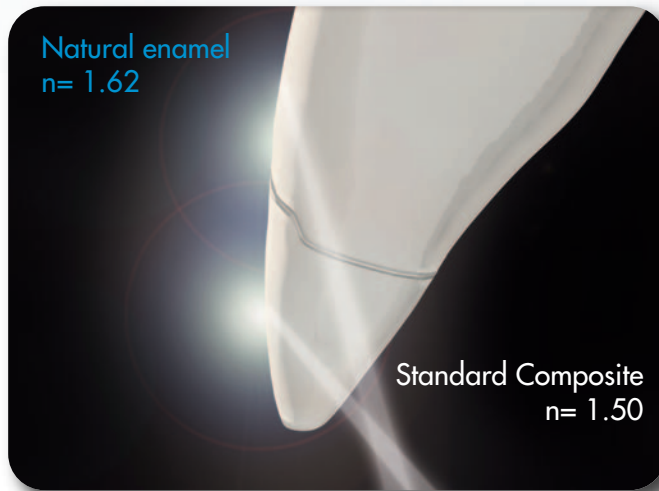


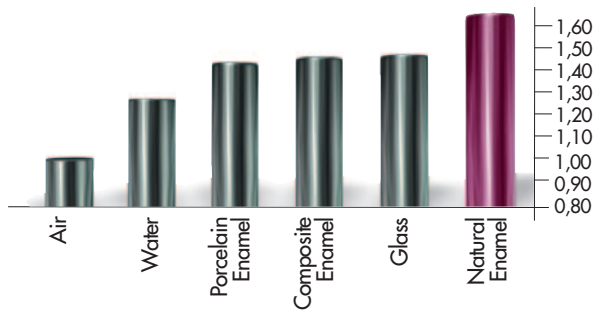
THE PROBLEM

THE REFRACTION OF COMPOSITE & CERAMIC MATERIALS...



“Glass Effect” lowers the value of the restoration with a grey 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 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)

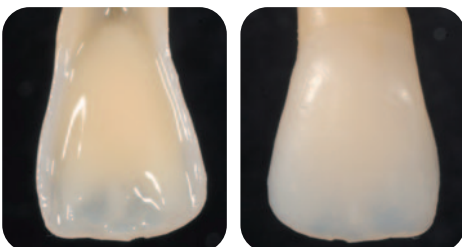
HRi: THE TRUE ENAMEL



HRi Enamel veneers showing natural effects

Different thicknesses of Enamel plus 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 dentine and opalescent OBN



UE1 low value (amber)

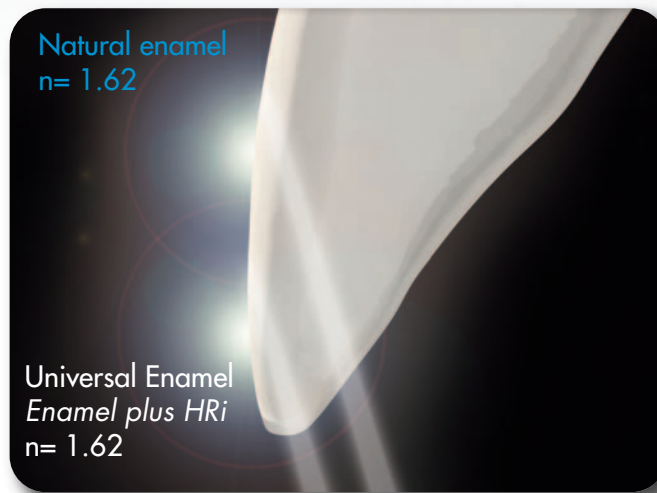
UE2 medium value

UE3 high value (for children or bleached teeth)

