### DIRECT SYSTEM

## Breakthrough in Pediatric Dentistry

VENEER OCCLUSIONVD POST & CORE DIGITAL SMILE SYSTEM PEDIATRIC CROWN



DENTISTRY

beautiful innovation you can trust

## Bio-Esthetics and Function in one Appointment

edelweiss dentistry is a dental "think tank" that conceptualizes and produces innovative systematic solutions that are developed together with partners within the dental world and marketed exclusively via the dental distribution network. The alliance between inspiration and technical know-how is focus. SYSTEMS from edelweiss are state of the art for modern and minimally invasive esthetic dentistry.

For the first time in the history of dentistry, it is now possible to work with prefabricated PEDIATRIC CROWN made from Nano-Hybrid Composite using modern laser technology. Never before has it been feasible to directly create the natural shape and youthful luminance of a tooth, so easily and perfectly in only one appointment. Its versatile area of application together with its time and cost saving procedure make edelweiss dentistry a sound investment in the future with the best interest of the patient in mind. Convince yourself.



Stephan Lampl CEO, Founder & Inventor of edelweiss dentistry

Claudio Novelli Clinical and Scientific Director



## The Technical Concept

### DIRECT SYSTEM PEDIATRIC CROWN

fissures like the natural milk teeth

easy individualization by adding edelweiss enamel composite

perfect marginal \_\_\_\_\_ edge for the gingival intigration

easy to prepare

Natural abrasive behavior

#### edelweiss PEDIATRIC CROWN

For every dentist, the treatment of carious milk teeth is a special challenge. Not only is the psychological aspect different to the dental treatment of adults, but also the different anatomical and morphological aspects need special treatment. Until now pediatric crowns are mostly made of nickel-chrome, which material has good functional results, but has no esthetic features and ignores the health of children.

Within the dental market, there exists many different types of crowns for kids, e.g. steelcrowns with or without ceramic facing and zircone-crowns, etc. but none of these contain as many positive features as the edelweiss PEDIATRIC CROWN.

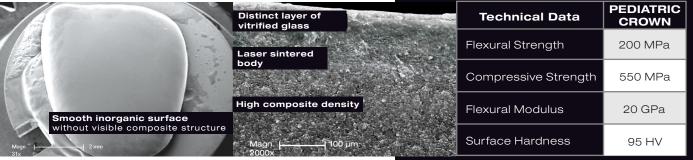
Facing steel-crowns contain a high risk of spallings and as a consequence of spallings, gingival irritations, which can cause gingival inflammations. Zirconium-crowns for kids are expensive and the material is too hard for the milk antagonists.

#### INNOVATION

The edelweiss PEDIATRIC CROWNs are made of densly-filled composite. They are laser-sintered, antibacterial and have a high plaque-resistance. These crowns are biocompatible and have the same abrasion like natural teeth. That is why the edelweiss PEDIATRIC CROWNs does not damage the antagonists.

The mesial and distal margins of the edelweiss PEDIATRIC CROWN follow the natural gingival-line of the milk teeth. The edelweiss PEDIATRIC CROWNs imitates perfectly the natural milk teeth in form and function. The pre-fabricated, bio-esthetical morphology permits a quick and safe treatment with maximum esthetic results.

In one appointment the treatment is minimallyinvasive and with the edelweiss PEDIATRIC CROWN the dentists get a perfect restoration for every milk tooth: anterior, premolar and molar, each in different sizes.



(Source: University of Geneva / internal data edelweiss dentistry)

# Composition



Introduction by Jessica J. Sidharta D.M.D. C.D.T.

### edelweiss PEDIATRIC CROWN

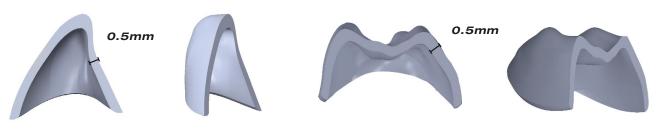
«The treatment of carious milk teeth needs more attention, ability and concentration. Until today, steel crowns were for me the single and easiest way of getting a functional restoration with minimal costs.

