



Effective treatment
for white spots

Icon Vestibular



The modern solution for white spots: Icon

Discolourations on smooth surfaces can have a number of causes.

Whether dealing with incipient caries, fluorosis or trauma, there's a simple, gentle treatment option: **infiltration treatment with Icon Vestibular.**

The infiltration treatment with a special, highly fluid resin was originally developed to stop early proximal caries without drilling. However, the innovative concept also makes the aesthetic treatment of discolorations on smooth surfaces possible.

For a healthy, beautiful smile.
Quick, easy and gentle.

White spots: different causes – one solution

Caries – fluorosis – trauma

Correct diagnosis is essential for treatment.

Caries



Caries-related white spots often occur after orthodontic treatment with fixed brackets. These lesions are clearly demarcated from the healthy enamel, are typically located around the brackets, and are mostly in the cervical region.

Fluorosis



Depending on the severity, 25% to 100% of the enamel surface can be affected. The appearance of the lesions can range from tiny white spots or stripes to dark brown spots or even rough, pitted enamel. The tooth may present irregular, demarcated or diffuse opacities.

Trauma



Traumatic hypomineralisation of a permanent tooth is the result of periodontal trauma or apical periodontitis in primary teeth. This clearly demarcated lesion mostly affects the facial surface.

Incipient caries causes discolouration on the smooth surfaces.

Until recently, there has been no genuinely satisfactory treatment option available for these caries-related white spots, which are often visible after bracket removal. Infiltration treatment with Icon provides a solution. However, not every spot is a caries-related white spot.

Fluorosis, trauma and more ...

For example, how can fluorosis, traumatic and idiopathic spots or developmental enamel defects be treated adequately? In other words: in a way that is permanently effective, efficient and comfortable for the patient?

Bleaching alone will not achieve a persistently convincing result in most cases of tooth discoloration. Invasive treatment methods such as veneer restorations are time-consuming and costly. Furthermore, they always involve sacrificing healthy tooth substance.

Icon Vestibular allows you to offer your patients a gentle and reliable treatment – without any unnecessary loss of substance.

Infiltration treatment: an ingeniously simple principle

The infiltration method is incredibly simple: After pretreatment with an etching gel and a drying step, the “infiltrant”, a highly liquid resin, is applied to the affected area. Through capillary action, the infiltrant penetrates deep into the porous tooth enamel where it is then light-cured. This allows white spots to be masked; the infiltrated area resembles the appearance of the natural enamel. The healthy tooth substance remains intact.

Etching – drying – infiltration.

1. Icon Etch

Icon Etch is used to prepare the tooth for infiltration. The HCl gel is applied to the treatment area using special applicators, thereby removing the pseudo-intact surface layer. Only this way can the infiltrant later penetrate the pore system.

2. Icon Dry

A dry environment is required for the subsequent step of actual infiltration. For this purpose, the lesion is additionally dried with Icon Dry and air.

3. Icon Infiltrant

The low viscosity resin, i.e. the infiltrant, is applied, penetrates deep into the enamel through capillary action and fills the lesion. It is then light-cured. The infiltrated lesion has similar mechanical and optical characteristics to healthy tooth enamel.

Icon and white spots



Initial situation



The pseudo-intact surface layer over the lesion surface is removed using etching gel.



Icon Dry is used to dry the lesion in depth. It also provides a preview of the final result.



Application of Icon Infiltrant

Source: Dr Ingo Frank, Germany

Treatment options with Icon Vestibular

It all depends on the depth.

How deep is the lesion located in the enamel and how strong is the intact enamel layer above the lesion? Correct assessment is crucial for establishing the right treatment procedure. Practical tips for this are included as part of this product sheet.

Easy first steps.

Caries-related white spot lesions are superficial and therefore the best choice for your first infiltration treatment. Fluorosis or traumatic lesions may be located deeper in the enamel. Here, in addition to the etching step, further pre-treatment measures may be useful. For example, sandblasting, microabrasion or partial use of a diamond bur.

For deeper lesions, the infiltration treatment can also be combined with a thin composite layer.



You can also find out more about infiltration with Icon on DMG's YouTube channel. From user videos on fluorosis treatment to interviews with dentists and patients and even detailed product training.

