

2018

Product Catalogue

Das NANOPLANT HÖCHST Implantatsystem



CONTENTS

- 0 1** Nanoplant Höchst System

- 0 2** Implants' macro-design characteristics
Nanotechnological surface treatment of the implant intraosseous part
Abutments' macro-design characteristics

- 0 3** Universal implant, type NHI-1
Conical implant, type NHI-2
Cylindrical implant, type NHI-3
Implants set, type NHI-4
Gingiva-formers

- 0 4** Direct abutments 4.5
Direct abutments 5.0
Direct abutments 5.5
Angulated abutments 4.5
Angulated abutments 5.0
Angulated abutments 5.5

- 0 5** Spherical abutments NSKA
Spherical abutments NSKA-1
Spherical abutments NSKA-2
Impression taking transfer

- 0 6** Implants' laboratory analogues

- 0 7** Instruments

- 0 8** Sterilization set NHBG

NANOPLANT HÖCHST SYSTEM

The Nanoplant Höchst System represents a unified set of intraosseous screw implants, abutments and instruments. All the constituents thereof are developed on the advanced technologies, taking into account the accumulated experience of the long-standing practice of dental implantation, which has already become traditional.

Nanoplant Höchst is one of the first companies using nanotechnologies in the treatment of intraosseous surfaces of titanium implants, providing thus an optimal integration with bone tissue.

This system was created based on the special design of implants elaborated through computer simulation of the load distribution.

Thus, there was created a unique architecture of thread with a groove typical solely to Nanoplant Höchst, which allows decreasing compression of the bone and, consequently, ischemia thereof. Furthermore, a special thread form provides for a good initial implant fixation – this is the best guarantee of successful long-term results.

The developed implants' design is protected by Patent No. 000871884-0001.

The Nanoplant Höchst System is universal, making possible the usage of each of the numerous abutments with any System implant, notwithstanding the type and diameter thereof. Undoubtedly, such functionality facilitates significantly the corresponding prosthetics phase.

IMPLANTS' MACRO-DESIGN CHARACTERISTICS

1. A special expansive conical thread in the implant's lower third part can penetrate by screwing into the trabecula of the compact bone layer, providing thus a reliable macro-fixation and primary implant stabilization.

2. A triple micro-thread in the implant's cervical part creates the smoothest possible connection between the implant and the compact solid part of bone, preventing it from destruction.

3. Due to its conical form with self-cutting thread, the implant can easily screw into the bone, creating thus lateral condensation of the bone, which reinforces the implant fixation in the soft bone.

4. Due to special decompression groove, developed by us, it is possible not only to reduce the bone compression, but also to expand surface area of the implant's intraosseous part.

5. Due to its semicircular apical part, the implant can smoothly penetrate into the bone, lessening certain traumatism thereof.

6. Hexagon – is the most convenient and safe form of fixation amongst numerous forms of the implant connection with abutments. For safer fixation, the inner hexagon of Nanoplant Höchst implants has been extended.

7. When implant is inserted into the bone, some osseous chips are gathering in its lower part. Due to semicircular form of the knives' lower part, the pressure on osseous chips under the implant is evenly distributed. Thus, it ensures a reliable and uniform blood supply in the whole young bone, preventing it from necrosis and deterioration.

NHI-1



NHI-2



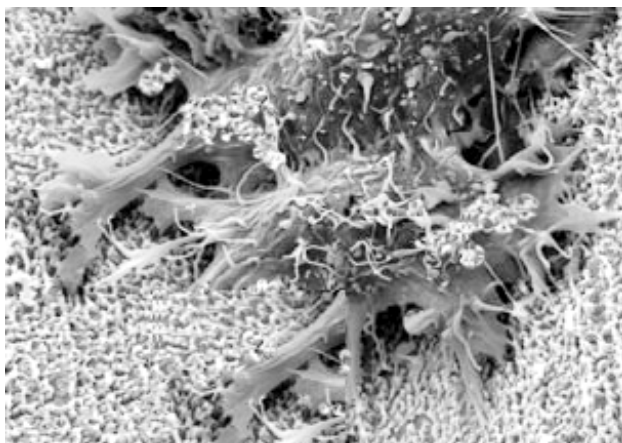
NHI-3



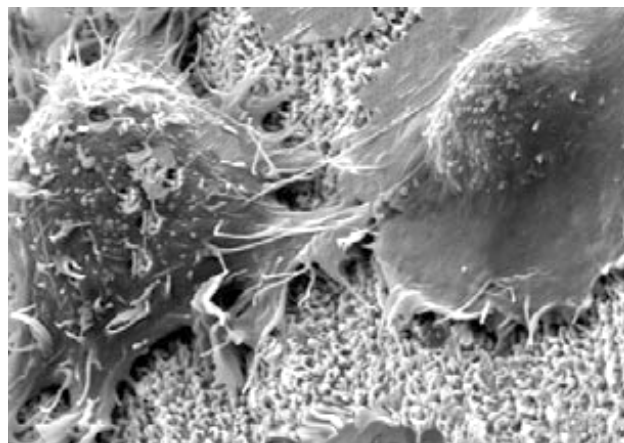
NANOTECHNOLOGICAL SURFACE TREATMENT OF THE IMPLANT INTRAOSSEOUS PART

Safe osseointegration and long-term reciprocal bioconnection between the bone and the integrated implant constitutes one of the most topical issues in dental implantology. By joint efforts of scientists and practitioners in different branches of science (medicine, physics, information technology, science of materials and others), there was developed a certain technology of applying nanoporous structure on the titanium implant surface.