But most kids and their parents were very disappointed with the dark look and poor esthetics. Explanations about the function in these cases were no solution. For me the edelweiss PEDIATRIC CROWN are the perfect way to administer a perfectly natural esthetic, safely.»

«Easy and safe treatment for a healthy smile for children»

### **ADVANTAGES**

- Prefabricated for all types of milk teeth in three universal sizes
- Morphology protects the pulpapeaks of milk teeth
- Minimally-invasive
- Cuts like natural tooth
- Biocompatible & Biofunctional
- Antibacterial and plaque resistent
- Natural abrasion-behavior
- Repairable
- Cost-effective



PEDIATRIC CROWN diameter: Ø 0.5 mm

## Artificial Nature

### DIRECT SYSTEM PEDIATRIC CROWN





Milk teeth have softer tissue than permanent teeth. That means that the enamel and dentin is thinner, the pulpa cavity is bigger and has on its top, marked pulpa peaks. The roots are irregularly formed and have physiological root-resorptions. This is the reason why the pulpa appears diminished and cold-tests result negatively. Additionally the root resorption often has incorrect percussions-tests.

The milk tooth morphology is also the reason why caries spread quickly into the pulpa, resulting in required early restoration. Moreover an untreated infection of the milk tooth-pulpa ends in necrosis and thus chronical and apical infection with bone-loss. In these cases, it is possible that the permanent tooth germ will be damaged, e.g. enamel- or dentinhypoplasis. Incomplete or deformed crowns, varied roots like «Turner-Teeth» with incomplete surface are often the results.

Milk teeth have a different crown-morphology with wider approximal-contacts, basal enamel torus and a larger convergence, which is why the application of matrices is often difficult. The high permeability of the bone enables infiltration anaesthesia even on six-year olds' molars.

#### INDICATIONS

- Anterior and posterior restorations
- Discolorations
- Morphological deformations
- Diminished enamel quality
- Increasing carious activity
- Nickel-intolerance
- Post-vitalexstripation with reduced teeth material and functional root treatment
- Restoration after trauma

### CONTRAINDICATIONS

- Physiological root-resorption progressed, Milk tooth with higer mobility
- Non-cooperation and compliance
- Reduces systemical feeling
- Apical inflammation

## Pre-Treatment



## PRE-TREATMENT OF MILK TEETH FOR edelweiss PEDIATRIC CROWNS

- Minimally-invasive preparation of milk teeth: Following the natural enamel-dentin-line for preventing an iatrogen opening of the pulpa.
- If needed it is possible to optimise the wide approximal-contacts. The previous carious and with appropriate instruments. Underline fillings are possible with composite or calmative cement. Manual excavators are more often very useful for working more comfortably and saving milk teeth material.
- It is highly recommended to taper the enamel, because the surface of milk teeth is 30-100 µm without prisms. Tapering is important for a better long-life stay of edelweiss PEDIATRIC CROWN.
- Etching the enamel of milk teeth needs 30 seconds, and dentin just 7 seconds, because of the higher permeability. Etching with 37% Phosphoric acid. Followed by comprehensive rinsing.





# Step by Step

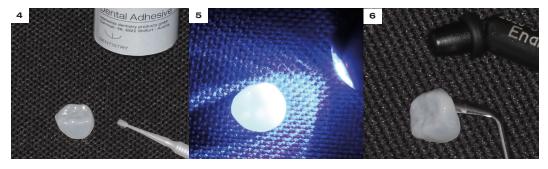
### **DIRECT SYSTEM** PEDIATRIC CROWN



1 edelweiss PEDIATRIC CROWN for every situation approximal area, just

2 For increasing the roughen the surface of the PEDIATRIC CROWN with a diamond bur

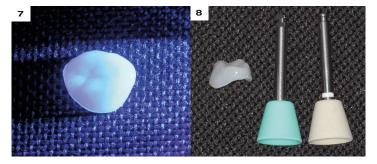
3 For cleaning the smearlayer, it is possible to use 37% phosphoric acid



4 Bonding with edelweiss 5 Light-curing of the Direct Veneer Bond, compatible Bonding for all 20 seconds edelweiss PRODUCTS

Direct Veneer Bond for

6 Building up the approximal area with edelweiss direct COMPOSITE. This is the same composite for cementing the PEDIATRIC CROWNs intraoral



