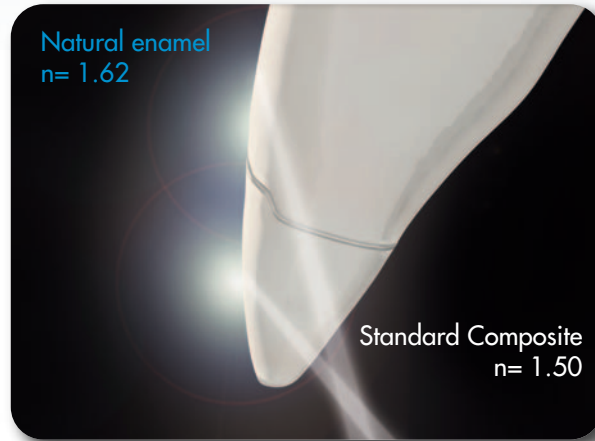


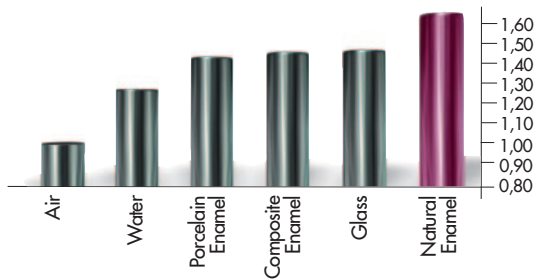
# THE PROBLEM

## THE REFRACTION OF COMPOSITE & CERAMIC MATERIALS...



“Glass Effect” lowers the value of the restoration with a gray halo on the margin (dark line)

### RELATIVE REFRACTIVE INDEX OF LIGHT (n)



The relative refractive indexes of common materials measured at a temperature of 20°C/68°F and with a 589 nm wavelength light indicate the deviation and speed reduction of the light that crosses a translucent area (Vanini Mangani Klimovskaia “Conservative Restoration of Anterior Teeth” Acme 2005)

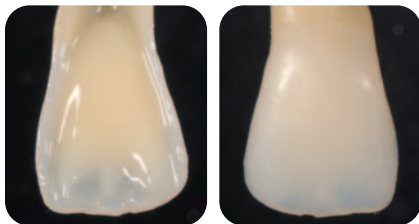
### HRi: THE TRUE ENAMEL



HRi Enamel veneers showing natural effects

Different thicknesses of Ena HRi change in shade in the same manner as Natural Enamel would in the same thickness.