The implant's nanostructured coating is very similar by construction to the collagenous bone structure; therefore osteoblastic cells penetrate easily into the implant's porous surface, providing thus a solid biomechanical connection. We're one of the first companies, who has developed and implemented a certain know-how technology of applying nanoporous layer on the titanium implant surface, i.e. a layer of certain structure and depth, which is mostly coherent with the collagenous bone structure.



Osteoblasts are deposited, making a fibrin layer, on the nanostructured surface of the Nanoplant Höchst implant, while their Filiaepodiae and Laminaepodiae extensions form low-differentiating and proliferating cells of bone formation.



Osteoblasts multiple contacts with nanosurface of the Nanoplant Höchst implant. Formation of new bone tissue towards the existing bone, including the commencement of blood vessels and marrowy space formation.

ABUTMENTS' MACRO-DESIGN CHARACTERISTICS



Compatibility

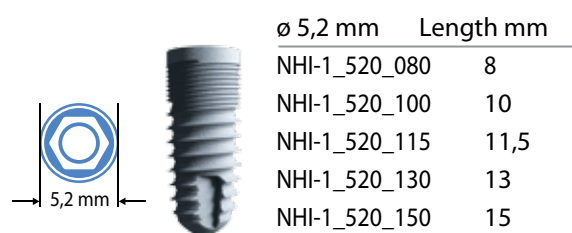
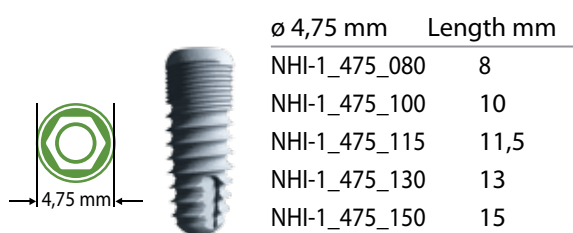
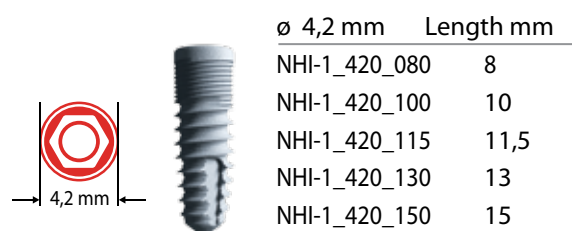
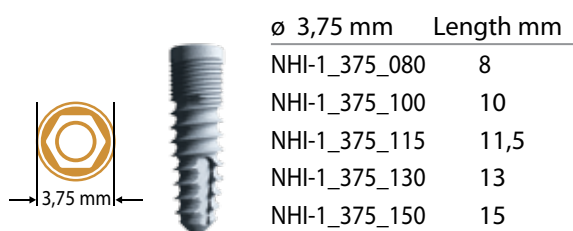
1. Many abutments, which differ in diameter, height, abutment inclination, and size of gingival part, are compatible with the inner hexagon platform of all implants in the aforementioned system.



Universal Plug Screw	Length mm
M-18	8

2. To facilitate certain positioning toward the implant, there are two options of the abutment body rotation to its hexagon: either to the hexagon angle or to the hexagon facet in the horizontal plane. Due to this, the maximum value of rotation angle makes 30 degrees.

UNIVERSAL IMPLANT, TYPE NHI-1



NHI-1

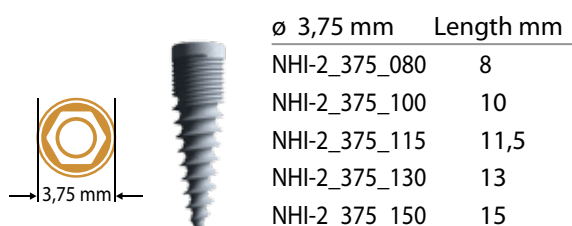
The set of universal implants NHI-1 is designed, manufactured and assembled to ensure a successful implantation and, based on the integrated implants, to form safe dental-orthopedic structures, taking into account a wide variety of bone, including anatomic and topographic features of the patients' upper and lower jaws. The implants NHI-1 are characterized by their low-grade conical design and self-cutting thread with groove. The implants NHI-1 are also distinguished through three types of thread and knife-edges distributed along the implant length. Due to the elaboration and implementation of such structure, the following issues were handled:

- less traumatic penetration and smooth osseointegration of the implant;
- expansion of the implant's direct contact area with the bone;
- increased density and stability of the connection between bone and implant;
- dispersal and more uniform distribution of occlusal pressure on the bone.

