

Denseo Genie – Instructions for use



Crown with cracks

Denseo Genie can be used with all conventional ceramic veneers suitable for precious or base-metal alloys, zirconia and pressed ceramic frameworks.

WARNING: Not suitable for pickling in Neacid!



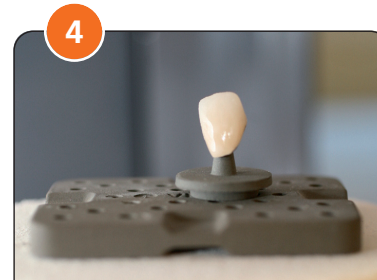
Roughening the crown surface

To allow Denseo Genie to diffuse into the ceramic material, sandblast the entire surface of the crown to be healed or roughen it with a diamond rotary instrument or similar. Clean the surface with a steam cleaner.



Applying Denseo Genie

Carefully dry the crown. Shake the pin and turn the endpiece until the desired amount is extruded. Use a clean brush to apply an even layer of Denseo Genie to the entire veneer.



Firing the crown

Fire the crown using the “healer firing” program parameters (see below), taking the specific properties of the framework material into due account. Vary the temperature depending on the number of crowns to be healed and the veneering material used.



Crown without cracks

No additional glaze firing is required after applying Denseo Genie. The satin lustre may be increased by manual polishing if desired. Do not try to return any excess material to the applicator.

Denseo Genie healer firing – Firing example

	Pre-heating/ start temperature	Pre-drying/ pre-heating time	Heating rate	End temperature	Holding time	Vakuum start	Vakuum stop
Denseo Genie 730°	450°C	4 min	60°C/min	730°C	45 sec	450°C	730°C
Denseo Genie 830°	500°C	4 min	50°C/min	830°C	1 min	500°C	830°C
Denseo Genie ZrO ₂ 830°	500°C	4 min	50°C/min	830°C	1 min 15 sec	500°C	830°C

IMPORTANT: The firing temperatures listed here are recommendations only. Adjustments may be required due to differences in furnace performance. Increase the temperature slightly for larger-span bridges. The difference between the healer firing temperature and the glaze firing temperature must not exceed 50°C. **Storage:** Store in a cool and dry place at a temperature of 15 – 25°C and a relative humidity of 35% – 65%. Shelf life: See label. **Scientific studies have shown that Denseo Genie will heal common veneering ceramics in more than 90% of the cases. If you experience any problems while working with Denseo Genie, please do not hesitate to call.**

Denseo Genie – Instructions for use

Denseo Genie is used for healing fissures and cracks on any popular veneering ceramics for precious and non-precious alloy frameworks.

Scientific studies have confirmed that 90% of all cracks, regardless of cause, can be healed with Denseo Genie. If you experience any difficulties during use, please do not hesitate to call. Our “crack experts” will be happy to assist you. **Phone +49 6021 45106-0 or visit www.denseo.de**

Cracked crown

The first step consists of analyzing the crack: Is it a late crack, or had the crack already become evident after the first two main firing cycles?

1. If the **crack became evident after the first or second dentine firing**, heal it first before building up additional layers or subjecting the restoration to further processing. In this case, the final temperature of the healer firing will be the dentine firing temperature of the ceramic material used. Make sure that preheating time, the preheating temperature and the heating rate correspond to the Denseo firing chart.
2. If the crack is a late crack, keep the healer firing temperature below the glaze firing temperature of the veneering material to avoid overfiring existing ceramic layers. For example, if the glaze firing temperature of the ceramic material is 890°C, the healer firing temperature should not be below 840°C.

Roughening the crown surface

To prepare the ceramic material to accept diffusion of Denseo Genie, roughen the glossy or glazed surface. The best way to do this is to use a diamond rotary instrument. Clean the surface with a steam cleaner and dry carefully.

Applying Denseo Genie

Carefully dry the crown. Shake the pin and turn the endpiece, until the desired amount is extruded. Use a clean brush to apply an even layer of Denseo Genie to the entire veneer.

Firing the crown

The final temperature of Denseo healer firing is variable. It will depend on the nature of the ceramic material used, the type of crack and the performance of the ceramic furnace. Therefore, all values listed are approximate and serve as guidelines only. Fire according to the “Denseo Genie healer firing” firing example (see overleaf), taking into account the correct final temperature. Multiple crowns or bridges in a larger firing chamber, e.g. with non-precious alloy frameworks, can generally be fired at a somewhat higher temperature. The gloss level is controlled by the holding time (longer time = higher gloss).

After the healer firing, additional adjustment can be made (overlying or a separate stain firing).

General processing temperature:

Denseo Genie 730 from 730°C to 800°C ± 10°C

Denseo Genie 830 and Genie 830 ZrO₂ from 800°C to 970°C ± 10°C

Caution:

Never acidify ceramic veneers on high-gold alloys after the application of Denseo Genie.

Storage:

Store in a cool and dry place at a temperature of 15 – 25°C and a relative humidity of 35% – 65%. Shelf life: See label