

DENTAL TECHNICIAN

IPS d.SIGN®



d.SIGN NATURAL BEAUTY



FLUORAPATITE-LEUCITE  
GLASS-CERAMICS

ivoclar  
vivadent®  
technical

# INSPIRED BY NATURE – BRILLIANT FEATURING LIFELIKE CHARACTERISTICS

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## Attraction and aesthetics

We are attracted to other people not only because of their personality, but also because of their appearance. Dental medicine has been dedicated to improving and further developing the aesthetic quality of dental restorations to satisfy even the most discerning patients over the past few decades.

## Function and aesthetics

Modern ceramic restorations have to fulfil very demanding functional and aesthetic requirements. Ivoclar Vivadent has developed a comprehensive restorative system exactly for this purpose. It comprises the following components:

- IPS d.SIGN veneering ceramics
- A range of matching alloys
- Vivaglass CEM cementation system



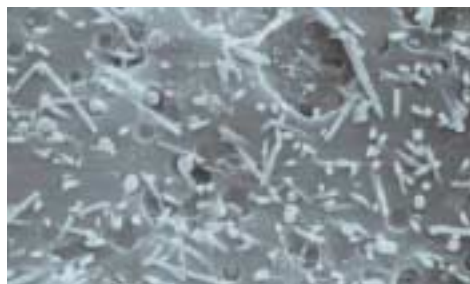
# LIANT GLASS-CERAMICS CHARACTERISTICS

## Physical background

Nature provided the fine example according to which the highly aesthetic glass-ceramics with true-to-nature properties have been developed.

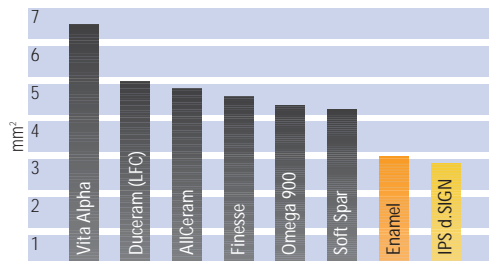


SEM – natural tooth



SEM – IPS d.SIGN (after acid etching of the surface)

The wear data gathered for IPS d.SIGN is decidedly better than that of conventional feldspar ceramics. The wear of antagonists is substantially reduced.



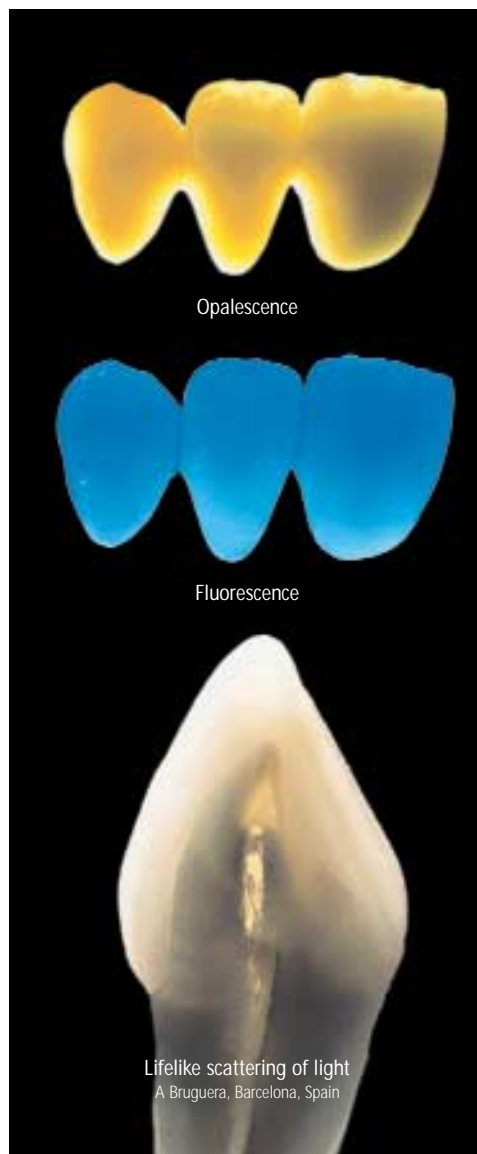
Bar diagram showing the wear of antagonistic enamel of various types of dental ceramics