Undoubtedly, all these factors contribute to successful osseointegration and safe functioning of the dental and orthopedic structures based on the integrated implants. The technique of implant insertion shall comprise a sequence of the following operations:

- preliminary drilling of the bone with a thin pilot-drill. This process operation shall be performed either by using special conical drills or a set of cylindrical drills with expanding diameter and decreasing canal size, subject to the immersion of drill;
- insertion of implant into the prepared bone bed. This process operation shall be performed by means of applying a reusable detachable implant-driver.

CONICAL IMPLANT, TYPE NHI-2

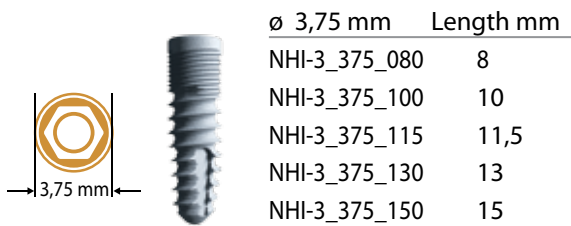


NHI-2

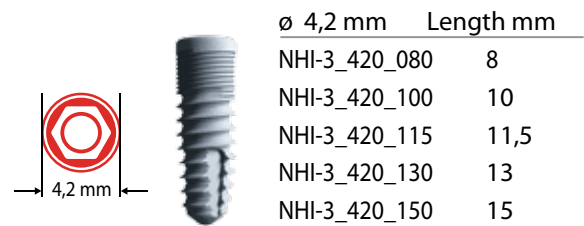
The set of conical implants NHI-2 is designed, manufactured and assembled for implantation into the soft, spongy bone of the upper jaw, refined parts of the lower jaw and narrow places between the roots of contiguous teeth. The implants NHI-2 are designed to provide a better coherence with commonly spread anatomical features and topographic characteristics of the upper jaw. The implants NHI-2 are distinguished through their pronounced conicity, self-cutting aggressive thread and sharp bayonet apex. Such structure contributes to lateral condensation of the bone and uniform load distribution in the densification of bone trabeculae. Thus successful osseointegration is provided and favorable conditions are created for the formation of reliable orthopedic structures on the spongy bone.

The inserting technique of NHI-2 implants shall comprise a preliminary preparation of the bone bed, followed by the process of implants screwing through the usage of proper thread and bayonet apex thereof. The bone bed shall be formed with drills of minor diameters. Drill diameters shall be selected, taking into account the bone density and the possibility of providing a reliable lateral bone condensation.

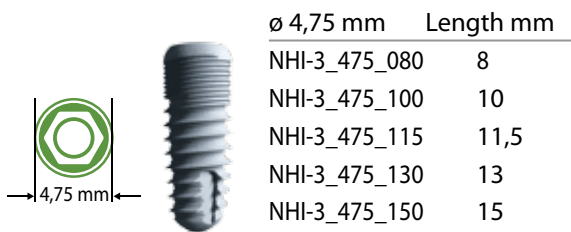
CYLINDRICAL IMPLANT, TYPE NHI-3



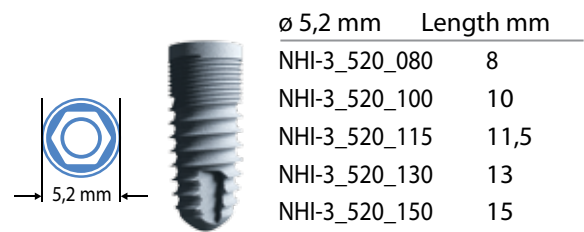
\varnothing 3,75 mm	Length mm
NHI-3_375_080	8
NHI-3_375_100	10
NHI-3_375_115	11,5
NHI-3_375_130	13
NHI-3_375_150	15



\varnothing 4,2 mm	Length mm
NHI-3_420_080	8
NHI-3_420_100	10
NHI-3_420_115	11,5
NHI-3_420_130	13
NHI-3_420_150	15



\varnothing 4,75 mm	Length mm
NHI-3_475_080	8
NHI-3_475_100	10
NHI-3_475_115	11,5
NHI-3_475_130	13
NHI-3_475_150	15



\varnothing 5,2 mm	Length mm
NHI-3_520_080	8
NHI-3_520_100	10
NHI-3_520_115	11,5
NHI-3_520_130	13
NHI-3_520_150	15



\varnothing 5,75 mm	Length mm
NHI-3_575_080	8
NHI-3_575_100	10
NHI-1_575_115	11,5
NHI-3_575_130	13
NHI-3_575_150	15

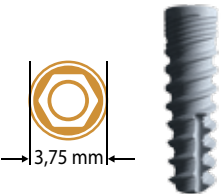
NHI-3

The set of self-cutting cylindrical implants NHI-3 are designed to form reliable implant-orthopedic structures on solid and hollow bones of the lower jaw and under sinus-lift conditions of the upper jaw. The set of implants NHI-3 has the following features:

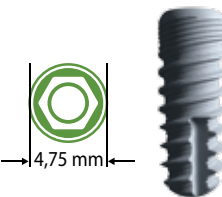
- medium-sized, low-grade atraumatic thread in lower 2/3 parts of the implant's body for smooth penetration and good connection between the implant and the bone;
- spherical form of apical part, which contributes to uniform distribution of load on the bone's bed bottom and on the osseous chips, as well as creates favorable conditions for implants' ossification;
- three special sockets distributed along the apical part with sharp knife-edges assigned to collect bone chips;
- cervical part executed as micro-thread with low-grade conicity.

