

# HS10PC



estetic ceram

## Instruction for use

estetic ceram ag

CE0483

# HS10PC Content

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# HS10PC

## Indication

esthetic ceram **HS10PC** pressable ingots base on a high strength glass ceramic. Colouration was made on the base of VITA<sup>®\*</sup> classical shades (SL, SLM, LT, HT, MT translucency) and in special shades (L, L+, MO and S translucency & Bleach) or opalescence colours.

esthetic ceram **HS10PC** is intended for dental applications and for use by trained professionals.

Mechanical strength and optical properties qualify esthetic ceram **HS10PC** to press all ceramic single unit restorations (anterior and molar crowns, veneers, inlays, partial crowns/onlays) and three unit anterior bridges, three unit praemolar bridges including second praemolar as terminal post. Follow the instructions for minimum wall thicknesses and connector cross sections as mentioned.

Pressed objects may be completed in layering or staining technique with esthetic ceram **zirkon** layering porcelain and esthetic ceram **shades & stains LFU** and **glaze LFU**.

## Contraindication

- Combination with materials beside the mentioned esthetic ceram products and/or external products.
- Manufacturing of non-mentioned restorations.
- Manufacturing of restorations with reduced wall thicknesses and connectors cross sections as recommended.
- Dental ceramic and complete ceramic restorations made of **HS10PC** are not recommended for patients with bruxism or parafunction or patients with substantially reduced residual dentition.



\*VITA is a registered trade mark of the VITA- Zahnfabrik, Bad Säckingen

# HS10PC Preparation Guideline

The preparation of the tooth structure follows the common rules for all ceramic restorations:

- Preparation of a deep chamfer or shoulder with rounded inner edge.
- All edges and angles have to be rounded out.
- Preparation of retentive surfaces and sufficient preparation height for conventional cementation.

Minimum wall thickness (in mm) for the indicated restorations, finishing techniques and connector cross sections (in mm<sup>2</sup>) are given in the following table:

|          |                         | Veneer    | Inlay | Onlay | Crowns                           |       | Three-unit bridges |           |
|----------|-------------------------|-----------|-------|-------|----------------------------------|-------|--------------------|-----------|
|          |                         |           |       |       | Anterior                         | Molar | Anterior           | Praemolar |
| Staining | circular                | 0.3 - 0.6 | 1.0   | 1.5   | 1.2                              | 1.5   | 1.2                | 1.5       |
|          | incisal/occlusal        | 0.4 - 0.7 | 1.0   | 1.5   | 1.5                              | 1.5   | 1.5                | 1.5       |
| Cut-back | circular                | 0.6       | --    | 1.5   | 1.2                              | 1.5   | 1.2                | 1.5       |
|          | labial/occlusal         | 0.4       | --    | 0.8   | 0.4                              | 0.8   | 0.8                | 0.8       |
| Layering | circular                | --        | --    | --    | 0.6                              | 0.8   | 0.8                | 0.8       |
|          | incisal/occlusal        | --        | --    | --    | 0.6                              | 0.8   | 0.8                | 0.8       |
|          | in principle            | --        | --    | --    | anatomically reduced tooth shape |       |                    |           |
|          | connector cross section | --        | --    | --    | --                               | --    | 16                 | 16        |
|          | max. pontic width       | --        | --    | --    | --                               | --    | 11                 | 9         |

**Please Note:** 50% of the total restoration dimension must be made in high strength pressable ceramic! In case of excess space always compensate the dimensions in high strength pressable ceramic esthetic ceram **HS10PC** and not in layering porcelain.

# HS10PC Wax Up - Layering (Framework)



Wax framework (for full zirkon layering)

Wax framework for the zirkon layering (dentine and incisal)  
Usable ingots: L, L+, MO



## Model preparation

Prepare a segmented plaster working model as usual.  
Depending on the dentists preparation spacer application to the plaster model is recommended in one or two layers:  
For partial crowns, crowns and veneers, apply two layers up to 1 mm apical of the preparation margin.  
For Inlays and Onlays apply two layers to the walls and three layers to the bottom, up to 1mm distance to the preparation margin.

## Wax up

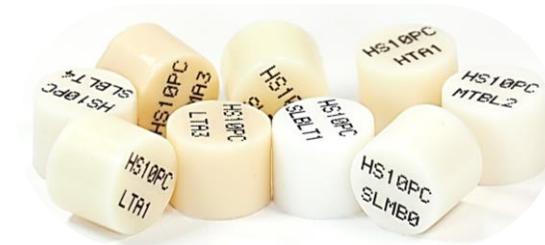
The objects are contoured in wax that burns without residues. Contour according desired finishing technique. Consider anatomical form and functional detail of occlusal surfaces. Avoid over contouring, especially in the marginal area. Always respect minimum wall thickness and the right proportion between press ceramic and layering ceramic.  
For cut-back and layering technique create reduced anatomical forms and avoid sharp edges or tips.

