Instructions for Use

PRODUCT DESCRIPTION
Au-based dental casting/ metal-ceramic alloy, Type 4

INDIKATIONEN
Inlays, Onlays, 3/4 Crowns, Crowns, Telescope Crowns, Conus Crowns, Bridges, Wide Bridges, Cast Posts/ Cores, Bars, Attachment Supports, Retained Superstructures, Partial Dentures

WAXING / MODELLATION
Design the framework in full contour or in a reduced anatomic shape taking the planned veneer into consideration. For Lab Composite veneering material use mechanical retentions. Single crowns require a minimum thickness of 0.5 mm. Abutment crowns require a minimum thickness of 0.5 mm. Ensure that the framework design provides adequate support for the veneering material. Avoid sharp angles. Connectors must have the required dimensions to provide resistance to deformation. Create large surface areas for planned soldering, with a gap of 0.05 – 0.2 mm.

PRÉPARATION
Provide the modeled single-tooth restoration or bridge framework with sprues of a suitable size. In general the sprues should be attached to thicker spots, whether pear shaped or traditional, must be sized according to the specific technique used. When using the pear or indirect technique be sure the sprue is positioned so that the wax pattern is in the lower third of the casting ring. Use only sprues with a diameter of 3 mm. Attach the wax pattern to the sprue at an angle of 45 – 90 degrees. Use a wax pattern including the sprues to determine the required amount of gold. Place in order to determine the needed amount of alloy. Wax consumption was weight (grams) alloy density = gram of alloy.

INVESTING
Use a phosphate / gypsum-bonded investment material. Follow the manufacturer's instructions.

PREHEATING / BURN-OUT
Burnout furnace at room temperature: 700 °C

MELTING AND CASTING
Flame: Propane 51 bar; Oxygen 0,35 bar
Other specifics may be required by the type of casting machine. It is recommended to use a separate and clean casting crucible and casting ring for each alloy. Preheat the ceramic crucible in the burnout furnace. The recommended ratio of used material to new material is 1:1. Do not use flux.
Casting Temperature: 1080 °C

FRAMEWORK FINISHING
After bench cooling, carefully divest and clean the casting with aluminum oxide (AlO3). Do not use a hammer for divesting. Finish the casting with carbide burs and/or with ceramic-bonded grinding instruments. Blast the casting with 50 –110 micron aluminum oxide (AlO3) at 2,0 bar. For veneering with Lab Composite material, the framework must be finished and polished. Subsequently, steam clean or ultrasonic clean with distilled water or ethanol and dry the framework. Use the appropriate Lab Composite primer. Follow the manufacturer's instructions.

OXIDATION
Place the framework on the firing tray providing adequate support. To achieve a uniform result follow the oxidation cycle:
Temperature: 800 °C; **Holding time:** 5 min; **Vacuum:** No
Cool down to room temperature. Remove the oxide layer by blast the oxide firing. In the case of Zn-containing alloys it is recommended to repeat the oxidation process. Blast the oxide layer with 50 micron aluminum oxide. Always observe proper safety procedures when handling acid. Before opaque application clean framework carefully with water. Use the appropriate veneering material, following the manufacturer's instructions.
Highest recommended firing temperature: 810 °C

HEAT TREATMENT
Hardening: 450 °C for 15 min; bench cool

SOLDERING AND LASER WELDING
The soldering gap should not be wider than the thickness of the soldering material. Allow the soldered casting to cool slowly. Use flux sparingly.

Pre Solder:	Porta Optimum Solder 880	**Flux:**	High Fusing Bondal Flux
Post Solder:	Porta Optimum Solder 710	**Flux:**	Bondal Flux

Laser Welding Wire: Porta Norm

FINISHING
Carefully remove any oxide and flux residue. Smooth the metal surfaces with rubber polishers. Polish to a high gloss finish using polishing paste. Subsequently, clean using ultrasonic cleaning equipment or careful steam sorgfältig mit dem Dampfstrahler reinigen.

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Gebrauchsinformation

PRODUKTBESCHREIBUNG
Au hältige Dentalguss-/ Keramik-Legierung, Typ 4

INDIKATIONEN
Inlays, Onlays, 3/4 Kronen, Kronen, Teleskopkronen, Konuskronen, Brücken, weitspannige Brücken, Wurzel-/Stiftaufbauten, Stegkonstruktionen, Teilkronen, Attachés, Teilprothesen mit Metallgerüst

WACHSMODELLATION
Die Gerüst in vollanatomischer oder verkleinerter anatomischer Form unter Berücksichtigung der geplanten Verblendung gestalten. Bei Verwendung von Labor Composite als Verblendmaterial mechanische Retentionen anbringen. Die Wandstärke für Einzelkronen muss mindestens 0,5 mm betragen. Bei Pfeilerkronen mindestens 0,5 mm betragen. Dabei muss sichergestellt werden, dass die Gerüstgestaltung die Verblendung ausreichend unterstützt. Scharfe Übergänge vermeiden. Die Konnektoren müssen mindestens die erforderlichen Mindestmaße aufweisen, um Verformungen zu widerstehen. Für das geplante Weichlöten großflächige Gerüstbereiche gestalten, einschließlich eines Spalts von 0,05 – 0,2 mm.

ANSTIFTEN DER GUSSRÄNDER
Die modellierte Einzelzahnrestauration oder Brückengerüst mit ausreichend dimensionierten Gusskanälen versehen. Grundsätzlich sollte die Grösse des Reservoirs, der Gusskanäle und der Verbindungsstäbe bemessen sein. Die Gussmasse muss ausreichend dimensioniert sein, um Schrumpfungen zu kompensieren

Made in Germany
Modelle/Models:
Porta Norm
Ausgabe/Edition:
Version/Version:
Stand der Information/Date:
6/2697 / 2018-05-15 / 1K
Änderungen vorbehalten
Subject to changes
Sous réserve de modifications
Con riserva di modifiche
Sin derecho de modificación
Wijzigingen voorbehouden
Ändringsrätten reserverad
Zastrzegamy prawo do zmian
Změny vyhrazeny
Szabadon megváltoztatható
Si ha diritto di modificare
Reservat rätten till ändringar
Ändringsretten er forbehold
Muutosoikeus pidätetään
Ο δικαίωμα τροποποιήσεων παρέχεται
Reserve-se o direito a alterações
Şi se rezervă dreptul de modificare
Изменения возможны
Zmiany są możliwe
Změny jsou možné
Módosítás lehetséges
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