Such structure prevents the resorption of the bone's marginal part and provides a better bilateral biomechanical connection in the implant's upper part. Thus, the totality of structural features intrinsic to the set of implants NHI-3 creates favorable conditions for successful osseointegration, as well as for the formation of safe orthopedic structures on solid and hollow bones of the lower jaw and sinus-lifts on the upper jaw. The technique of inserting implants NHI-3 shall comprise a preliminary creation of the bone bed by using cylindrical drills with a diameter close to the implant diameter.

IMPLANTS SET, TYPE NHI-4

	\varnothing 3,75 mm	Length mm
	NHI-4_375_080	8
	NHI-4_375_100	10
	NHI-4_375_115	11,5
	NHI-4_375_130	13
	NHI-4_375_150	15

	\varnothing 4,2 mm	Length mm
	NHI-4_420_080	8
	NHI-4_420_100	10
	NHI-4_420_115	11,5
	NHI-4_420_130	13
	NHI-4_420_150	15

	\varnothing 4,75 mm	Length mm
	NHI-4_475_080	8
	NHI-4_475_100	10
	NHI-4_475_115	11,5
	NHI-4_475_130	13
	NHI-4_475_150	15

	\varnothing 5,2 mm	Length mm
	NHI-4_520_080	8
	NHI-4_520_100	10
	NHI-4_520_115	11,5
	NHI-4_520_130	13
	NHI-4_520_150	15

	\varnothing 5,75 mm	Length mm
	NHI-4_575_080	8
	NHI-4_575_100	10
	NHI-4_575_115	11,5
	NHI-4_575_130	13
	NHI-4_575_150	15

NHI-4

The set of implants NHI-4 is designed for upper and lower jaws of patients in soft bone conditions. Therefore, the main technical requirement to the development of corresponding constructive forms was attaining the necessary level of the soft bone lateral condensation while inserting the implants and their subsequent osseointegration.

The set of implants NHI-4 is specifically distinguished through its three types of thread and knife-edges distributed along the implant length, as well as through its smooth cutting depression and concomitant increase in the width of cogs' cut in the direction of the implants' cervical part. Due to such structure, it is possible:

- to expand the implant's direct contact area with the soft bone;
- to ensure uniform lateral condensation of the soft bone, both in the implant's inter-thread and screw parts;
- to ensure dispersal and more uniform distribution of occlusal pressure on the bone, while inserting implants into the soft bone;

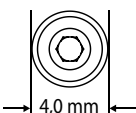

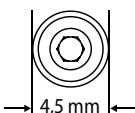

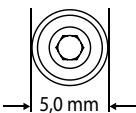

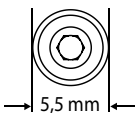

- to increase the density and solidity of biomechanical connection between the soft bone and the implant;
- to provide a less traumatic penetration and smooth osseointegration of the implant in the soft bone.

The totality of these factors intrinsic ensures a successful osseointegration and safe functioning of dental and orthopedic structures, based on the implants NHI-4 integrated into the soft bone. The technique of the bone bed preparation and implant insertion shall comprise a sequence of the following operations:

- preliminary drilling of the bone with a thin cylindrical pilot-drill;
- consequent drilling by means of cylindrical drills with expanding diameter and gradual decreasing of the depth of drilling;
- flattening the hole surface with the finishing drill completes the formation of the bone bed for implant.

Insertion of implant into the prepared bone bed shall be performed by means of a reusable detachable implant-driver.

GINGIVA-FORMERS SET

		GH: 4 mm	Length mm			GH: 4.50 mm	Length mm
		NHG_400_100	1			NHG_450_100	1
		NHG_400_200	2			NHG_450_200	2
		NHG_400_300	3			NHG_450_300	3
		NHG_400_400	4			NHG_450_400	4
		NHG_400_500	5			NHG_450_500	5
		NHG_400_600	6			NHG_450_600	6
		NHG_400_700	7			NHG_450_700	7
		GH: 5 mm	Length mm			GH: 5.50 mm	Length mm
		NHG_500_100	1			NHG_550_100	1
		NHG_500_200	2			NHG_550_200	2
		NHG_500_300	3			NHG_550_300	3
		NHG_500_400	4			NHG_550_400	4
		NHG_500_500	5			NHG_550_500	5
		NHG_500_600	6			NHG_550_600	6
		NHG_500_700	7			NHG_550_700	7

NHG 4.0, 4.5, 5.0, 5.5

The set of gingiva-formers comprises a wide variety of elements, taking into consideration the most common and known features of the patients' gingival structure.

At present, this set comprises 28 elements, which are characterized by a variety of design shapes, diameters and heights.