# HS10PC Wax Up - Layering (Cut-Back)



Wax framework (for incisal layering)

Wax framework cut-back for zirkon layering (incisal)  
Usable ingots: SL, SLBL, SLBLT, SLM, LT, MT, HT



## Model preparation

Prepare a segmented plaster working model as usual.  
Depending on the dentists preparation spacer application to the plaster model is recommended in one or two layers:  
For partial crowns, crowns and veneers, apply two layers up to 1 mm apical of the preparation margin.  
For Inlays and Onlays apply two layers to the walls and three layers to the bottom, up to 1mm distance to the preparation margin.

## Wax up

The objects are contoured in wax that burns without residues. Contour according desired finishing technique. Consider anatomical form and functional detail of occlusal surfaces. Avoid over contouring, especially in the marginal area. Always respect minimum wall thickness and the right proportion between press ceramic and layering ceramic.  
For cut-back and layering technique create reduced anatomical forms and avoid sharp edges or tips.

# HS10PC Wax Up - Stain Technic (Full Contour)



Wax framework (for stain technic)

Wax framework full contour for stain technic (glaze, shades, stains LFU)  
Usable ingots: SL, SLBL, SLBLT, SLM, LT, MT, HT



## Model preparation

Prepare a segmented plaster working model as usual.  
Depending on the dentists preparation spacer application to the plaster model is recommended.  
For partial crowns, crowns and veneers, apply two layers up to 1 mm apical of the preparation margin.  
For Inlays and Onlays apply two layers to the walls and three layers to the bottom, up to 1mm distance to the preparation margin.

## Wax up

The objects are contoured in wax that burns without residues. Contour according desired finishing technique. Consider anatomical form and functional detail of occlusal surfaces. Avoid over contouring, especially in the marginal area. Always respect minimum wall thickness and the right proportion between press ceramic and layering ceramic.  
For cut-back and layering technique create reduced anatomical forms and avoid sharp edges or tips.

# HS10PC Wax Up - Stain Technic (Inlay)



Wax inlay (for stain technic)

Wax inlay for stain technic (glaze, shades, stains LFU)  
Usable ingots: S, HT, Impulse, SLETC



## Model preparation

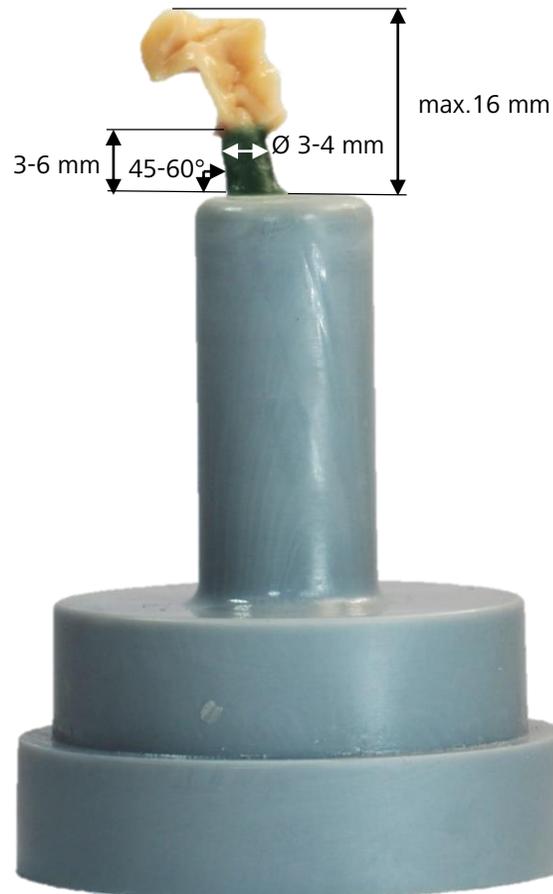
Prepare a segmented plaster working model as usual. Depending on the dentists preparation, spacer application to the plaster model is recommended.  
For partial crowns, crowns and veneers, apply two layers up to 1 mm apical of the preparation margin. For Inlays and Onlays apply two layers to the walls and three layers to the bottom, up to 1mm distance to the preparation margin.