THE SOLUTION

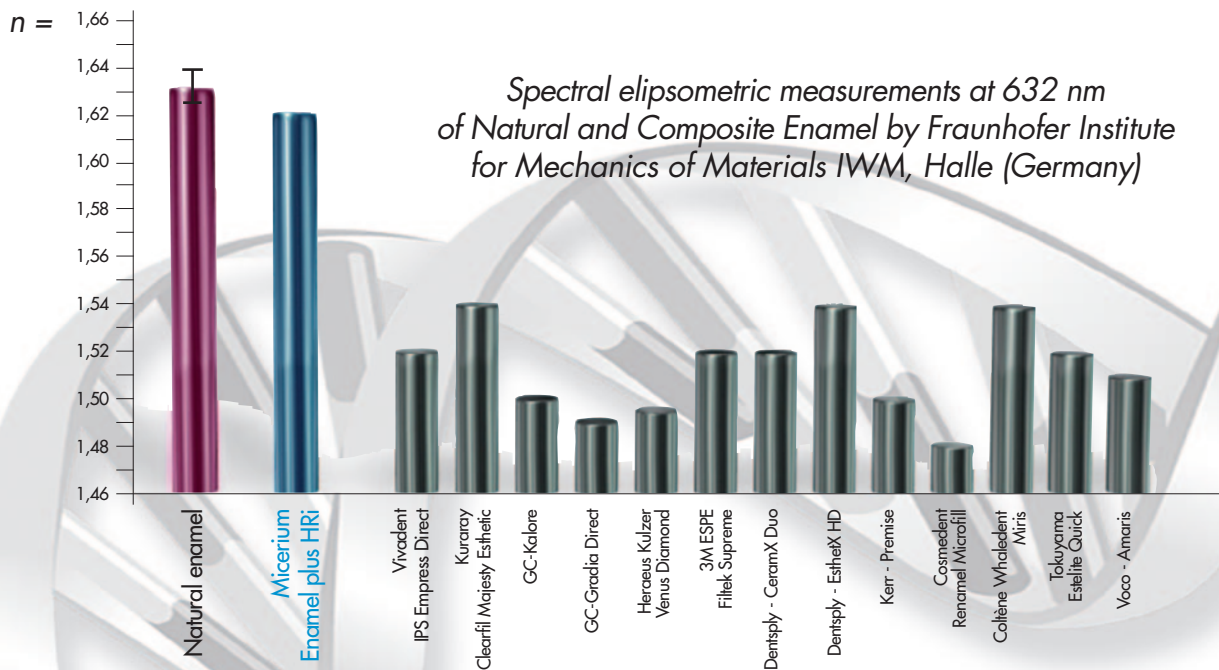
ENAMEL PLUS HRi

... THE SAME REFRACTIVE INDEX AS NATURAL ENAMEL

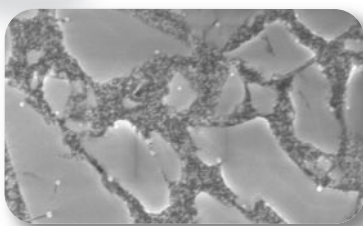


Invisible margins, in **HRi** restoration, using the same thickness of the natural enamel

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. Niem (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.

ENAMEL PLUS HRi

Characteristics and clinical cases

TECHNOLOGICAL ADVANTAGES

UNIVERSAL DENTINE



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

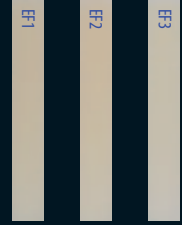
DENTINE

UNIVERSAL ENAMEL FOR ANTERIORS



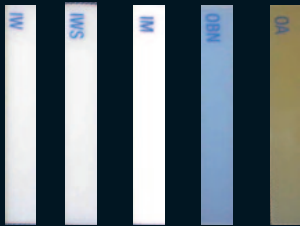
- Universal** (low, medium and high value)
- **Invisible margin thanks to high refraction index** no "glass effect" lowering the value of the restoration
 - **Opalescent effect blue and amber given by HRi Enamel** (Transparency 30% until 0,8 mm)
- Function** (low, medium and high value)
- **Low abrasion**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