Simplicity, efficiency and convenience in the process of inserting or replacing elements, provides the possibility to choose the most appropriate to the patients' gingiva characteristics element.

The elements of the set are made of titanium.

DIRECT ABUTMENTS

The direct abutment consists of a direct abutment and a plug screw M-1,8.

This set of abutments comprises six varieties, which are identical in design, but different in the gingival part diameter: 4.5, 5.0 and 5.5 mm. The plug screw is universal.

The main constituents of abutment are the following:

- connecting and fixing hexagon;
- hexagon platform;
- gingival part in six height sizes: 1, 2, 3, 4, 5 and 6 mm;
- abutment body in three height sizes: 5, 7 and 10 mm

Peculiarities of abutments, which constitute the superstructure:

- suitability for a comprehensive connection with any type of NANOPLANT HÖCHST system implant;
- hexagon extended size provide a tight connection between the abutments and the implants, and the firm fixation of the abutment in the implant's body;
- three stopper grooves in the abutment's upper part is designed for safer anti-rotational fixation thereof with the prosthetic part.

The main constituents of the plug screw:

- leading cylinder in the lower part which facilitates the screw insertion and positioning in the implant's thread;
- thread segment;
- conical neck-seal, which ensures a firm and tight

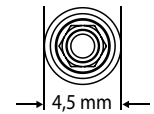



Universal Plug Screw	Length mm
M-18	5





DIRECT ABUTMENTS 4,5; 5,0


NSG 4.5





GH: 1 mm		Length mm
	NSG_450_00_100_050	5
	NSG_450_00_100_070	7
	NSG_450_00_100_100	10

GH: 2 mm		Length mm
	NSG_450_00_200_050	5
	NSG_450_00_200_070	7
	NSG_450_00_200_100	10

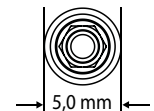
GH: 3 mm		Length mm
	NSG_450_00_300_050	5
	NSG_450_00_300_070	7
	NSG_450_00_300_100	10


GH: 4 mm		Length mm
	NSG_450_00_400_050	5
	NSG_450_00_400_070	7
	NSG_450_00_400_100	10


GH: 5 mm		Length mm
	NSG_450_00_500_050	5
	NSG_450_00_500_070	7
	NSG_450_00_500_100	10


GH: 6 mm		Length mm
	NSG_450_00_600_050	5
	NSG_450_00_600_070	7
	NSG_450_00_600_100	10


NSG 5.0





GH: 1 mm		Length mm
	NSG_500_00_100_050	5
	NSG_500_00_100_070	7
	NSG_500_00_100_100	10

GH: 2 mm		Length mm
	NSG_500_00_200_050	5
	NSG_500_00_200_070	7
	NSG_500_00_200_100	10

GH: 3 mm		Length mm
	NSG_500_00_300_050	5
	NSG_500_00_300_070	7
	NSG_500_00_300_100	10

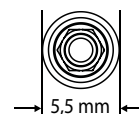
GH: 4 mm		Length mm
	NSG_500_00_400_050	5
	NSG_500_00_400_070	7
	NSG_500_00_400_100	10

GH: 5 mm		Length mm
	NSG_500_00_500_050	5
	NSG_500_00_500_070	7
	NSG_500_00_500_100	10

GH: 6 mm		Length mm
	NSG_500_00_600_050	5
	NSG_500_00_600_070	7
	NSG_500_00_600_100	10

DIRECT ABUTMENTS 5,5

NSG 5.5



GH: 1 mm	Length mm
NSG_550_00_100_050	5
NSG_450_00_100_070	7
NSG_450_00_100_100	10



GH: 2 mm	Length mm
NSG_550_00_200_050	5
NSG_450_00_200_070	7
NSG_450_00_200_100	10



GH: 3 mm	Length mm
NSG_550_00_300_050	5
NSG_450_00_300_070	7
NSG_450_00_300_100	10



GH: 4 mm	Length mm
NSG_550_00_400_050	5
NSG_450_00_400_070	7
NSG_450_00_400_100	10



GH: 5 mm	Length mm
NSG_550_00_500_050	5
NSG_450_00_500_070	7
NSG_450_00_500_100	10



GH: 6 mm	Length mm
NSG_550_00_600_050	5
NSG_450_00_600_070	7
NSG_450_00_600_100	10

ANGULATED ABUTMENTS

Angulated abutments shall be used, if the application of direct superstructure is impossible, difficult or unreasonable. Such situations include the following cases:

- anatomic and topographic features of the jaws, preventing parallel implants' installation and requiring one of the angulated abutments' application;
- all cases of impossible insertion of direct abutments or in cases of uncertainty of the safe functioning of orthopedic constructions based on such structures;
- when the insertion of a certain angulated superstructure ensures, to the fullest extent, the required aesthetics in the frontal dentition areas etc.

The set of angulated abutments, designed to satisfy the requirements to various prosthetics peculiarities, comprises a wide choice of abutments.