## Wax up

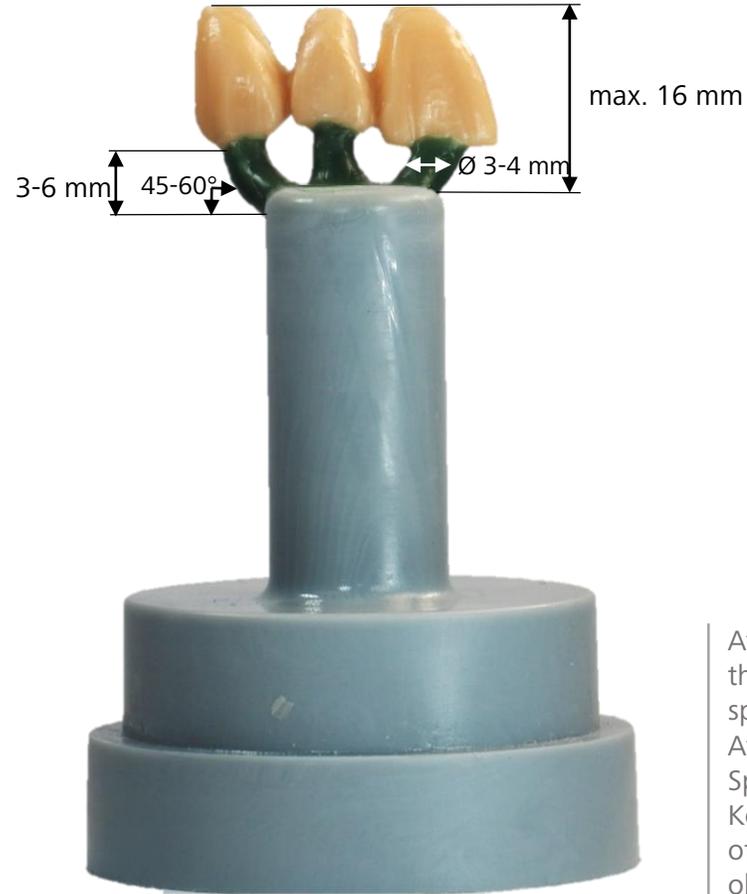
The objects are contoured in wax that burns without residues. Contour according desired finishing technique. Consider anatomical form and functional detail of occlusal surfaces. Avoid over contouring, especially in the marginal area.  
Always respect minimum wall thickness and the right proportion between press ceramic and layering ceramic.  
For cut-back and layering technique create reduced anatomical forms and avoid sharp edges or tips.

# HS10PC Sprueing

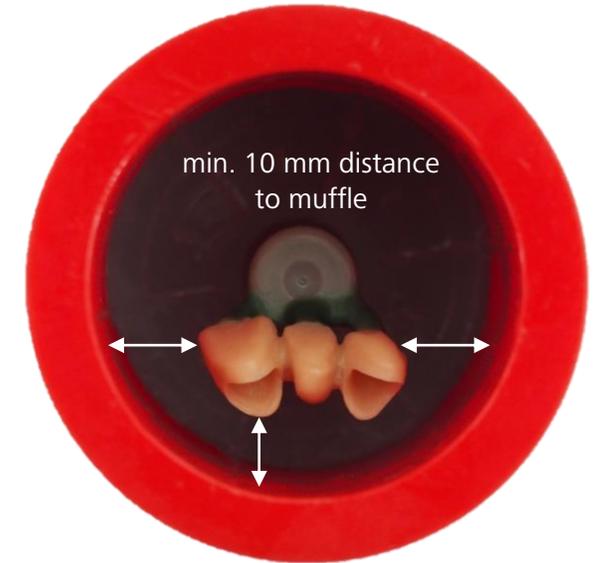
Inlay



Anterior bridge



Muffle



Attach a wax sprue ( $\varnothing$  3-4 mm) at the thickest part of the wax object. Round up the connection between sprue and object and between ring system and sprue. Attach sprue always in flow direction. Sprue and wax object must not be longer than **16 mm**. Keep a distance between silicone ring and wax object of about **10 mm**. The cervical margins of the wax objects always point to the silicone ring.

# HS10PC Determine wax weight



**Note:** Weigh the empty press base - then weigh the press base with the respective modeled object.

|                             |                 |
|-----------------------------|-----------------|
| up to max. 0.7 g wax weight | 1 ingot (3g)    |
| up to max. 1.9 g wax weight | 2 ingots (2x3g) |

