

POLARIS

Dental Implant System 

GC, Dental Implant System



Finds the Way...

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Introducing the Implant Project

This company started a road plan of 'Manufacturing the Group of Dental Implant Products' in 2016 and localized the knowledge of manufacturing this product with the help of the educational and scientific elites and transferred technology from the top companies in the world. The company exploited this localized plan in the field of health industry in 2016 through exploiting the world's most advanced equipment and number one European raw materials and by supplying the specialized installations and infrastructure equipment, implementing international dynamic and technical standards and through effective cooperation with the accredited international universities and international reference laboratories. The company's portfolio includes a broad spectrum of the group-of-equipment and materials in the field-of-dentistry and dental prosthetics. It will be improved by introducing this new product and the company will get standing a head in its main goal, which is supplying the dental technology and commodity requirements to its customers.

Dental implant surgery has emerged as a highly effective and reliable solution for replacing the roots of missing natural teeth, with success rates exceeding 95% over 10 years in clinical studies. This proven track record has led to a significant increase in the adoption of implantology worldwide, making it the gold standard for tooth replacement.

The success of an implant system depends on several critical factors, including the design of the implant's internal surface, the type of connection, the coating technology, the range of prosthetic components, and the precision of the surgical fit. Now, we provide a detailed overview of the **Implant 300** system, a comprehensive and innovative solution designed to meet the highest standards in dental implantology ensuring optimal outcomes for both clinicians and patients.



Standards



ISO 1093

ISO 10361

ISO 12308

Cellular Response

MTT/MTS, Adhesion test,
ALP Gene Expression,
Cell Differentiation, Protein

Stiffness

ISO 11607

ISO 11137

ISO 11757

FDS/DM/Confocal

ISO 21873

Raw Material

ASTM F62, F136, F75

Mechanical Tests

ISO 14801

ISO 18158

Biological Evaluation

ISO 10993-1,12,16,17

ISO 11757

Clean-Room Class 7.5

ISO 14644-1,2,3,4,5

Medicinal Product Test

ISO 4287

ISO 19400



REGULAR

Connection:
Double-Morse T[®]
Hex: 2.5
M2 Thread

Efficient Switching

• Bone level **↑** restored

- **Double-Contour** design with **Optimized Crest** | Bone Preservation
- **Soft Tissue Seal** **↑**
- **Constant Emergence Profile** **↑**

Stability

- **High Torque** design
- **Anti-rotational** design using **vertical** | **horizontal** | **angular** | **rigid** | **flexible** | **designs**
- **Constant torque**

Cutting Edge

- **Micro-ripples**
- **Smooth T[®]**

Our portfolio includes implants in Morse and Regular lines, with the Regular line also featuring short implants for versatile clinical applications. Additionally, a Wide Type will soon be introduced, maintaining the same connection type as the Regular Type for consistency and ease-of-use. The Morse Type features a 1.7mm hex, while the Regular Type is designed with a 2.5mm hex, ensuring precision and adaptability for a wide range of clinical scenarios.

NARROW

Connection:
 Morse IT[®]
 Hole: 1.7
 M1.4 Thread

Coronal

- Wide, beveled tapered coronal
- Easy thread engagement
- Coated stem: PEEK for 4 mm
- Tapered stem: 1.7 mm