Due to this factor, it is possible to create superstructures with the following characteristics:

- hexagon platform diameters: 4.5, 5.0 and 5.5 mm;
- abutment vertical plane inclination: 15° and 25°;
- abutment horizontal plane rotation: $\pm 30^\circ$;
- abutment height from gingival part: 5, 7 and 10 mm;
- abutment gingival part height: 1, 2, 3, 4, 5 and 6 mm.

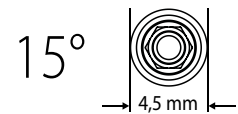


Universal Plug Screw	Length mm
M-18	5



ANGULATED ABUTMENTS 4,5

NSA 4.5



GH: 1 mm	Length mm
NSA_450_15_100_050	5
NSA_450_15_100_070	7
NSA_450_15_100_100	10



GH: 2 mm	Length mm
NSA_450_15_200_050	5
NSA_450_15_200_070	7
NSA_450_15_200_100	10



GH: 3 mm	Length mm
NSA_450_15_300_050	5
NSA_450_15_300_070	7
NSA_450_15_300_100	10



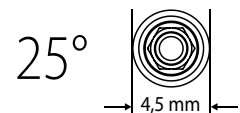
GH: 4 mm	Length mm
NSA_450_15_400_050	5
NSA_450_15_400_070	7
NSA_450_15_400_100	10



GH: 5 mm	Length mm
NSA_450_15_500_050	5
NSA_450_15_500_070	7
NSA_450_15_500_100	10



GH: 6 mm	Length mm
NSA_450_15_600_050	5
NSA_450_15_600_070	7
NSA_450_15_600_100	10



GH: 1 mm	Length mm
NSA_450_25_100_050	5
NSA_450_25_100_070	7
NSA_450_25_100_100	10



GH: 2 mm	Length mm
NSA_450_25_200_050	5
NSA_450_25_200_070	7
NSA_450_25_200_100	10



GH: 3 mm	Length mm
NSA_450_25_300_050	5
NSA_450_25_300_070	7
NSA_450_25_300_100	10



GH: 4 mm	Length mm
NSA_450_25_400_050	5
NSA_450_25_400_070	7
NSA_450_25_400_100	10



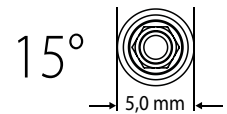
GH: 5 mm	Length mm
NSA_450_25_500_050	5
NSA_450_25_500_070	7
NSA_450_25_500_100	10



GH: 6 mm	Length mm
NSA_450_25_600_050	5
NSA_450_25_600_070	7
NSA_450_25_600_100	10

ANGULATED ABUTMENTS 5,0

NSA 5.0



GH: 1 mm	Length mm
NSA_500_15_100_050	5
NSA_500_15_100_070	7
NSA_500_15_100_100	10



GH: 2 mm	Length mm
NSA_500_15_200_050	5
NSA_500_15_200_070	7
NSA_500_15_200_100	10



GH: 3 mm	Length mm
NSA_500_15_300_050	5
NSA_500_15_300_070	7
NSA_500_15_300_100	10



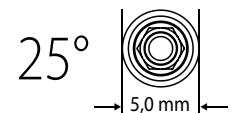
GH: 4 mm	Length mm
NSA_500_15_400_050	5
NSA_500_15_400_070	7
NSA_500_15_400_100	10



GH: 5 mm	Length mm
NSA_500_15_500_050	5
NSA_500_15_500_070	7
NSA_500_15_500_100	10



GH: 6 mm	Length mm
NSA_500_15_600_050	5
NSA_500_15_600_070	7
NSA_500_15_600_100	10



GH: 1 mm	Length mm
NSA_500_25_100_050	5
NSA_500_25_100_070	7
NSA_500_25_100_100	10



GH: 2 mm	Length mm
NSA_500_25_200_050	5
NSA_500_25_200_070	7
NSA_500_25_200_100	10



GH: 3 mm	Length mm
NSA_500_25_300_050	5
NSA_500_25_300_070	7
NSA_500_25_300_100	10



GH: 4 mm	Length mm
NSA_500_25_400_050	5
NSA_500_25_400_070	7
NSA_500_25_400_100	10



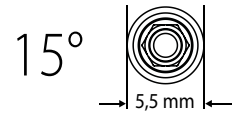
GH: 5 mm	Length mm
NSA_500_25_500_050	5
NSA_500_25_500_070	7
NSA_500_25_500_100	10



GH: 6 mm	Length mm
NSA_500_25_600_050	5
NSA_500_25_600_070	7
NSA_500_25_600_100	10

ANGULATED ABUTMENTS 5,5

NSA 5.5



GH: 1 mm	Length mm
NSA_550_15_100_050	5
NSA_550_15_100_070	7
NSA_550_15_100_100	10



GH: 2 mm	Length mm
NSA_550_15_200_050	5
NSA_550_15_200_070	7
NSA_550_15_200_100	10



GH: 3 mm	Length mm
NSA_550_15_300_050	5
NSA_550_15_300_070	7
NSA_550_15_300_100	10