# HS10PC Investing

**Note:** Please follow carefully the instructions of the investment manufacturer.



components required



fill the inner volume of the crowns with investment



fill up the muffle

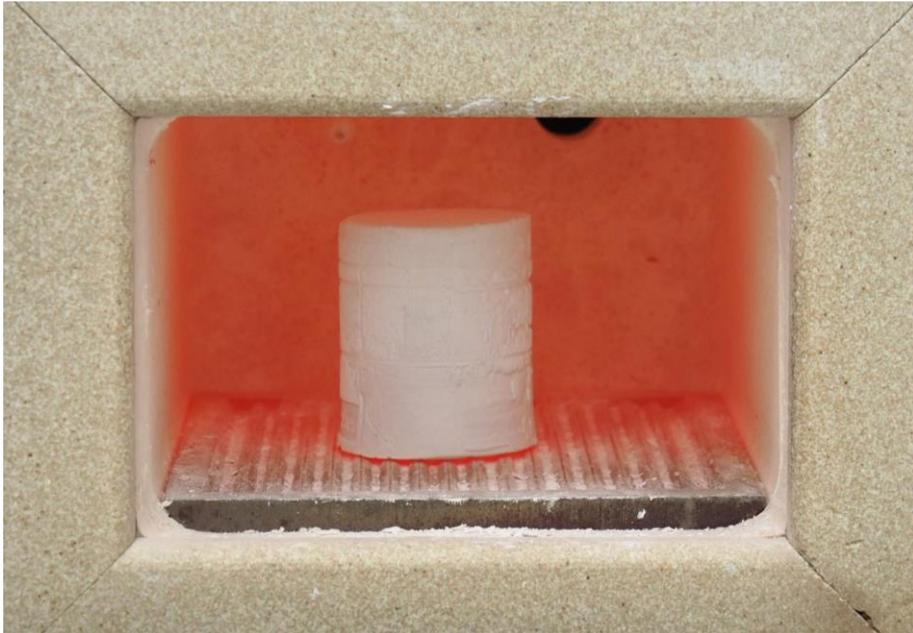


put on muffle cover

Fill investment bubble free in the silicone ring. Remove excess investment material after the setting time and make sure that the muffle stands straight.

# HS10PC Preheating

**Note:** Please follow carefully the instructions of the investment manufacturer.



Furnace

Investment rings must be preheated for at least 60 minutes at 850 °C in the burnout furnace.

**Important Note:** Place ingots and single-use plunger **without preheating** in the muffle before entering the press furnace.

# HS10PC Press

**Note:** Temperatures and times were determined in **Zubler Vario Press 300** furnaces. Please adjust parameters according to your results in your particular furnace. See press programmes (page 31).



ingot, single-use plunger and muffle



Place the ingot into the muffle



Place the plunger on top of the ingot.



Muffle in pressing furnace

Before pressing, please start the programme of the empty furnace once, to assure complete heating of all furnace parts. When press furnace is prepared, open the press furnace. Take the muffle ring out of the preheating furnace and place ingot and plunger in the ring. Put the ring in an upright position on the table of the press furnace and start the programme immediately.

**Important Note:** Place ingots and single-use plunger **without preheating** in the muffle before entering the press furnace.

# HS10PC Devesting



mark the position of plunger on the outside of the investment ring

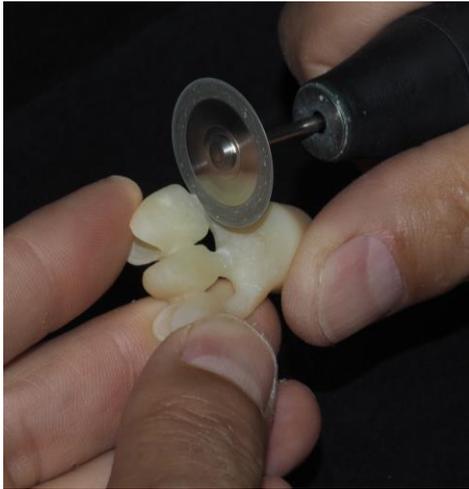


remove excess investment

Mark the end position of the plunger on the ring and remove excess investment with a cutting wheel. Divest objects, beginning with polishing/glass beads (50  $\mu\text{m}$ ) at 4 bar pressure until pressed objects become visible. Divest completely with 2 bar pressure.



# HS10PC Finishing



cut the sprue

Only use suitable cutting and grinding tools for all ceramic objects, to cut sprues, finish the surface and to adjust fit. Avoid excessive grinding and do not overheat the pressed ceramic objects. Work with little pressure at a low rotation speed.

Fit the object to the segment model using Occlu-spray. Adjust fit by removing contact points with a diamond grinder.

Round out the sprue connecting areas following form and function of the restoration.

To clean the object, sandblast the entire outer surface carefully with aluminium oxide at 1 bar pressure and steam afterwards.

# HS10PC Modeling - Stain Technic (Full Contour)

(SL, SLBL, SLBLT, SLM, LT, MT, HT)



Wax framework (for stain technic)

HS10PC framework elaborated for stains/glaze firing

after stains/glaze firing



# HS10PC Modeling - Cut-Back

(SL, SLBL, SLBLT, SLM, LT, MT, HT)



# HS10PC Modeling - Layering

(L, L+, MO)



Wax framework (for full zircon layering)



HS10PC framework (for full zircon layering)



before dentine bake



after dentine bake



before incisal bake



after incisal bake



elaborated for stains/glaze firing



after stains/glaze firing

# HS10PC

## Dentine/Incisal Bake (zirkon)



before dentine bake\*



after dentine bake



before incisal bake



after incisal bake

Mix **zirkon** ceramic powder (dentine and/or incisal) with **modeling liquid** to a creamy consistency. Apply dentine or incisal ceramic in small portions to the cervical and interdental area and compact by light vibration. Then more dentine or incisal is applied according to the tooth layering.

### 1<sup>st</sup> Dentine/Incisal Bake

After the dentine application the crown is placed on a firing tray at a starting temperature of 400 °C. Subsequently the furnace is closed with a 4 minute closing time and then heated at 45 K/min with vacuum (vacuum starting at 450 °C) to 780 °C (bake temperature). Hold time: 1 minute without vacuum.