John A Sorensen, DMD, PhD (1999)  
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## Visual appearance

Highly aesthetic restorations that imitate the natural tooth are achieved with just a few IPS d.SIGN materials. In addition, a wide range of characterization materials is available for personalizing each restoration. As all teeth are different, customized and flexible solutions are needed to restore them. The new fluorapatite-leucite glass-ceramic features a number of properties that are copied from natural teeth:

- High shade consistency
- True-to-nature fluorescence
- Opalescence
- Brightness



Opalescence

Fluorescence

Lifelike scattering of light  
 A Bruguera, Barcelona, Spain

# COORDINATED COMPONENTS

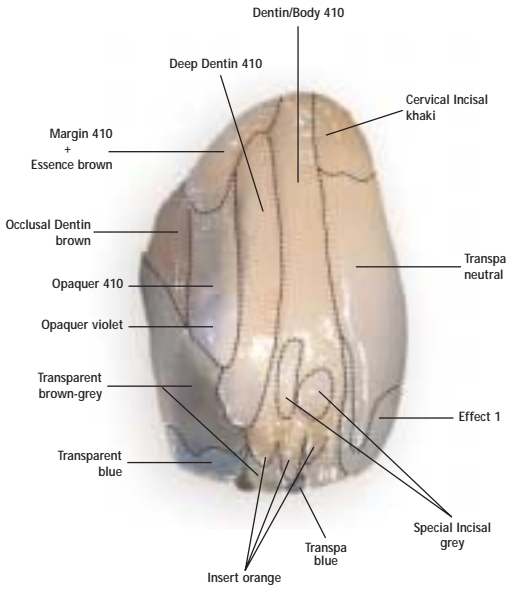
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## A comprehensive assortment

The well-balanced basic assortment of IPS d.SIGN materials and the various additional assortments in Chromascop and A-D shades offer ambitious first-time users, demanding all-round technicians and specialists a wealth of options for achieving highly aesthetic restorations, ranging from straightforward to highly complex cases.

The difference in the processing properties of IPS d.SIGN compared to other ceramic materials is clearly noticeable. Because of their outstanding stability, the materials can be applied swiftly. The different feel of the ceramics is not only perceptible during layering. Grinding is surprisingly convenient.



# S FROM ONE MANUFACTURER

## Nine matching alloys

A range of alloys has been specially developed for use with IPS d.SIGN. It includes high gold, reduced gold and base metal alloys. The biocompatibility of these alloys has been thoroughly tested and certified. The alloys comply with international standards (ISO and ADA). Seven precious metal alloys and two base metal alloys allow restorations to be fabricated for a wide spectrum of indications.

IPS d.SIGN 98	high gold alloy
IPS d.SIGN 96	high gold alloy
IPS d.SIGN 91	reduced gold alloy
IPS d.SIGN 84	palladium-based alloy
IPS d.SIGN 67	palladium-based alloy
IPS d.SIGN 59	palladium-based alloy
IPS d.SIGN 53	palladium-based alloy
IPS d.SIGN 30	cobalt-chromium alloy
IPS d.SIGN 15	nickel-chromium alloy



## A suitable cementation system

Vivaglass CEM is a highly translucent self-curing glass ionomer cement specifically designed for aesthetic dentistry. The high translucency of the material in combination with the light shade of the cement is highly desirable wherever aesthetic results need to be achieved.

Vivaglass CEM PL



A translucent cement is ideal for ceramic shoulders.