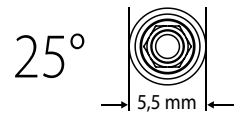
GH: 4 mm	Length mm
NSA_550_15_400_050	5
NSA_550_15_400_070	7
NSA_550_15_400_100	10



GH: 5 mm	Length mm
NSA_550_15_500_050	5
NSA_550_15_500_070	7
NSA_550_15_500_100	10



GH: 6 mm	Length mm
NSA_550_15_600_050	5
NSA_550_15_600_070	7
NSA_550_15_600_100	10



GH: 1 mm	Length mm
NSA_550_25_100_050	5
NSA_550_25_100_070	7
NSA_550_25_100_100	10



GH: 2 mm	Length mm
NSA_550_25_200_050	5
NSA_550_25_200_070	7
NSA_550_25_200_100	10



GH: 3 mm	Length mm
NSA_550_25_300_050	5
NSA_550_25_300_070	7
NSA_550_25_300_100	10



GH: 4 mm	Length mm
NSA_550_25_400_050	5
NSA_550_25_400_070	7
NSA_550_25_400_100	10



GH: 5 mm	Length mm
NSA_550_25_500_050	5
NSA_550_25_500_070	7
NSA_550_25_500_100	10



GH: 6 mm	Length mm
NSA_550_25_600_050	5
NSA_550_25_600_070	7
NSA_550_25_600_100	10

SPHERICAL ABUTMENTS NSKA

with detachable spherical connection for removable prosthetics



NSKAM_13



NSKAM_22_K NSKAG_22_K



NSKAM_11 NSKAM_12



NSKAM_21_G NSKAG_21_G



NSKA-1

The set of direct abutments NSKA with detachable spherical connection significantly extends the functional possibilities of Nanoplant Höchst System, as well as the range of patients, to whom certain implantation and prosthetics procedures based on this System can be indicated.

The set comprises 2 types of such abutments:

NSKA-1 abutment is designed for removable prosthetics based on the implants with loading, not earlier than 3 months for the lower jaw and not earlier than 6 months for the upper jaw;



NSKA-2

NSKA-2 abutment is designed for the mounting of the removable prostheses on the implants, ensuring the possibility of immediate loading of the prosthetic device after completion of the implantation procedure (on the same day).

SPHERICAL ABUTMENT NSKA-1



GH: 1 mm	Length mm
NSKA_1_400_050	0,50
NSKA_1_400_100	1,00
NSKA_1_400_200	2,00
NSKA_1_400_300	3,00
NSKA_1_400_400	4,00
NSKA_1_400_500	5,00
NSKA_1_400_600	6,00



GH: 1 mm	Length mm
NSKA_1_450_050	0,50
NSKA_1_450_100	1,00
NSKA_1_450_200	2,00
NSKA_1_450_300	3,00
NSKA_1_450_400	4,00
NSKA_1_450_500	5,00
NSKA_1_450_600	6,00



GH: 1 mm	Length mm
NSKA_1_500_050	0,50
NSKA_1_500_100	1,00
NSKA_1_500_200	2,00
NSKA_1_500_300	3,00
NSKA_1_500_400	4,00
NSKA_1_500_500	5,00
NSKA_1_500_600	6,00

NSKA - 1

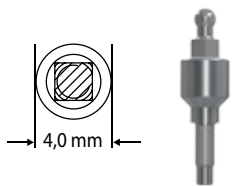
1. Connection and safe fixing of removable prostheses on the implants are provided by means of two abutments of this construction:

- Direct abutment with spherical head and neck. This abutment shall be inserted into the implant by means of internal hexagon at the butt of spherical head and a hexagon 1.25 mm wrench. This superstructure, hereinafter – patrix, constitutes the implant part of the detachable connection.
- Prosthetic abutment, hereinafter – matrix, represents a titanium case with a dense nylon cap pressed therein. NSKA-1 superstructures comprise different nylon caps of various densities. The titanium case is fixed firmly in the removable prosthesis.
- Safe functioning of the removable prosthetic construction based on NSKA-1 superstructure is provided by means of solid spherical interlock, of the nylon cap matrix with the patrix neck.

2. Main structural constituents of spherical abutments:

- 2.50 mm diameter spherical head with and a butt hexagon;
- Neck coupling with a nylon cap of prosthetic superstructure;
- Gingival part;
- Neck of direct superstructure within the implant;
- Thread segment;
- Leading cylinder.

SPHERICAL ABUTMENT NSKA-2

	GH: 1 mm	Length mm
	NSKA_2_400_050	0,50
	NSKA_2_400_100	1,00
	NSKA_2_400_200	2,00
	NSKA_2_400_300	3,00
	NSKA_2_400_400	4,00
	NSKA_2_400_500	5,00
	NSKA_2_400_600	6,00

	GH: 1 mm	Length mm
	NSKA_2_450_050	0,50
	NSKA_2_450_100	1,00
	NSKA_2_450_200	2,00
	NSKA_2_450_300	3,00
	NSKA_2_450_400	4,00
	NSKA_2_450_500	5,00
	NSKA_2_450_600	6,00

	GH: 1 mm	Length mm
	NSKA_2_500_050	0,50
	NSKA_2_500_100	1,00
	NSKA_2_500_200	2,00
	NSKA_2_500_300	3,00
	NSKA_2_500_400	4,00
	NSKA_2_500_500	5,00
	NSKA_2_500_600	6,00

NSKA - 2

1. Spherical abutment NSKA - 2 is designed to build removable prostheses on the implants, ensuring the possibility of immediate loading of the prosthetic device after completion of the implantation procedure (on the same day).