For multiple unit prosthesis with bigger amount of porcelain increase the firing temperature about 20-30 °C. After the first dentine/incisal firing is complete, trim the crown or bridge and clean. Next, apply a second layer of dentine and incisal for the second dentine firing.

### 2<sup>nd</sup> Dentine/Incisal Bake

Same procedure as by the first dentine firing, except with a firing temperature of about 10 °C lower than the previous bake.

\* Dentine and incisal firing is of course also possible in one go and is common practice.

# HS10PC Glaze Finish/Glaze Firing



elaborated for stains/glaze firing



after stains/glaze firing

After completely finishing the surface with a diamond instrument, thoroughly clean the crown or bridge. Apply the **glaze LFU** paste or the **glaze LFU** powder mixed with the **glaze liquid** in a thin layer. For colour characterization, esthetic ceram **glaze, shades & stains LFU** can be applied and fired. For the firing, please refer to the firing table or to the separate instructions for use.

## Glaze Firing

After the stains/glaze application the crown or bridge is placed on a firing tray at starting temperature of 400 °C. Subsequently the furnace is closed with a 4 minute closing time and then heated at 45 K/min without vacuum to 710 °C (bake temperature). Hold time: 1 Minute (without vacuum).

## Natural Glaze (zirkon)

Place the crown on a firing tray at a starting temperature of 400 °C. Subsequently close the furnace with a 4 minute closing time and then heat at a rate of 45 K/min with vacuum to 760 °C (bake temperature). Hold time: 1 minute (without vacuum).

# HS10PC Modeling «nature» (zirkon)



A thin layer of **zircon** opaque dentine was applied to the **HS10PC** coping for the simpler «nature» modeling and an effect of depth. The tooth body is built up with **zircon** dentine materials, slightly contoured and covered with **zircon** incisal material. After the dentine / incisal firing is complete, **shades & stains LFU** can be used to highlight the colour aspects of the finished crown that match the tooth color. The gloss finish was then made with **glaze LFU**. (Firing table on page 32)

# HS10PC Modeling «individual» (zirkon)



For the «individual» modeling, a thin layer of **zirkon** opaque dentine was applied to the **HS10PC** coping for the optical depth effect. **Zirkon** dentine, modifiers, mamelons and various transpa materials were then applied analogously to the internal structure of natural teeth. After the dentine firing, the crown was completed with various **zirkon** incisal and opal materials and fired. Special colour aspects of the finished crown can be highlighted with **shades & stains LFU**. The crown was then given its gloss finish with **glaze LFU**. (Firing table see page 32)

# Coloured Modeling Liquids



estetic ceram

If desired, our ceramic powders can be coloured with coloured modeling liquid. This makes it easier for the dental technician to distinguish between the powders when layering.