Thickness of 0,6 mm allows ideal translucency



Application of dentin and opalescent OBN

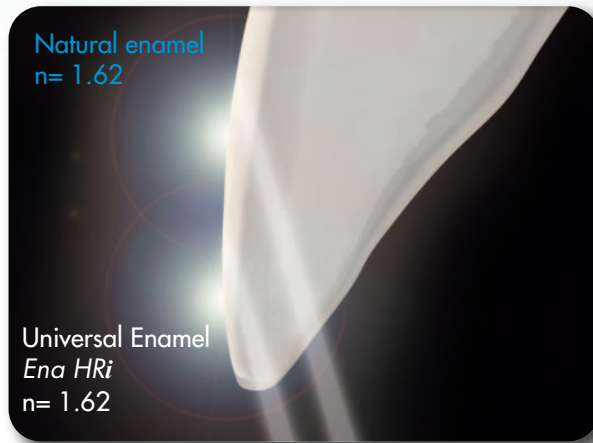


**UE1** low value (amber)

**UE2** medium value

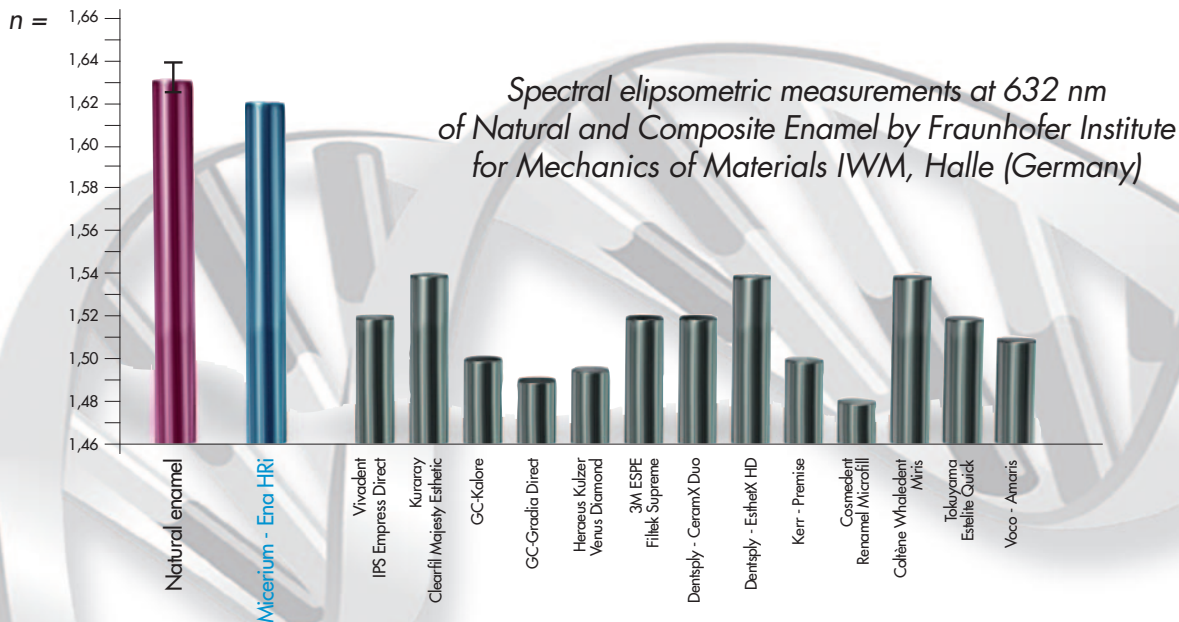
**UE3** high value (for children or bleached teeth)

... THE SAME REFRACTIVE INDEX AS NATURAL ENAMEL

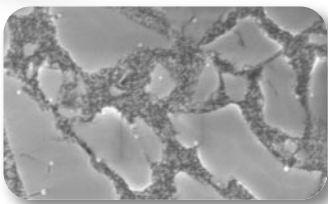


Invisible margins, in HRi restoration, using the same thickness of the natural enamel

## RELATIVE REFRACTIVE INDEX



## NANOTECHNOLOGY REM



- **Composition FILLING (80% WEIGHT - 63% VOLUME)**
  - Surface-treated nano zirconium oxide with high refractive index (12% in weight)
  - New type of filling glass with high refractive index (68% in weight)

### • Ideal physical data

- for every type of direct or indirect restoration
- Vickers Hardness 700 MPa
  - Modulus of elasticity 14.500 MPa
  - Flexural Strength 170 MPa
  - Compressive strength 450 MPa
  - High radiopacity 600% Al



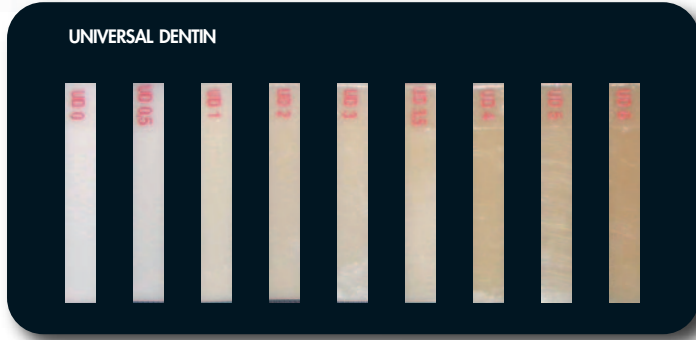
The HRi project has been devised from Dr. L.Vanini and developed in collaboration with Dr. T. Niemi (Patent Pending)

This project (HA-Project-Nr: 130/07-01) has received special funding from the State of Hessen, co-financed by funds of the European Union (European Social Fund - ESF) for scientific innovation and advancement.