7 Light-curing of the composite-building-up for 30 seconds

8 Polishing with special polisher, begin with green, after this using grey for high shining

## Step by Step

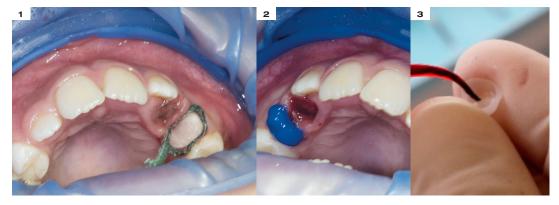


YESTERDAY

TODAY



### DIRECT SYSTEM PEDIATRIC CROWN



Situation with retraction and previous carious elimination

Enamel etching 30 seconds, dentin 7 seconds

Bonding 20 seconds

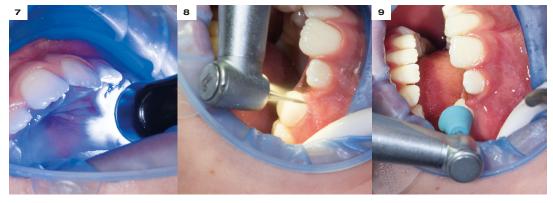






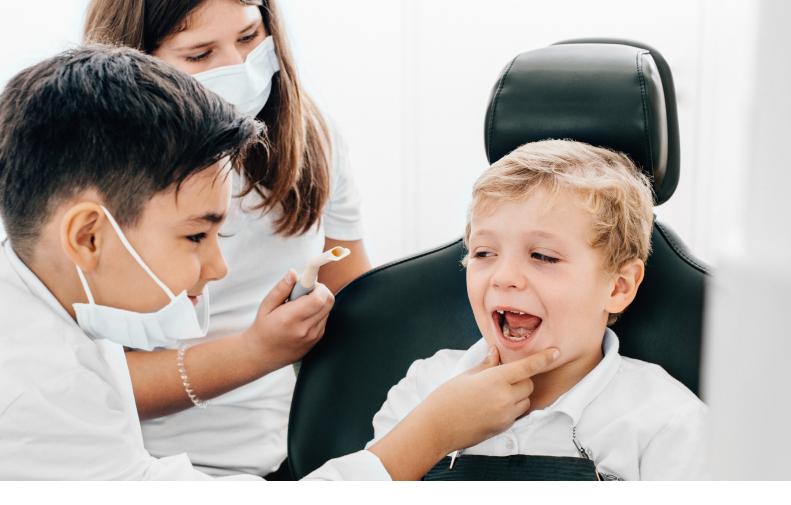
edelweiss composite for adhesion edelweiss PEDIATRIC CROWN Application of edelweiss PEDIATRIC CROWN

Position of edelweiss PEDIATRIC CROWN, excess composite removed



30 seconds light-curing Finishing (depending on light power)

Polishing



#### DENTAL TREATMENT OF CHILDREN

The general treatment of carious milk teeth with steel-crowns is functional but today the material and the look are more critical. With edelweiss PEDIATRIC CROWNs the treatment is safe, functional and esthetical. The PEDIATRIC CROWNs from edelweiss dentistry are bio-inert, biofunctional and the perfect way for the positive treatment of children.

Not even adults wish for steel-crowns with Nickel, so the treatment of childrens with steel-crowns should also be reconsidererd.



### MILK TOOTH ENDODONTICS

Root-treatments collaboration on milk teeth are possible, but a good compliance with the child is important, e.g. rubber dam. This treatment is different to the root treatment of permanent teeth.

If the result is a pulpitis or pulpa-necrosis then the vital-exstipation with root-treatment is recommended.

The roots of milk teeth are very curved, therefore the root instruments should be prebending and rigorously rinsed with natrium-hypochlorite which is important for removing all of the bacterials.

Also, a very carefully root-treatment apical is indicated, especially because of physiological root resorptions and the possibility of injuring the underlying permanent tooth.

Only 2/3 of the root-length should be filled up with calcium-hydroxide material.

After the root-treatment of milk teeth, edelweiss PEDIATRIC CROWN are the perfect treatment solution for rebuilding milk teeth naturally and functionally.