# HS10PC Correction Bake



correction  
dentine



correction  
incisal



correction  
neutral

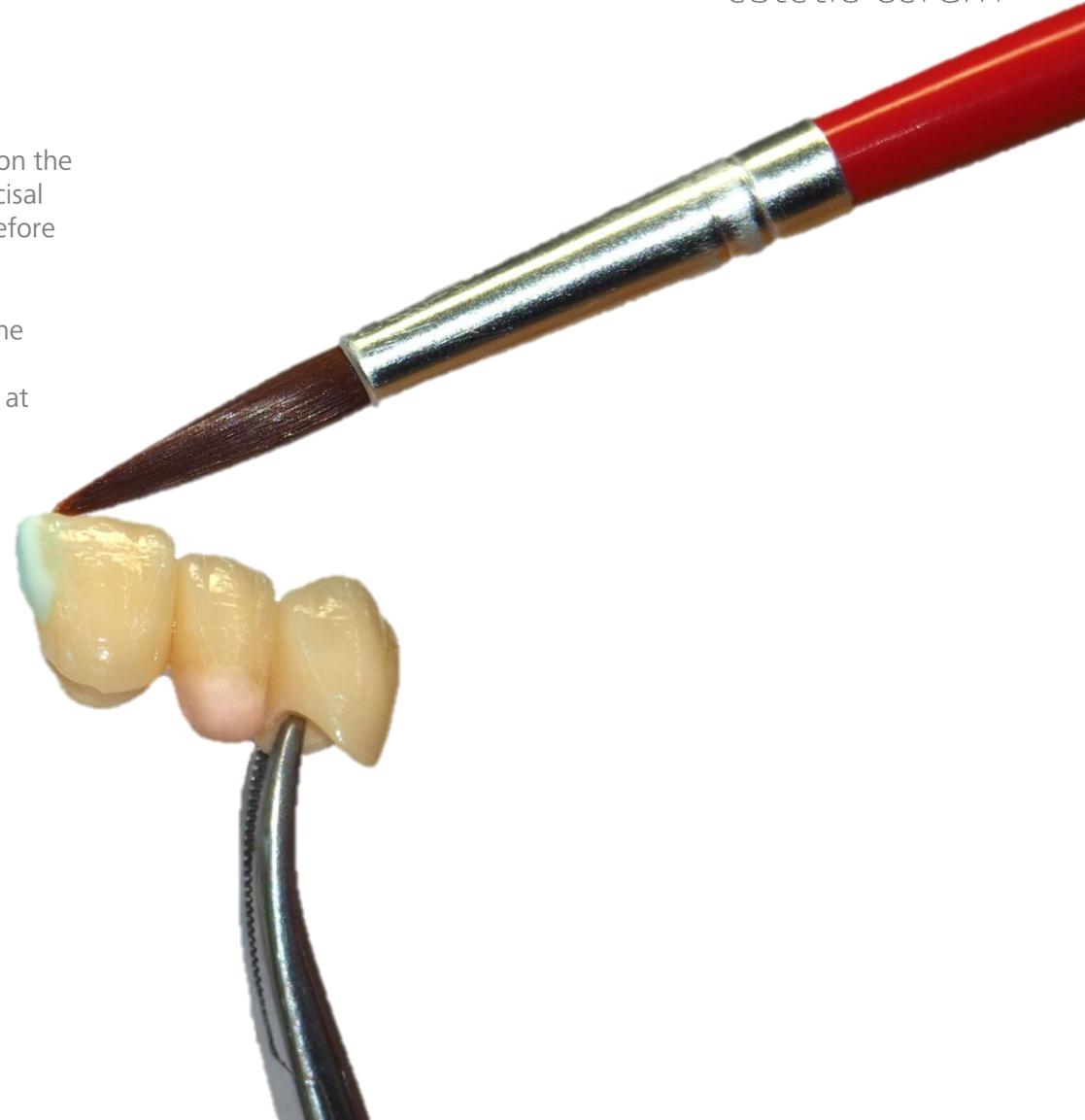
If small corrections (approximal contacts, apical pontic) are required on the finished restoration, **zirkon titan correction** powder in dentine or incisal shading may be applied without altering the result of the layering. Before application clean the crown or bridge.

Mix **zirkon titan correction** powder with **modeling liquid** to a creamy consistency. Apply small portion of porcelain to the desired area of the restoration.

After correction powder application, place the crown on a firing tray at starting temperature. See firing schedule (Page 32).



bridge after  
correction bake



# shades & stains LFU



# shades LFU



shade A light fluor.



shade B light fluor.



shade C light fluor.



shade D light fluor.



shade A fluor.



shade B fluor.



shade C fluor.



shade D fluor.



Body colours

**Area of application:** Body colours for the characteristic colouring of A - D colours.

# stains LFU



# stains LFU



white fluor.



snow white fluor.



vanilla fluor.



beige fluor.



yellow fluor.



yellow 2 fluor.



orange fluor.



orange middle fluor.



orange 2 fluor.



champagne fluor.



safari fluor.



safari + fluor.



olive fluor.



khaki fluor.



rose fluor.



rose pink



red purple fluor.



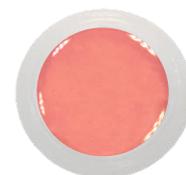
blue rose fluor.



purple fluor.



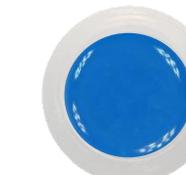
red



red bright



smoke fluor.



blue fluor.



pigeon blue fluor.



green fluor.



brown fluor.



dark brown fluor.



red brown fluor.



black fluor.



grey fluor.

## Effect colours

**Area of application:** Effect colours for extensive characteristic colouring.

**Note:** The colours shown are a selection of our wider range only.

# HS10PC Combination Table

| Combination table                   | A  |    |    |      |    | B  |    |    |    | C  |    |    |    | D  |    |    |
|-------------------------------------|----|----|----|------|----|----|----|----|----|----|----|----|----|----|----|----|
| tooth colour                        | A1 | A2 | A3 | A3,5 | A4 | B1 | B2 | B3 | B4 | C1 | C2 | C3 | C4 | D2 | D3 | D4 |
| HS10PC (ingots) S                   | 1  | 1  | 2  | 2    | 3  | 1  | 1  | 2  | 3  | 1  | 3  | 3  | 3  | 1  | 1  | 3  |
| HS10PC (ingots) SL, SLM, LT, MT, HT | A1 | A2 | A3 | A3,5 | A4 | B1 | B2 | B3 | B4 | C1 | C2 | C3 | C4 | D2 | D3 | D4 |
| HS10PC (ingots) L, L+               | 1  | 2  | 2  | 2    | 4  | 1  | 1  | 2  | 2  | 1  | 3  | 3  | 4  | 1  | 5  | 5  |
| HS10PC (ingots) MO                  | 1  | 1  | 2  | 2    | 4  | 1  | 1  | 3  | 3  | 1  | 4  | 4  | 4  | 2  | 4  | 4  |
| zirkon dentine                      | A1 | A2 | A3 | A3,5 | A4 | B1 | B2 | B3 | B4 | C1 | C2 | C3 | C4 | D2 | D3 | D4 |
| zirkon incisal                      | 1  | 2  | 2  | 4    | 4  | 1  | 2  | 3  | 4  | 2  | 2  | 3  | 4  | 1  | 2  | 3  |

The esthetic ceram **HS10PC** pressable ingots for different finishing techniques are offered in various ranges of translucency for staining, cut-back or layering technique. A colour chart of the recent available ingot colours is available separately.