Why not go and take a look:

www.youtube.com/dmgdental

Infiltration treatment: clear and practical

Icon for fluorosis



Initial situation



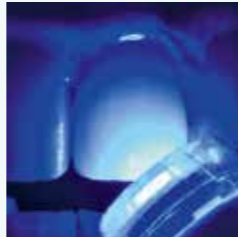
Visual difference with Icon Dry after one etching step



Visual difference with Icon Dry after two etching steps



Application of Icon Infiltrant




Light-curing for 40 seconds




The result of treatment after polishing

Source: Prof. Dr. Leandro Augusto Hilgert, Marília Bizinoto Silva Duarte


Icon for trauma




Initial situation




Sand blasting




Application of Icon Etch




Application of Icon Dry




Application of Icon Dry after three pre-treatment cycles with Icon Etch and sandblasting



Application of Icon Infiltrant



Compensation of substance loss with composite



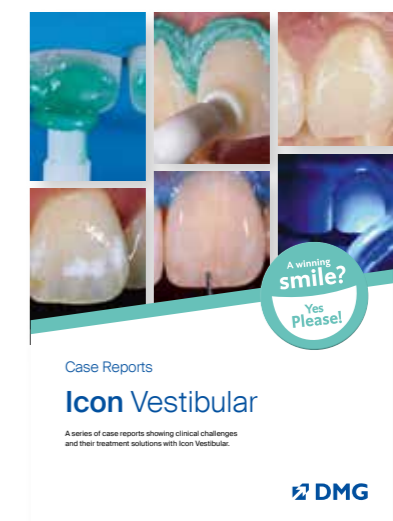
Final result two months after infiltration treatment

Source: Dr Marie Clement, France

The Icon Casebook download ...

... presents 22 clinical cases that clearly demonstrate the possibilities Icon infiltration offers for the vestibular region. The 88 pages, divided into four chapters, provide:

- Detailed, illustrated case studies of the treatment of caries-related white spots, fluorosis, traumatic and idiopathic spots and MIH
- Valuable background information about the various application possibilities to facilitate correct diagnosis
- Numerous practice-based tips and suggestions
- "Decision tree"-Diagram assists the treatment process



You can find the casebook on our Icon website at www.dmg-dental.com/casebook-icon

Tips from the dental practice

Identifying the depth of the lesion

Transillumination, e.g. using a photopolymerisation light unit, can provide a good indication of the depth of the lesion in the enamel. The darker the spot appears under the light, the deeper the lesion is located in the enamel. (Fig 1 & 2: before infiltration; 3 & 4: after infiltration)

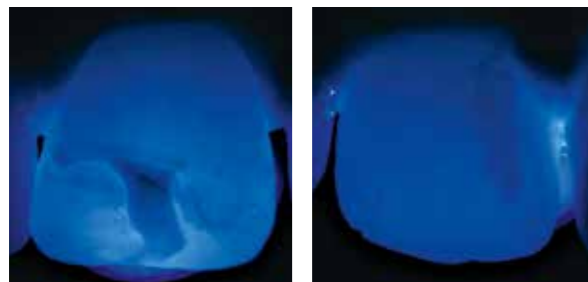


Fig. 1: Tooth 21 before infiltration

Fig. 2: Tooth 12 before infiltration

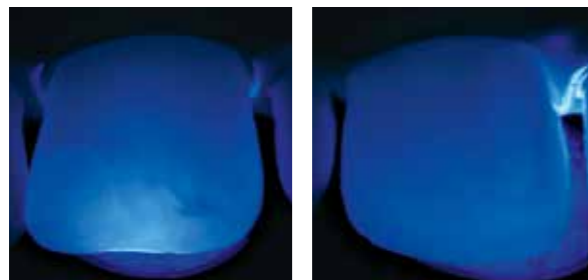


Fig. 3: Tooth 21 after infiltration

Fig. 4: Tooth 12 after infiltration

Treatment of deep lesions

For the successful aesthetic treatment of white spots, the lesion must be fully accessible to the infiltration. In the case of a particularly thick pseudo-intact surface layer, etching can be carried out multiple times. Alternatively, the lesion can be prepared for infiltration by microabrasion, sandblasting or partial use of a diamond drill. If the white staining disappears within a few seconds when moistened with Icon Dry (ethanol), enough of the surface has been removed and the lesion surface has been made accessible.