A Bruguera, Barcelona, Spain

## Programat P200 and Programat PX1

The ceramic furnaces from Ivoclar Vivadent are characterized by their high performance and outstanding ergonomics – optimal equipment for processing IPS d.SIGN.



Programat P200



Programat PX1

# IPS d.SIGN – THE MATERIAL DENTISTS ARE TALKING ABOUT

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## DENTAL TECHNICIANS

### V Brosch, Essen, Germany



«Ceramic veneering materials should imitate the physical, colour and light-optical characteristics of natural tooth structure as closely as possible. If a material partially or entirely lacks these

properties, a sophisticated layering technique has to be used to compensate for this deficiency. That's why I work with IPS d.SIGN.»

### C Broseghini, Pergine Valsugana, Italy



«My clinical experience with the IPS d.SIGN glass-ceramic has convinced me of the biocompatibility of the material with soft tissue. Furthermore, the material achieves highly aesthetic effects in

different light conditions. These effects must be attributed to the presence of fluorapatite crystals.»

### A Bruguera, Barcelona, Spain



«It is easy to integrate a crown made with IPS d.SIGN into the oral environment, as this material reflects light and exhibits translucency similar to that of natural teeth. IPS d.SIGN enables me to achieve outstanding results.»

### G Ubassy, Rochefort du Gard, France



«The phenomenon of metamerism often associated with metal-ceramic restorations hardly occurs with IPS d.SIGN.»

### D Cornell, Newport Beach, USA



«No other metal-ceramic today reproduces the look of natural tooth structure so faithfully.»

### S Kataoka, Osaka, Japan



«IPS d.SIGN is a breakthrough ceramic made of innovative materials. This product has a natural apatite-like crystal structure, which imparts true-to-nature properties in terms of hardness,

surface texture and shade based on (ideal) light incidence and reflection. IPS d.SIGN enables us to make 'natural teeth'.»

### E Steger, Bruneck, Italy



«This fluorapatite glass-ceramic looks like the real thing in the oral cavity. Only natural teeth have shown such properties so far. Congratulations on the development of this material.»

### O Brix, Frankfurt, Germany



«The fluorapatite-leucite glass-ceramic IPS d.SIGN combines efficiency and creativity in metal-ceramic applications. The brightness of the material as well as its ability to transmit light has been

copied from natural teeth. These properties have been effectively incorporated into the ceramic material. The material's outstanding light-scattering and masking capabilities allow successful restorations to be fabricated, even in situations where space is limited.»

# DENTAL PROFESSIONALS ARE

## DENTISTS

### Dr R Winter, Newport Beach, USA



«IPS d.SIGN ceramic has created new possibilities for the dental professional who wishes to provide patients with an easy to use restorative material that simulates natural dentition in every

respect – light refraction, beauty and wear compatibility.»

### Dr U Brodbeck, Zurich, Switzerland



«IPS d.SIGN achieves an amazing effect of depth, even in very thin layers. This allows outstanding aesthetic results to be achieved, even in situations where space is limited.»

### Dr G Unterbrink, Triesen, Liechtenstein



«Easy to adjust the occlusion and repolish – the way this material fits, this is really important»



Before



After

C Broseghini, Pergine Valsugana, Italy



Before

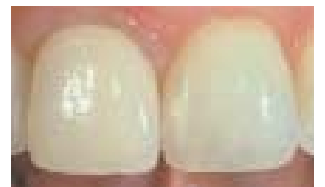


After

A Bruguera, Barcelona, Spain



Before



After



Before



After

Dr R Winter, Newport Beach, USA



Before



After

Dr U Brodbeck, Zurich, Switzerland

C L I N I C A L E X A M P L E S

# IPS d.SIGN®

## FLUORAPATITE-LEUCITE GLASS-CERAMICS

The most convenient way of informing  
your dentist and your patients:

This brochure is also available in a version  
tailored to dentists and one written  
specifically for patients.



For more information about our products,  
please contact Ivoclar Vivadent directly or  
visit our website.

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