# ENA HRi

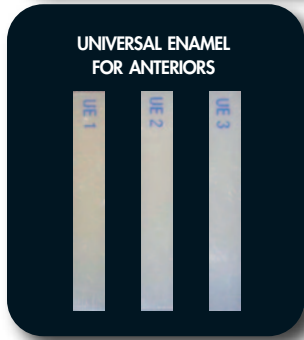
## Characteristics and clinical cases

### TECHNOLOGICAL ADVANTAGES



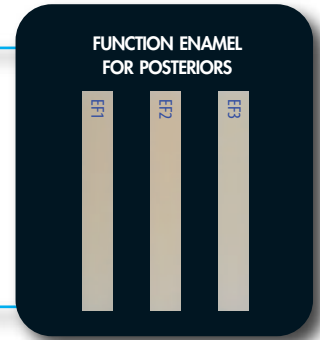
- **Dentin** with fluorescence and increased translucency calibrated to natural dentin
- **Ultra-light Dentin:** UD0 and UD0,5 for bleached teeth

DENTIN



- Universal** (low, medium and high value)
- **Invisible margin thanks to high refraction index** no "glass effect" lowering the value of the restoration
  - **Opalescent effect blue and amber given by HRi Enamel** (Transparency 30% until 0,8 mm)
- Function** (low, medium and high value)
- **Low abrasion** ideal for posteriors

ENAMEL

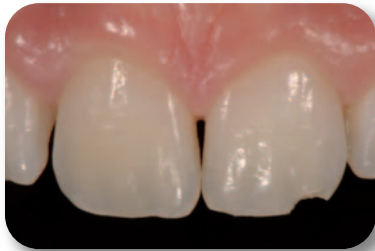


- ADDITIONAL SHADE**
- **Characterization and intensive effect** created by intensive enamel (IM, IWS, IW) and opalescent amber (OA)
  - **Opalescent blue effect** enhanced by Opalescent OBN

ADDITIONAL SHADE

### OPERATING ADVANTAGES: SIMPLE TECHNIQUE

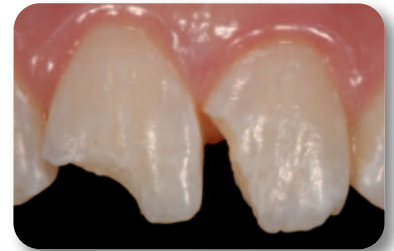
**"JUST ENAMEL" TECHNIQUE**  
using Ena HRi universal enamel



**"BASIC" TECHNIQUE**  
using Ena HRi, dentin and enamel



**"MASTER" TECHNIQUE**  
additional shades for opalescence, intensive and characterization





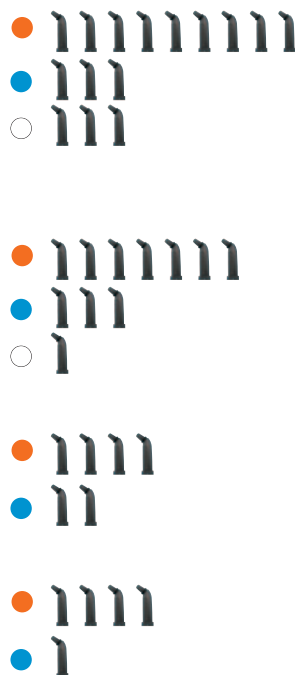
EHR15



EHR6

Ref	Description	Q.ty
EHR15	<b>ENA HRi Complete Kit</b> including 15 syringes 5 g with holder 9 dentin: UD0, UD0,5, UD1 (A1), UD2 (A2), UD3 (A3), UD3,5 (A3,5), UD4 (A4), UD5, UD6 3 universal enamel: UE1, UE2, UE3 3 intensive enamel: White (IW), White Spot (IWS), Milky (IM)	15x5g
EHR11	<b>ENA HRi Complete Kit</b> including 11 syringes 5 g with holder 7 dentin: UD0, UD1 (A1), UD2 (A2), UD3 (A3), UD4 (A4), UD5, UD6 3 universal enamel: UE1, UE2, UE3 1 intensive enamel: White Spot (IWS)	11x5g
EHR6*	<b>ENA HRi Trial Kit</b> including 6 syringes 2,5 g with holder 4 dentin: UD1 (A1), UD2 (A2), UD3 (A3), UD4 (A4) 2 universal enamel: UE2, UE3	6x2,5g
EHR5B	<b>ENA HRi "Bleach" Kit</b> including 5 syringes 2,5 g with holder 4 dentin: UD0, UD0,5, UD1 (A1), UD2 (A2) 1 universal enamel: UE3	5x2,5g

\*It is possible to replace UE3 with UE1 (Ref. Kit EHR6B)