## Feedback

### DIRECT SYSTEM PEDIATRIC CROWN

#### How did you hear about our product?

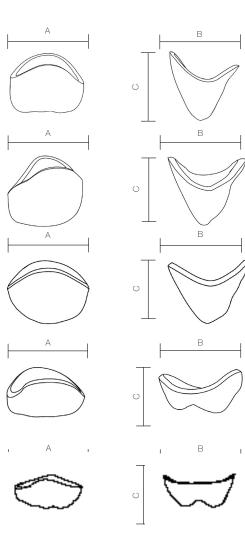
There were booklets about edelweiss dentistry in the pedodontist's practice. My favourite aspect was primarily the biocompatibility, because I wanted only the safest and most beautiful therapy available for my children.

The pedodontist explained the advantages and disadvantages of different restorations and materials. When I saw the metallic crowns for children, I was shocked by the material and non-esthetic quality of them. I would never choose such a metallic crown for a treatment in my mouth, which is why I would never accept this crown in the mouth of my child.

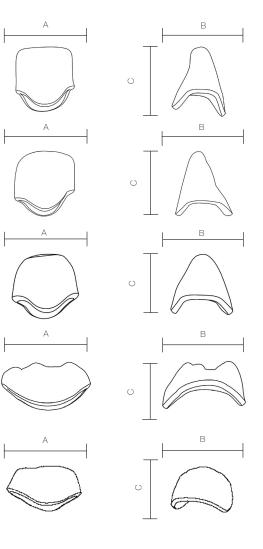
That is why it was only logical to choose edelweiss with all it's benefits.



## Technical Aspects & Sizes



Size S - Upper	mesial - distal A	vestibulär - oral B	incisal - cervical C
E & F / 51 & 61	5,4	4,5	4,1
D & G / 52 & 62	4,4	4,6	3,9
C&H/53&63	6,0	5,7	4,4
B&I/ 54&64	6,2	7,5	3,8
A&J/ 55&65	8,1	8,4	4,1
Size M - Upper	mesial - distal A	vestibulär - oral B	incisal - cervical C
E & F / 51 & 61	6,1	4,8	4,7
D & G / 52 & 62	4,9	5,0	4,4
C&H/53&63	6,7	6,3	5,0
B & I / 54 & 64	7,0	8,1	4,3
A & J / 55 & 65	9,0	9,3	4,5
Size L - Upper	mesial - distal A	vestibulär - oral B	incisal - cervical C
E & F / 51 & 61	6,6	5,5	5,0
D & G / 52 & 62	5,4	5,6	4,8
C & H / 53 & 63	7,4	7,0	5,5
B&I/ 54 & 64	7,6	9,2	4,8
A & J / 55 & 65	9,9	10,1	5,0



Size S - Lower	mesial - distal A	vestibulär - oral B	incisal - cervical C
P & O / 81 & 71	3,7	3,2	3,9
Q & N / 82 & 72	4,0	3,8	4,3
R & M / 83 & 73	5,4	5,1	5,0
S&L/84&74	7,6	6,2	4,3
T & K / 85 & 75	8,6	8,0	4,1
Size M - Lower	mesial - distal A	vestibulär - oral B	incisal - cervical C
P & O / 81 & 71	4,2	3,5	4,5
Q & N / 82 & 72	4,6	4,3	4,8
R & M / 83 & 73	6,7	6,3	5,0
S&L/84&74	7,0	8,1	4,3
T & K / 85 & 75	9,0	9,3	4,5
Size L - Lower	mesial - distal A	vestibulär - oral B	incisal - cervical C
P & O / 81 & 71	4,6	3,9	4,9
Q & N / 82 & 72	5,0	4,7	5,3
R & M / 83 & 73	6,6	6,2	6,0
S&L/84&74	9,3	7,6	5,3
T & K / 85 & 75	10,5	9,7	5,2