Before/after documentation

Optimise your patient communication by taking before and after photographs. These photos give your patients definitive proof about the success of the treatment.



Microabrasion

Sand blasting



Partial use of a diamond bur

Bleaching before infiltration

In some cases, a bleaching treatment before infiltration can even improve the overall result. For a combined treatment of bleaching and infiltration, a waiting period of two weeks should be observed between treatments.

Resin infiltration as the focus of international studies

Over 200 international studies, both in vitro and in vivo, demonstrate the effectiveness of the infiltration method. Below are several particularly interesting extracts...

Infiltration and bleaching

Infiltration with Icon can effectively mask mild to moderate fluorosis in young adults. In-office bleaching with 25% H₂O₂ prior to infiltration treatment further enhances the masking effect.

- » Power bleaching enhances resin infiltration masking effect of dental fluorosis. A randomized clinical trial. «
Schoppmeier CM, Derman SHM, Noack MJ, Wicht MJ; J Dent
2018 Dec; 79:77-84

Long-term effect of infiltration

The treatment of white spots with Icon also remains effective over time. The masking of white spots in vivo does not show statistically significant or clinically relevant changes after 24 months.

- » Long-term follow-up of camouflage effects following resin infiltration of post orthodontic white-spot lesions in vivo. «
Knösel M, Eckstein A, Helms HJ; Angle Orthod.
2019 Jan; 89(1):33-39

Quality of life for children

The treatment of MIH with Icon (also in combination with microabrasion) has a positive effect on children's wellbeing.

- » Change in Oral Health-Related Quality of Life Following Minimally Invasive Aesthetic Treatment for Children with Molar Incisor Hypomineralisation: A Prospective Study. «
Hasmun N, Lawson J, Vettore MV, Elcock C, Zaitoun H, Rodd H; Dent J (Basel).
2018 Nov 1; 6(4)

Infiltration vs. microabrasion

Infiltration and microabrasion both improve the aesthetic appearance of white spot lesions. However, a comparison shows that infiltration achieves a better aesthetic effect after 12 months.

- » Esthetic improvements of postorthodontic white-spot lesions treated with resin infiltration and microabrasion: A split-mouth, randomized clinical trial. «
Gu X, Yang L, Yang D, Gao Y, Duan X, Zhu X, Yuan H, Li J; Angle Orthod.
2019 May; 89(3):372-377

Microabrasion in combination with Clinpro White Varnish or tooth mousse produces a weaker masking effect than Icon, particularly in teeth with fluorosis.

- » A comparison of the effectiveness of resin infiltration and microabrasion treatments applied to developmental enamel defects in color masking. «
Gençer MDG, Kirzioğlu Z; Dent Mater J.
2019 Mar 31; 38(2):295-302.



Our support for you and your patients

The Icon Dentist Finder

Where will infiltration take place? With the online Dentist Finder, patients can quickly and easily find an Icon dentist near them. Call attention to the fact that your practice is ready for the future and register for the Dentist Finder free of charge.

Register at drilling-no-thanks.com/en/dentist-finder



The Icon website for patients

Both vestibular and proximal infiltration treatments are clearly illustrated for patients at drilling-no-thanks.com. Information is presented in an easy to understand, engaging manner and includes a video as well as the integrated Icon Dentist Finder. Why not go and take a look?



Good reasons

- Aesthetic results on smooth surfaces
- Preserve healthy tooth structure
- Gentle treatment method
- Just one treatment session



Recipient of many awards

DMG has received awards such as the "German Innovation Award 2010" in the category "Medium-sized Companies" for its Icon products and has been recognised by the "Germany - Land of Ideas" initiative. Chosen by Germany's dentists, Icon also won the "Innovation Award 2009".



Product overview

Icon Vestibular

1 Treatment unit contains:
 1 Syringe @ 0.45 ml Icon Etch,
 1 Syringe @ 0.45 ml Icon Dry
 1 Syringe @ 0.45 ml Icon Infiltrant,
 6 Vestibular Tips, 1 Luer-Lock Tip

Starter pack:

2 Treatment units REF 220343

Economy Pack:

7 Treatment units REF 220238

Icon Vestibular Etch

3 Syringes @ 0.45 ml Icon Etch, 15 Vestibular Tips REF 220384

A smile ahead
together

