%	01:00	min.	
Shoulder bake							

T						--:--	min.
S						05:00	min.
V	450 842°F	°C			01:00	min.	
Temp 1	765 1409°F	°C	55 131°F	°C/min	01:00	min.	
Temp 2	--	°C	--	°C/min	--:--	min.	
Temp 3	--	°C	--	°C/min	--:--	min.	
VAC	765 1409°F	°C	100	%	01:00	min.	
Dentin bake 1							

T						--:--	min.
S						03:00	min.
V	450 842°F	°C			01:00	min.	
Temp 1	765 1409°F	°C	55 131°F	°C/min	01:00	min.	
Temp 2	--	°C	--	°C/min	--:--	min.	
Temp 3	--	°C	--	°C/min	--:--	min.	
VAC	765 1409°F	°C	100	%	01:00	min.	
Dentin bake 2							

T						01:00	min.
S						02:00	min.
V	450 842°F	°C			--:--	min.	
Temp 1	765 1409°F	°C	75 167°F	°C/min	01:00	min.	
Temp 2	--	°C	--	°C/min	--:--	min.	
Temp 3	--	°C	--	°C/min	--:--	min.	
VAC	*	°C	*	%	*	min.	
Glaze bake							

T						--:--	min.
S						03:00	min.
V	450 842°F	°C			01:00	min.	
Temp 1	745 1373°F	°C	55 131°F	°C/min	01:00	min.	
Temp 2	--	°C	--	°C/min	--:--	min.	
Temp 3	--	°C	--	°C/min	--:--	min.	
VAC	745 1373°F	°C	100	%	--:--	min.	
Korrekturmaterial							

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Austromat M

	START	□	↑	→	VAC LEVEL	↗ min.	END	→	(V)	↘ 1	↘ 2
Basispaste	500 °C 932 °F	0	6	0	9	75 °C 167 °F	800 °C 1472 °F	1 min.	d	0	0
Opaque bake 1	500 °C 932 °F	0	6	0	9	75 °C 167 °F	800 °C 1472 °F	1 min.	d	0	0
Opaque bake 2	500 °C 932 °F	0	6	0	9	75 °C 167 °F	790 °C 1454 °F	1 min.	d	0	0
Shoulder bake	450 °C 842 °F	1	5	0	9	55 °C 131 °F	780 °C 1436 °F	1 min. under vacuum	d	0	0
Dentin bake 1	450 °C 842 °F	0	5	1	9	55 °C 131 °F	765 °C 1409 °F	1 min. under vacuum	d	0	0
Dentin bake 2	450 °C 842 °F	0	3	1	9	55 °C 131 °F	765 °C 1409 °F	1 min. under vacuum	d	0	0
Glaze bake *	450 °C 842 °F	1	2	0	*	75 °C 167 °F	765 °C 1409 °F	1 min. *	*	0	0
Korrektur- material CM	450 °C 842 °F	0	3	1	9	55 °C 131 °F	745 °C 1373 °F	1 min.	d	0	0

Austromat 3001

Basispaste	C500 T360	• L9 V9 TO75 • C800 V0 T60 CO LO T2 C500
Opaque bake 1	C500 T360	• L9 V9 TO75 • C800 V0 T60 CO LO T2 C450
Opaque bake 2	C500 T360	• L9 V9 TO75 • C790 V0 T60 CO LO T2 C450
Shoulder bake	C450 T60 T300	• L9 V9 TO55 • C780 T60 V0 CO LO T2 C450
Dentin bake 1	C450 T300 T60	• L9 V9 TO55 • C765 T60 V0 CO LO T2 C450
Dentin bake 2	C450 T180 T60	• L9 V9 TO55 • C765 T60 V0 CO LO T2 C450
Glaze bake *	C450 T60 T120	• L9 TO75 • C765 T60 CO LO T2 C500
Korrektur- material CM	C450 T180 T60	• L9 V9 TO55 • C745 T60 V0 LO T2 C450

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Multimat MCII (Mach1/Mach2)

