
PHYSIOSTAR
NFC+
PERFECTED
BY MASTERS
Convincingly real.
BY CANDULOR

FORM 882

PHY

SIO

STAR

NFC+

Perfection begins where a tooth line feels as natural for the patient as his/her own teeth. Inspired by nature, we developed the PhysioStar design to create precisely this good feeling. PhysioStar looks deceptively real in the mouth due to natural shapes[3] and layering made of strong NFC+ material[5].

NATURAL-LOOKING SHAPES FOR A PERFECT REALITY.

Not too much and not too little.

After 10 years of PhysioStar we can state: it is not about an abundance of tooth shapes that is absolutely necessary – it is about the details to give patients their profile.

With 15 upper jaw shapes, whether Delicate, Vigorous, Universal or Individual, the characteristics of your patients can be personalized.

DELICATE GROUP 55

> delicate and naturally tapered shapes
> soft design of the contours
> juvenile incisal edge shape

UNIVERSAL GROUP 66

> greatest flexibility of use for all age groups
> versatile use with square centers and narrow posterior incisors

VIGOROUS GROUP 77

> powerful characteristics through vigorous shapes with their angular contours
> authentic abrasions at the incisal edges

15× PERFECTION

INDIVIDUAL GROUP 88

- natural and asymmetrical shapes
- can be used for all age groups
- unmistakable character through nested set-up

YOUR BENEFIT THROUGH A NATURAL VARIETY OF SHAPES

Patient
The PhysioStar gives patients back a natural appearance and their quality of life.

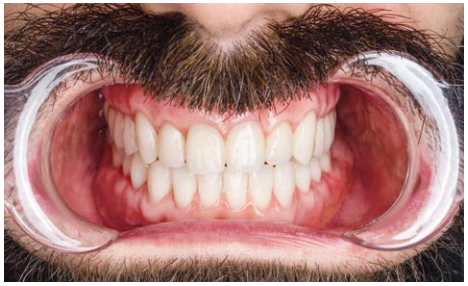
Dental technician
The tooth line with individuality for high-quality removable restorations made of NFC+[3].

Dentist
The opportunity of offering good esthetics and function for removable prosthetics[3].

WHEN ARTIFICIAL CAN NO LONGER BE DISTINGUISHED FROM THE REAL THING.

PhysioStar shapes in use.

CASE REPORTS



Case 1

Source: Pavel Kravets, Timur Vartanov

Case 2

Source: Prof. Inv. Dr. Jürgen Wahlmann

CONVINCING INDICATIONS WITH A NATURAL EFFECT.

Added value for the patient, laboratory and dental practice.

FULL DENTURES[6]

> primarily in tooth to tooth relationship
> lingualized (BC contacts)
> in full or bilateral balance

PARTIAL DENTURES[6]

> partial acrylic dentures
> model cast dentures
> removable constructions for combined dentures

HYBRID PROSTHETICS (PERIODONTAL, IMPLANT-SUPPORTED)[6]

> removable superstructures
> coverdenture/overdenture

Source: 1. Roman Wolf, 2. Walter Bracchi, 3. Erwin Eitler

ONE MATERIAL. MANY SPECIAL ASPECTS.

NanoFilledComposite⁺ – the basic element for the real-looking PhysioStar.

A SPECIAL FORMULA

NFC⁺ is a composite based on a urethane dimethyl acrylate matrix (UDMA matrix) composed of various types and sizes of fillers as well as PMMA clusters. This results in very good physical material properties, such as abrasion resistance[1] and strength[5].

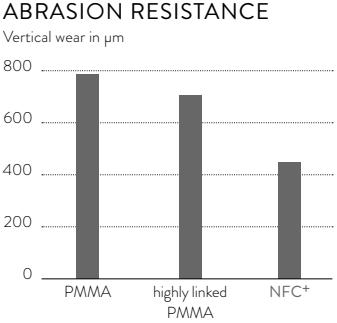
YOUR BENEFIT THROUGH THE NFC⁺ MATERIAL

Patient – Deceptively real, natural-looking[3] and durable teeth[1] [5] at an affordable price.
Dental technician – The alternative to brittle zirconium and classic dental ceramic solutions. Can be integrated and processed in the laboratory routine without additional efforts[6].
Dentist – Implementation of optimal long-term treatment approaches for esthetic partial and implant prosthetics[1] [5], which in addition are also easy to expand and repair[6].