FUNCTION ENAMEL FOR POSTERIOR



ENAMEL

ADDITIONAL SHADES FOR MASTER TECHNIQUE



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

ADDITIONAL SHADE

OPERATING ADVANTAGES: SIMPLE TECHNIQUE

"JUST ENAMEL" TECHNIQUE

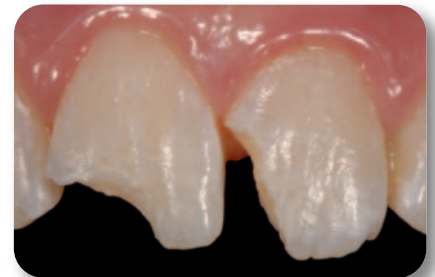
using Enamel plus HRi universal enamel

"BASIC" TECHNIQUE

using Enamel plus HRi, dentine and enamel

"MASTER" TECHNIQUE

additional shades for opalescence, intensive and characterization



ENAMEL PLUS HRi KIT



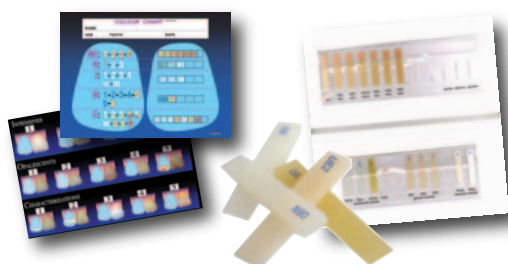
CHR15



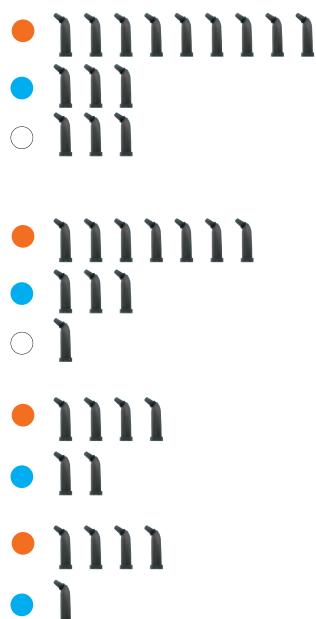
CHR6

Ref	Description	Q.ty
CHR15	ENAMEL PLUS HRi Complete Kit including 15 syringes 5 g with holder 9 dentine: UDO, 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
CHR11	ENAMEL PLUS HRi Complete Kit including 11 syringes 5 g with holder 7 dentine: UDO, UD1 (A1), UD2 (A2), UD3 (A3), UD4 (A4), UD5, UD6 3 universal enamel: UE1, UE2, UE3 1 intensive enamel: White Spot (IWS)	11x5g
CHR6*	ENAMEL PLUS HRi Trial Kit including 6 syringes 2,5 g with holder 4 dentine: UD1 (A1), UD2 (A2), UD3 (A3), UD4 (A4) 2 universal enamel: UE2, UE3	6x2,5g
CHR5B	ENAMEL PLUS HRi "Bleach" Kit including 5 syringes 2,5 g with holder 4 dentine: UDO, UD0,5, UD1 (A1), UD2 (A2) 1 universal enamel: UE3	5x2,5g

**It is possible to replace UE3 with UE1 (Ref. Kit CHR6B)*



Ref	Description	Q.ty
CSG15	Enamel plus HRi complete shade guide	15 shades
HFOMAP2	Colour chart for colour registration	50 sheets
PLEXI26D	Plexiglass syringe holder 26 holes	1 pc
PLEXI9D	Plexiglass syringe holder 9 holes	1 pc



Ref	Description	Q.ty
CHR15T	ENAMEL PLUS HRi Complete Kit Tips including 90 tips (6 tips x 15 shades) 9 dentine: UDO, 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
CHR11T	ENAMEL PLUS HRi Complete Kit Tips including 66 tips (6 tips x 11 shades) 7 dentine: 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
CHR6T*	ENAMEL PLUS HRi Trial Kit Tips including 36 tips (6 tips x 6 shades) 4 dentine: UD1(A1), UD2(A2), UD3(A3), UD4(A4) 2 universal enamel: UE2, UE3	6x6 pcs
CHR5BT	ENAMEL PLUS HRi "Bleach" Kit Tips including 30 tips (6 tips x 5 shades) 4 dentine: UDO, UD0,5, UD1 (A1), UD2 (A2) 1 universal enamel: UE3	5x6 pcs