	Preheating temperature	Drying (min.)	Preheating (min.)	Vacuum (min.)	Firing time (min.)	Firing temperature	Heat rate/min.	Vacuum
Basispaste	500 °C 932 °F	6	1	1	2	820 °C	75 °C 167 °F	50 hPa
Opaque bake 1	500 °C 932 °F	6	1	1	2	820 °C	75 °C 167 °F	50 hPa
Opaque bake 2	500 °C 932 °F	6	1	1	2	810 °C	75 °C 167 °F	50 hPa
Shoulder bake	450 °C 842 °F	4	2	1	2	800 °C	55 °C 131 °F	50 hPa
Dentin bake 1	450 °C 842 °F	4	2	1	2	785 °C	55 °C 131 °F	50 hPa
Dentin bake 2	450 °C 842 °F	4	1	1	2	785 °C	55 °C 131 °F	50 hPa
Glaze bake *	450 °C 842 °F	2	2	*	1 - 2 *	785 °C	75 °C 167 °F	*
Korrekturmaterial CM	450 °C 842 °F	3	1	1	1 - 2	765 °C	55 min.	50 hPa

P90/P95

	Base temperature	Heat rate/min.	Firing temperature	Closing time (min.)	Holding time	Vacuum ON	Vacuum OFF
Basispaste	500 °C 932 °F	75 °C 167 °F	800 °C 1472 °F	6 min.	1 min.	500 °C 932 °F	799 °C 1470 °F
Opaque bake 1	500 °C 932 °F	75 °C 167 °F	800 °C 1472 °F	6 min.	1 min.	500 °C 932 °F	799 °C 1470 °F
Opaque bake 2	500 °C 932 °F	75 °C 167 °F	790 °C 1454 °F	6 min.	1 min.	500 °C 932 °F	789 °C 1452.2 °F
Shoulder bake	450 °C 842 °F	55 °C 131 °F	780 °C 1436 °F	6 min.	1 min. under vacuum	450 °C 842 °F	780 °C 1436 °F
Dentin bake 1	450 °C 842 °F	55 °C 131 °F	765 °C 1409 °F	6 min.	1 min. under vacuum	450 °C 842 °F	765 °C 1409 °F
Dentin bake 2	450 °C 842 °F	55 °C 131 °F	765 °C 1409 °F	4 min.	1 min. under vacuum	450 °C 842 °F	765 °C 1409 °F
Glaze bake *	450 °C 842 °F	75 °C 167 °F	765 °C 1409 °F	2 min.	1 min. *	*	*
Korrekturmaterial CM	450 °C 842 °F	55 °C 131 °F	745 °C 1373 °F	4 min.	1 min.	450 °C 842 °F	744 °C 1371.2 °F

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Vacumat 100/200/50

	Final temperature	Predrying time (min.)	Heat rate (min.)	Holding time	Vacuum (min.)	Cooling
Basispaste	800 °C 1472 °F	6	5	1 min.	5	—
Opaque bake 1	800 °C 1472 °F	6	5	1 min.	5	—
Opaque bake 2	790 °C 1454 °F	6	5	1 min.	5	—
Shoulder bake	780 °C 1436 °F	6	5	1 min. under vacuum	6	—
Dentin bake 1	765 °C 1409 °F	6	5	1 min. under vacuum	6	—
Dentin bake 2	765 °C 1409 °F	4	5	1 min. under vacuum	6	—
Glaze bake *	765 °C 1409 °F	2	5	1 min. *	*	—
Korrektur- material CM	745 °C 1373 °F	4	5	1 min.	5	—

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Remarks:

▲ Furnace check:

When different alloys are fired in the same furnace, it is necessary to make frequent purge firings to the furnace according to the manufacturer's instructions. This prevents the contamination of the frames with unspecific alloy components and avoids the occurrence of unintentional impurity.

▲ dentceram LF firing temperature control:

In order to adjust the firing temperature of your furnace, we recommend a firing test, as this is the only way to judge the correct bake sequence.

For that purpose, use NT-material (neutral transparent) mixed with modelling liquid LV universal and fire at the following temperatures:

- base temperature 450 °C / **842 °F**
- drying time 8 minutes
- heat rate 55 °C/min. / **131 °F per min.**
- vacuum start 450 °C / **842 °F**
- vacuum end at final temperature 765 °C / **1409 °F**
- holding time 1 minute under vacuum

Put the bake specimen on platinum foil, not on firing cotton, as this may cause dulling.

The temperature of the furnace is correct when the specimen is clear and translucent with sharp edges. If the final temperature is too high, the specimen has a glossy appearance and the edges are not sharply defined. If the final temperature is too low, the specimen appears milky white. According to your result, please raise or lower the final temperature in steps of 10°C/**50°F** and fire a new specimen.

Important:

Maintain furnace always closed. Close furnace after use or switch to night modus to prevent up-take of humidity.

Please note:

The values given are only guidelines and should be adjusted individually depending on the respective situation, age and manufacturer of the furnace.

The firing charts are based on newly fine-silver calibrated furnaces.

All data have been compiled with due care, however, they cannot be guaranteed.