### DIRECT SYSTEM PEDIATRIC CROWN

## Toolbox & Refills



#### PEDIATIC CROWN SET REFILLS

REF 17211	PEDIATRIC CROWN 71/O Size S	low
REF 17231	PEDIATRIC CROWN 71/O Size M	low
REF 17251	PEDIATRIC CROWN 71/O Size L	low
REF 17212	PEDIATRIC CROWN 72/N Size S	low
REF 17232	PEDIATRIC CROWN 72/N Size M	low
REF 17252	PEDIATRIC CROWN 72/N Size L	low
REF 17213	PEDIATRIC CROWN 73/M Size S	low
REF 17233	PEDIATRIC CROWN 73/M Size M	low
REF 17253	PEDIATRIC CROWN 73/M Size L	low
REF 17214	PEDIATRIC CROWN 74/L Size S	low
BEE 17234	PEDIATRIC CROWN 74/L Size M	low
REF 17254	PEDIATRIC CROWN 74/L Size L	low
NEI 17204		1000
REF 17215	PEDIATRIC CROWN 75/K Size S	low
REF 17235	PEDIATRIC CROWN 75/K Size M	low
REF 17255	PEDIATRIC CROWN 75/K Size L	low
REF 17216	PEDIATRIC CROWN 81/P Size S	low
REF 17236	PEDIATRIC CROWN 81/P Size M	low
BEE 17256	PEDIATRIC CROWN 81/P Size L	low
REE 17017	PEDIATRIC CROWN 82/O Size S	
REF 17217	PEDIATRIC CROWN 82/Q Size S	low
REF 17237	PEDIATRIC CROWN 82/Q Size M	low
REF 17237	PEDIATRIC CROWN 82/Q Size M	low
REF 17237 REF 17257	PEDIATRIC CROWN 82/Q Size M PEDIATRIC CROWN 82/Q Size L	low
REF 17237 REF 17257 REF 17218	PEDIATRIC CROWN 82/Q Size M PEDIATRIC CROWN 82/Q Size L PEDIATRIC CROWN 83/R Size S	low low
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REF 17201	PEDIATRIC CROWN 51/E Size S	up
REF 17221	PEDIATRIC CROWN 51/E Size M	up
REF 17241	PEDIATRIC CROWN 51/E Size L	up
REF 17202	PEDIATRIC CROWN 52/D Size S	up
REF 17222	PEDIATRIC CROWN 52/D Size M	up
REF 17242	PEDIATRIC CROWN 52/D Size L	up
REF 17203	PEDIATRIC CROWN 53/C Size S	up
REF 17223	PEDIATRIC CROWN 53/C Size M	up
REF 17243	PEDIATRIC CROWN 53/C Size L	up
REF 17204	PEDIATRIC CROWN 54/B Size S	up
REF 17224	PEDIATRIC CROWN 54/B Size M	up
REF 17244	PEDIATRIC CROWN 54/B Size L	up
REF 17205	PEDIATRIC CROWN 55/A Size S	up
REF 17225	PEDIATRIC CROWN 55/A Size M	up
REF 17245	PEDIATRIC CROWN 55/A Size L	up
REF 17206	PEDIATRIC CROWN 61/F Size S	up
REF 17226	PEDIATRIC CROWN 61/F Size M	up
REF 17246	PEDIATRIC CROWN 61/F Size L	up
REF 17207	PEDIATRIC CROWN 62/G Size S	up
REF 17227	PEDIATRIC CROWN 62/G Size M	up
REF 17247	PEDIATRIC CROWN 62/G Size L	up
REF 17208	PEDIATRIC CROWN 63/H Size S	up
REF 17228	PEDIATRIC CROWN 63/H Size M	up
REF 17248	PEDIATRIC CROWN 63/H Size L	up
REF 17209	PEDIATRIC CROWN 64/I Size S	up
REF 17229	PEDIATRIC CROWN 64/I Size M	up
REF 17249	PEDIATRIC CROWN 64/I Size L	up
REF 17210	PEDIATRIC CROWN 65/J Size S	up
REF 17230	PEDIATRIC CROWN 65/J Size M	up
REF 17250	PEDIATRIC CROWN 65/J Size L	up

## MAKING OF

for further inquiries concerning our pictures please do not hesitate to contact us: «office@edelweiss-dentistry.com»







## edelweiss dentistry providing children the care they deserve

"SMILE and the world will smile with you"

DON DENTISTRY



beautiful innovation you can trust

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