**It is possible to replace UE3 with UE1 (Ref. Kit CHR6BT)*



ENAMEL PLUS HRi REFILL



Ref	Description	Syringes
CHREF1	Enamel plus HRi Function enamel EF1	5 g
CHREF2	Enamel plus HRi Function enamel EF2	5 g
CHREF3	Enamel plus HRi Function enamel EF3	5 g
CHRUE1	Enamel plus HRi universal enamel UE1	5 g
CHRUE2	Enamel plus HRi universal enamel UE2	5 g
CHRUE3	Enamel plus HRi universal enamel UE3	5 g
CHRIW	Enamel plus HRi intensive enamel White	5 g
CHRIW	Enamel plus HRi intensive enamel Milky	5 g
CHRIWS	Enamel plus HRi intensive enamel White Spot	5 g
CHRUD0	Enamel plus HRi dentine UD0	5 g
CHRUD0,5	Enamel plus HRi dentine UD0,5	5 g
CHRUD1	Enamel plus HRi dentine UD1 (A1)	5 g
CHRUD2	Enamel plus HRi dentine UD2 (A2)	5 g
CHRUD3	Enamel plus HRi dentine UD3 (A3)	5 g
CHRUD3,5	Enamel plus HRi dentine UD3,5 (A3,5)	5 g
CHRUD4	Enamel plus HRi dentine UD4 (A4)	5 g
CHRUD5	Enamel plus HRi dentine UD5	5 g
CHRUD6	Enamel plus HRi dentine UD6	5 g
CHFOA	Enamel plus opalescent enamel Amber	5 g
CHFOBN	Enamel plus opal.enamel Blue Natural	5 g

Ref	Description	Tips
CHRTEF1	Enamel plus HRi Function enamel EF1	12x0,3 g
CHRTEF2	Enamel plus HRi Function enamel EF2	12x0,3 g
CHRTEF3	Enamel plus HRi Function enamel EF3	12x0,3 g
CHRTUE1	Enamel plus HRi universal enamel UE1	12x0,3 g
CHRTUE2	Enamel plus HRi universal enamel UE2	12x0,3 g
CHRTUE3	Enamel plus HRi universal enamel UE3	12x0,3 g
CHRTIW	Enamel plus HRi intensive enamel White	12x0,3 g
CHRTIM	Enamel plus HRi intensive enamel Milky	12x0,3 g
CHRTIWS	Enamel plus HRi intens. enamel White Spot	12x0,3 g
CHRTUD0	Enamel plus HRi dentine UD0	12x0,3 g
CHRTUD0,5	Enamel plus HRi dentine UD0,5	12x0,3 g
CHRTUD1	Enamel plus HRi dentine UD1 (A1)	12x0,3 g
CHRTUD2	Enamel plus HRi dentine UD2 (A2)	12x0,3 g
CHRTUD3	Enamel plus HRi dentine UD3 (A3)	12x0,3 g
CHRTUD3,5	Enamel plus HRi dentine UD3,5 (A3,5)	12x0,3 g
CHRTUD4	Enamel plus HRi dentine UD4 (A4)	12x0,3 g
CHRTUD5	Enamel plus HRi dentine UD5	12x0,3 g
CHRTUD6	Enamel plus HRi dentine UD6	12x0,3 g
CHFTOA	Enamel plus opalescent enamel Amber	12x0,3 g
CHFTOBN	Enamel plus opal.enamel Blue Natural	12x0,3 g

● Function Enamel
 ● Universal Enamel
 ○ Intensive Enamel
 ● Dentine
 ● Opalescent Enamel