Ref	Description	Q.ty
EHR15T	<b>ENA HRi Complete Kit Tips</b> including 90 tips (6 tips x 15 shades) 9 dentin: UD0, UD0,5, UD1 (A1), UD2 (A2), UD3 (A3), UD3,5 (A3,5), UD4 (A4), UD5, UD6 3 universal enamel: UE1, UE2, UE3 3 intensive enamel: White (IW), White Spot (IWS), Milky (IM)	15x6 pcs
EHR11T	<b>ENA HRi Complete Kit Tips</b> including 66 tips (6 tips x 11 shades) 7 dentin: UD1 (A1), UD2 (A2), UD3 (A3), UD3,5 (A3,5), UD4 (A4), UD5, UD6 3 universal enamel: UE1, UE2, UE3 1 intensive enamel: White Spot (IWS)	11x6 pcs
EHR6T*	<b>ENA HRi Trial Kit Tips</b> including 36 tips (6 tips x 6 shades) 4 dentin: UD1(A1), UD2(A2), UD3(A3), UD4(A4) 2 universal enamel: UE2, UE3	6x6 pcs
EHR5BT	<b>ENA HRi "Bleach" Kit Tips</b> including 30 tips (6 tips x 5 shades) 4 dentin: UD0, UD0,5, UD1 (A1), UD2 (A2) 1 universal enamel: UE3	5x6 pcs

\*It is possible to replace UE3 with UE1 (Ref. Kit EHR6BT)



# ENA HRi REFILL



Ref	Description	Syringes
EHREF1	Ena HRi Function enamel EF1	5 g
EHREF2	Ena HRi Function enamel EF2	5 g
EHREF3	Ena HRi Function enamel EF3	5 g
EHRUE1	Ena HRi universal enamel UE1	5 g
EHRUE2	Ena HRi universal enamel UE2	5 g
EHRUE3	Ena HRi universal enamel UE3	5 g
EHRIW	Ena HRi intensive enamel White	5 g
EHRIM	Ena HRi intensive enamel Milky	5 g
EHRIS	Ena HRi intensive enamel White Spot	5 g
EHRUD0	Ena HRi dentin UD0	5 g
EHRUD0,5	Ena HRi dentin UD0,5	5 g
EHRUD1	Ena HRi dentin UD1 (A1)	5 g
EHRUD2	Ena HRi dentin UD2 (A2)	5 g
EHRUD3	Ena HRi dentin UD3 (A3)	5 g
EHRUD3,5	Ena HRi dentin UD3,5 (A3,5)	5 g
EHRUD4	Ena HRi dentin UD4 (A4)	5 g
EHRUD5	Ena HRi dentin UD5	5 g
EHRUD6	Ena HRi dentin UD6	5 g
EHOA	Ena HRi opalescent enamel Amber	5 g
EHOBN	Ena HRi opalescent enamel Blue Natural	4,5 g

Ref	Description	Tips
EHRTEF1	Ena HRi Function enamel EF1	12x0,3 g
EHRTEF2	Ena HRi Function enamel EF2	12x0,3 g
EHRTEF3	Ena HRi Function enamel EF3	12x0,3 g
EHRTUE1	Ena HRi universal enamel UE1	12x0,3g
EHRTUE2	Ena HRi universal enamel UE2	12x0,3g
EHRTUE3	Ena HRi universal enamel UE3	12x0,3g
EHRTIW	Ena HRi intensive enamel White	12x0,3g
EHRTIM	Ena HRi intensive enamel Milky	12x0,3g
EHRTIWS	Ena HRi intensive enamel White Spot	12x0,3g
EHRTUD0	Ena HRi dentin UD0	12x0,3g
EHRTUD0,5	Ena HRi dentin UD0,5	12x0,3g
EHRTUD1	Ena HRi dentin UD1 (A1)	12x0,3g
EHRTUD2	Ena HRi dentin UD2 (A2)	12x0,3g
EHRTUD3	Ena HRi dentin UD3 (A3)	12x0,3g
EHRTUD3,5	Ena HRi dentin UD3,5 (A3,5)	12x0,3g
EHRTUD4	Ena HRi dentin UD4 (A4)	12x0,3g
EHRTUD5	Ena HRi dentin UD5	12x0,3g
EHRTUD6	Ena HRi dentin UD6	12x0,3g
EHTOA	Ena HRi opalescent enamel Amber	12x0,3g
EHTOBN	Ena HRi opalescent enamel Blue Natural	12x0,3g

● Function enamel  
 ● Universal enamel  
 ○ Intensive  
 ● Dentin  
 ● Opalescent

B1-B2-B3-B4-C1-C2-C3-C4-D3 shades available on request (colors of Vita® shade guide).  
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