In principle any allowed indication could be manufactured from any ingot. For esthetical reasons a correlation of the ingots to the different forms of restorations is recommended according to the correlation table.

# HS10PC Correlation Table

|               |                 |   | Recommended technique |          |                  | Recommended indication |       |       |                 |                  |                    |
|---------------|-----------------|---|-----------------------|----------|------------------|------------------------|-------|-------|-----------------|------------------|--------------------|
| Colour system | Colour range    | Field of application                                    | Staining technic      | Cut-back | Layering technic | Veneer                 | Inlay | Onlay | Anterior crowns | Posterior crowns | Three-unit bridges |
| S             | incisal         | inlay, onlay, veneer                                    | +                     | -        | -                | +                      | +     | +     | -               | -                | -                  |
| HT            | dentine         | inlay, onlay, veneer, crowns                            | +                     | +        | -                | +                      | +     | +     | +               | -                | -                  |
| Impulse       | opal            | inlay, onlay, veneer                                    | +                     | +        | -                | +                      | +     | +     | -               | -                | -                  |
| SL BLT        | bleach dentine  | crowns & bridges  | +                     | +        | -                | +                      | -     | +     | +               | +                | +                  |
| SL            | dentine         | crowns & bridges  | +                     | +        | -                | +                      | -     | +     | +               | +                | +                  |
| SL BL         | bleach dentine  | crowns & bridges  | +                     | +        | -                | +                      | -     | +     | +               | +                | +                  |
| SL ETC        | dentine/incisal | inlay, onlay, veneer                                    | +                     | -        | -                | +                      | +     | +     | -               | -                | -                  |
| SLM           | dentine         | crown & bridgework on severely discoloured preparations | +                     | +        | -                | -                      | -     | -     | +               | +                | +                  |
| LT            | dentine         | crowns & bridges  | +                     | +        | -                | +                      | -     | +     | +               | +                | +                  |
| MT            | dentine         | crowns & bridges  | +                     | +        | -                | +                      | -     | +     | +               | +                | +                  |
| L             | liner           | crown and bridgework                                    | -                     | +        | +                | -                      | -     | -     | +               | +                | +                  |
| L+            | liner           | crown & bridgework on severely discoloured preparations | -                     | +        | +                | -                      | -     | -     | +               | +                | +                  |
| MO            | liner           | crown & bridgework on slightly discoloured preparations | -                     | +        | +                | -                      | -     | -     | +               | +                | +                  |

+ recommended - not recommended

# HS10PC Press Programmes

**Note:** The given firing- and press temperatures were determined in a **Zubler Vario 300** and a **Zubler Vario Press 300** dental furnace and are approximate values. For other furnace types, corrections to the firing temperatures may be necessary.

| Press parameters HS10PC    | Muffle size [g] |  | Start temperature [°C] | Heating rate [K/min] | Vacuum start [°C] | Final temperature [°C] | Pressing time [min] | Holding time [min] | Pressure |
|----------------------------|-----------------|--|------------------------|----------------------|-------------------|------------------------|---------------------|--------------------|----------|
| Zubler Vario Press 300     | 100             |  | 700                    | 60                   | 700               | 900                    | 3                   | 18                 | Low      |
|                            | 200             |  | 700                    | 60                   | 700               | 915                    | 3                   | 20                 | Low      |
| Dekema press-i-dent 654    | 100             |  | 700                    | 60                   | 700               | 910                    | 3                   | 15                 | Level 7  |
|                            | 200             |  | 700                    | 60                   | 700               | 930                    | 3                   | 15                 | Level 7  |
| Dentsply Multimat NTXpress | 100             |  | 700                    | 60                   | 700               | 930                    | 3                   | 15                 | --       |
|                            | 200             |  | 700                    | 60                   | 700               | 950                    | 3                   | 18                 | --       |
| Ivoclar Programat EP 3000  | 100             |  | 700                    | 60                   | 700               | 900                    | 3                   | 18                 | **       |
|                            | 200             |  | 700                    | 60                   | 700               | 915                    | 3                   | 20                 | **       |
| Ugin dentaire              | 100             |  | 700                    | 60                   | 700               | 930                    | 3                   | 15                 | --       |
|                            | 200             |  | 700                    | 60                   | 700               | 950                    | 3                   | 18                 | --       |

\*\* ) **Please note:** The "E"-value in the Ivoclar programme has to be set to "E 600".