2. Connection and safe fixing of removable labile prostheses on the implants are provided by means of two abutments of the NSKA-2 superstructure:

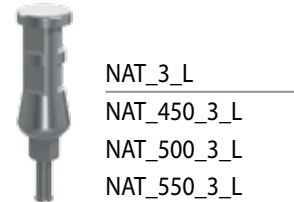
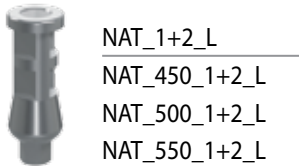
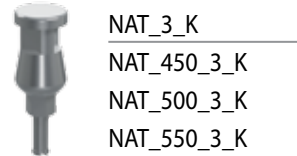
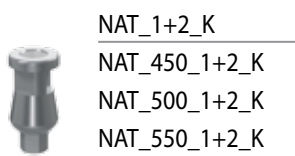
- Direct abutment with special spherical head and neck. This abutment, considered as patrix, constitutes the implant part of the detachable connection. The patrix shall be inserted into the implant by means of the specially assigned body square part under the neck.
- Prosthetic abutment – matrix, shall be considered as counterpart of the detachable connection. Structurally, such matrix represents a titanium case with a resilient rubber ring pressed therein. Superstructure NSKA-2 comprises rubber rings of various density and elasticity. The titanium case is firmly fixed in the removable prosthesis.

• Safe functioning of the removable prosthetic construction based on the NSKA-2 superstructures is provided by means of solid spherical interlock, of the rubber ring matrix with the patrix neck.

3. Main structural constituents of spherical abutments are the following:

- 1.8 mm diameter spherical head;
- Neck coupling with a resilient rubber ring of prosthetic abutment – matrix;
- Gingival part;
- Neck-seal of the spherical abutment within the implant;
- Thread segment;
- Leading cylinder

IMPRESSION TAKING TRANSFER




The Nanoplant Höchst System provides 2 types of impression taking transfers:

- monolithic transfer NAT-1+2 for open tray;
- monolithic transfer NAT-3 for closed tray.


To take impressions by means of monolithic transfer NAT-1+2 individual tray with perforation is used.

For more operative method of taking impressions with the help of monolithic transfer NAT-3 traditional closed tray is used.

IMPLANTS' LABORATORY ANALOGUES



NHIA_K	Ø mm
NAT_375_K	3,75
NAT_420_K	4,20
NAT_475_K	4,75
NAT_520_K	5,20
NAT_575_K	5,75



NHIA_L	Ø mm
NAT_375_L	3,75
NAT_420_L	4,20
NAT_475_L	4,75
NAT_520_L	5,20
NAT_575_L	5,75

The NANOPLANT HÖCHST System comprises 5 types of laboratory analogues imitating 5 different implants with the following diameters:

- Ø 3,75 mm,
- Ø 4,20 mm,
- Ø 4,75 mm,
- Ø 5,20 mm,
- Ø 5,75 mm.

INSTRUMENTS



NSD-125
NSD_125_L
NSD_125_M
NSD_125_K

NSD-125 wrench with 1.25 mm hexagon
The wrench is designated for the contra angle handpieces
Three dimensions: S, M, L.



NSDM-125
NSDM_125_L
NSDM_125_M
NSDM_125_K

NSDM-125 wrench with 1.25 mm hexagon
The wrench is designated for the manual installation of any implant of the NANOPLANT HÖSHST System.
Three dimensions: S, M, L.



NSKS-125
NSKS_125_L
NSKS_125_M
NSKS_125_K

NSKS-125 special wrench
The wrench is designated for the installing of the screw cap and abutments with 1.25mm hexagon.
Three dimensions: S, M, L.



NSKS-240
NSKS_240_L
NSKS_240_M
NSKS_240_K

NSKS-240 universal wrench with 2.40 mm hexagon
The wrench is designated for the implants' tightening by means of 4- or 6-sided ratchets.
Three dimensions: S, M, L.

NANOPLANT HÖCHST System comprises a large variety of instruments that can satisfy all known requirements of surgeons and orthopedists, making their work highly efficient.

Like all constituent parts of the NANOPLANT HÖCHST System, which are elaborated and manufactured by the innovative German company Nanoplant-Höchst GmbH, the instruments are characterized by:

- original constructive decisions;
- involving of the recent methods and means of computer simulation and construction;
- manufacturing of high-quality alloys.

The construction of the instruments is improving and their assortment within the NANOPLANT HÖCHST System is widening in line with the development of international dental implantology and practical needs thereof.

STERILIZATION SET NHBG