THE BITE HEIGHT REMAINS FIXED

The greatest advantage of the NFC⁺ material is the very good abrasion resistance, which is significantly greater than that of previously used tooth materials by CANDULOR[1]. The abrasion-resistant NFC⁺ material was developed to counteract premature wear of teeth and the associated loss of dimension[1].

ABRASION RESISTANCE



STRENGTH

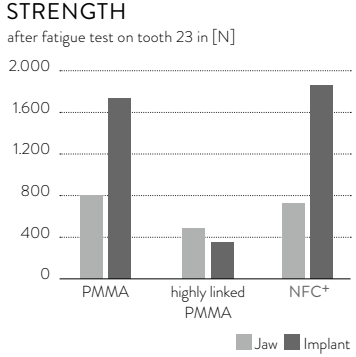
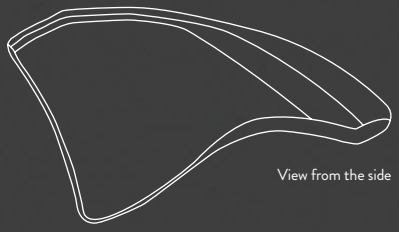
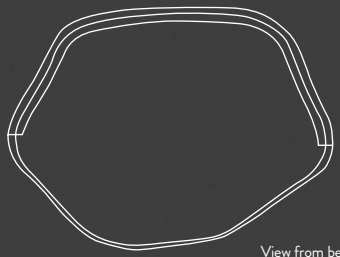


Fig. 1 / Source: Dr. Heintze F&E Ivoclar Schaan, Wary Willytec, 100,000 cycles, 3 kg load, 3 mm lateral stroke, without lifting, 1.2 Hz thermocycling (5° C/55° C)
Fig. 2 / Source: In vitro chipping tests University of Regensburg, chewing/chipping simulation on implants. Failure test at over 2 million cycles and a load of 50 N



View from the side



View from below

INDIVIDUAL ESTHETICS THROUGH LAYERING

A special 4-layer pattern typical for every individual tooth shape was developed for the PhysioStar. With the layering, close attention has been paid to give a natural and esthetic appearance[3]. The material is built-up in four layers, which guarantees colorfastness in the mouth and gives a particularly natural appearance[3].

THE PATIENT PROVIDES THE SOLUTION.

Setup concepts for every situation.

PHYSIOLOGICAL SETUP

The Bonartic II NFC+ meets esthetic-morphological demands. The occlusion morphology of the lower posterior teeth stands in relation to the condyle path. The inclination of the occlusional plane (Spee, Wilson) can be arranged individually and reliably with the Bonartic II NFC+[6]. It is the most important stabilizing element for every prosthetic restoration. The teeth were optimized in terms of a natural tooth to two-tooth relationship[2].

> Tooth to two-tooth relationship[2]
> ABC contacts – functional/balance-sided/centric[2]

BON
ARTIC II
NFC+

CONDYLOFORM II NFC+

SETUP ACCORDING TO PROF. DR. A. GERBER

Prof. Dr. A. Gerber established the functional relationship between the shapes of the temporomandibular joints and the occlusal surfaces and as a result, developed the Condyloform tooth on this basis. The modern Condyloform II NFC+ offers anatomically good occlusion design with age-adapted morphological and natural occlusal proportions and functional areas[6].

Also integrated is the mortar and pestle principle according to Prof. Dr. A. Gerber[6] which has proven itself for decades[8]. It enables autonomous chewing stability of each individual posterior tooth, as the upper palatal cusp occludes in the central fossa of its main antagonist[6]. Hereby the forces are transferred vertically via the prosthesis base and thus physiologically to the bony prosthesis bed.[6]

> Tooth to tooth relationship[6]
> Condyle theory according to Prof. Dr. A. Gerber[6]
> Lingualized occlusion[6]
> Joint-related guidance[6]
> Autonomous chewing stability[6]

[1] A. Latta, Evaluation of denture tooth materials, *Test Report*, Creighton University, 2009
[2] A. Ferilli, Zahntechnische Funktions Prüfung Bonartic II NFC Plus, *Test Report*, 2011
[3] J. Langner, Bericht NFC Frontzähne, *Zahntechnik Magazin*, 11, 9, 567–569, 2007
[5] M. Campillo, Fracture Strength of denture teeth, *Test Report*, University of New York at Buffalo, 2011
[6] M. Koller, Anwenderbericht Condyloform NFC Plus, *Test Report*, 2020
[8] H. H. Caesar, Die Ausbildung zum Zahntechniker, Band 5, *Verlag Neuer Merkur*, 1993

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