# HS10PC Firing Chart

**Note:** The given firing temperatures were determined in a Zubler Vario 300 dental furnace and are approximate values. For other furnace types, corrections to the firing temperatures may be necessary.

| Firing parameters       | Start temperature [ °C ] | Closing time [ min ] | Vacuum start [ °C ] | Heating rate [ K/min ] | (Vacuum end) 1 <sup>st</sup> Bake [ °C ] | (Vacuum end) 2 <sup>nd</sup> Bake [ °C ] | (Without vacuum) Holding time [ min ] |
|-------------------------|--------------------------|----------------------|---------------------|------------------------|--|--|---------------------------------------|
| zirkon dentine/incisal  | 400                      | 4                    | 450                 | 45                     | 780                                      | 770                                      | 1                                     |
| zirkon natural glaze    | 400                      | 4                    | 450                 | 45                     | 760                                      | --                                       | 1                                     |
| LFU glaze/stains        | 400                      | 4                    | ---                 | 45                     | 710                                      | --                                       | 1                                     |
| zirkon titan correction | 400                      | 4                    | 450                 | 45                     | 720                                      | --                                       | 1                                     |

**Please note:** In case of layering on zirconia, retarded opening of the furnace after each bake is required in general, beginning with dentine bake, in particular with voluminous layering of ceramic. Firing temperature depends on the number of units in the furnace. More units require up to 20-30 °C higher dentine/incisal firing temperatures.

# HS10PC Technical Data

HS10PC comply to all applicable standards for dental porcelains (DIN EN ISO 6872/ DIN EN ISO 10993-5). All limits are undercut and therefore outperformed.

| Materials characterisation |  |
|----------------------------|--|
| Material :                 | Lithium disilicate ceramic   |
| Chemical composition:      | Mayor components embedded in the glass ceramic structure: SiO <sub>2</sub> , Li <sub>2</sub> O, K <sub>2</sub> O, Al <sub>2</sub> O <sub>3</sub> , ZnO, ZrO <sub>2</sub> , P <sub>2</sub> O <sub>5</sub> |

| Classification acc. DIN EN ISO 6872:2019 |  |        |  |
|--|--|--------|--|
| Type:                                    | 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> | Class: | 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> a <input checked="" type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> |

| Physico-chemical properties – acc. DIN EN ISO 6872                              |               |              |
|---|---------------|--------------|
| Property  | Spezification | Actual value |
| Coefficient of thermal expansion (25 - 500 °C) [ $\cdot 10^{-6} \cdot K^{-1}$ ] | 10.0 ± 0.5    | 10.0         |
| Transformation temperature Tg [°C]  | 510 ± 20      | 520          |
| Bending strength [MPa]  | ≥ 300         | > 350        |
| Solubility [ $\mu g/cm^2$ ]   | < 100         | < 40         |

# HS10PC Regulatory Information



HS10PC meet all requirements of applicable directives and regulations for medical devices. The manufacturing complies to a certified Quality Management System acc. **ISO 13485**, annex 2 of **Medical Device Directive 93/42**, annex IX, Chapter 1 of regulation (EU) 2017/745 and further international requirements.

Medical device classification acc. annex IX, rule 8 of MDD 93/42:

IIa

Medical device classification acc. annex VIII, rule 8 of MDR 2017/745:

IIa

UMDNS Code:

16-187 Dental-ceramics

MDR Code acc. MDCG 2019-14:

MDT 2003, MDN 1103

Classification acc. DIN EN ISO 6872:

type 2, class 3

# HS10PC

## Warnings

Use only by trained specialists.

Wear protective goggles or suitable face protection when finishing the ceramic restorations. Remove splinters and dust with a suction device or wear a suitable dust mask.



Be careful with the high temperatures when burning. There is a risk of burns! Use oven tongs / tweezers and gloves!

Use only in a clean work environment! Contamination of the aids (waxes) and devices (mixing plate, preheating furnace) through residues from alloy processing, especially CoCr or NiCr alloys, can lead to discolouration of the ceramic.

The framework or framework that has already been veneered must be cleaned thoroughly with steam or under running water with a brush before each ceramic application.

**There are different firing conditions due to the different ceramic furnaces on the market. This fact must be taken into account and clarified by the customer on his own responsibility!**

**The specified firing temperatures are only guide values!**

Recommended storage conditions: 12-38 °C and normal humidity 40-60%.

Warning about the investment:

Investment materials contain quartz powder, avoid inhaling dust, use a protective mask. Pay attention to the hazard warnings on the packaging of the investment material.

## Label Symbols

-  Manufacturer
-  Date of manufacture YYYY MM
-  Medical Device
-  Batch code /LOT number
-  Reference number
-  Unique Device Identification
-  Caution, consult instruction for use

## Manufacturer Information

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**CE0483**