Straight Body

Tapered Apex

- Provides a high primary
- Good long-term stability

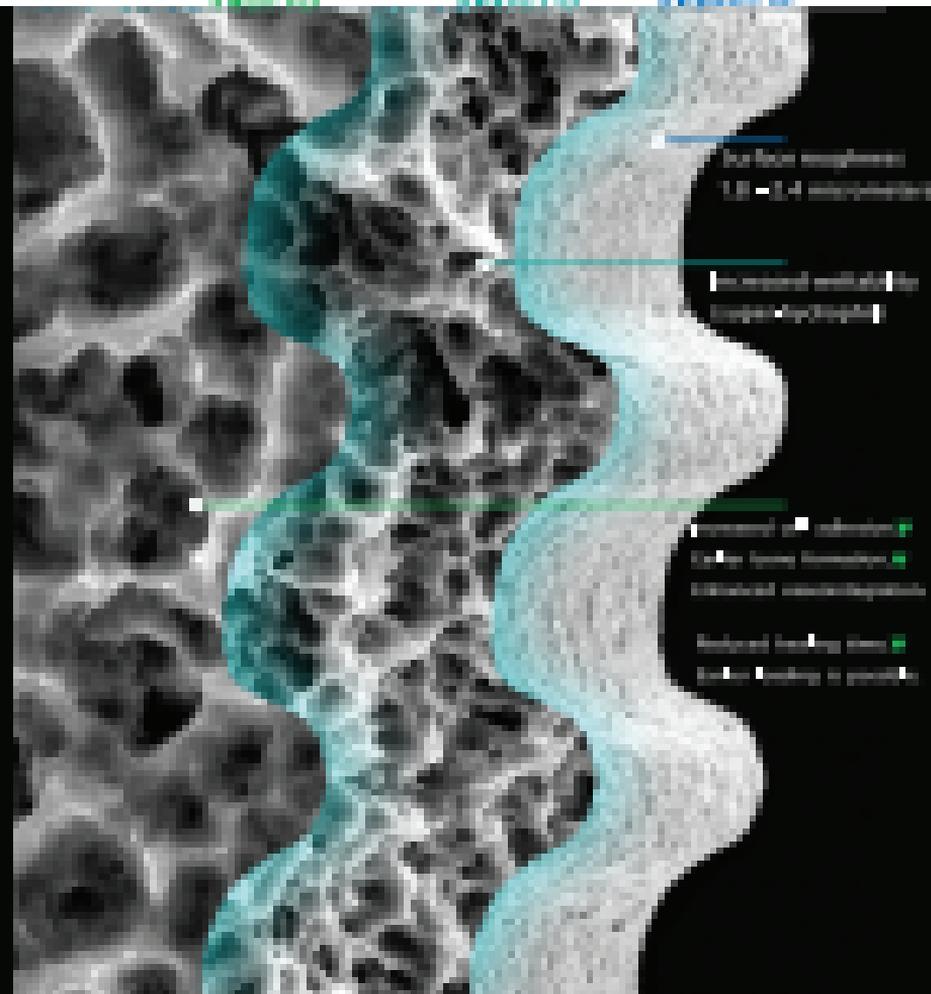


To complement our implant systems, we offer a comprehensive range of prosthetic components designed around various clinical needs. Our portfolio includes standard prosthetic parts, digital solutions for streamlined workflows, and customized treatments tailored to individual patient anatomy for optimal aesthetics and functionality.

Nano

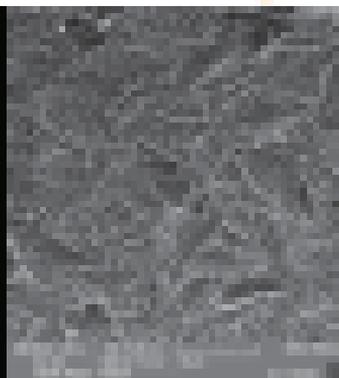
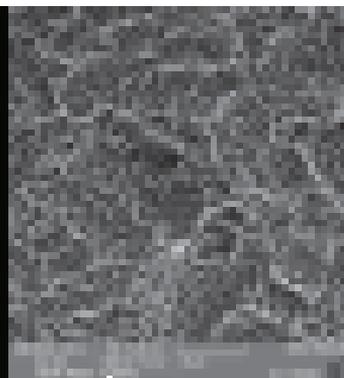
Micro

Macro

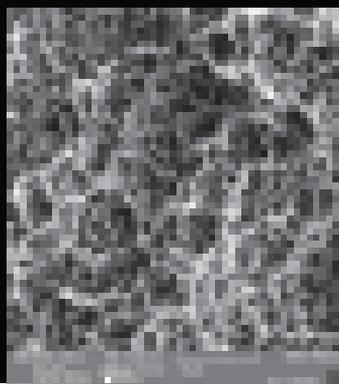
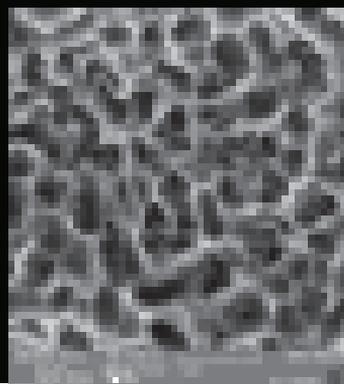


SLURRY CAST

1. Initial • 2. Argon • 3. Anneal



What we are looking to show the manufacturer's accepted surface SLA surface is different across areas. It is about proper morphology for the rest of positioning. The morphology will be able to show the effect of sanding, roughing, and polishing where the pure effect of chemical treatment. Most of the SLA brands around in industry are following this process to create the following results.

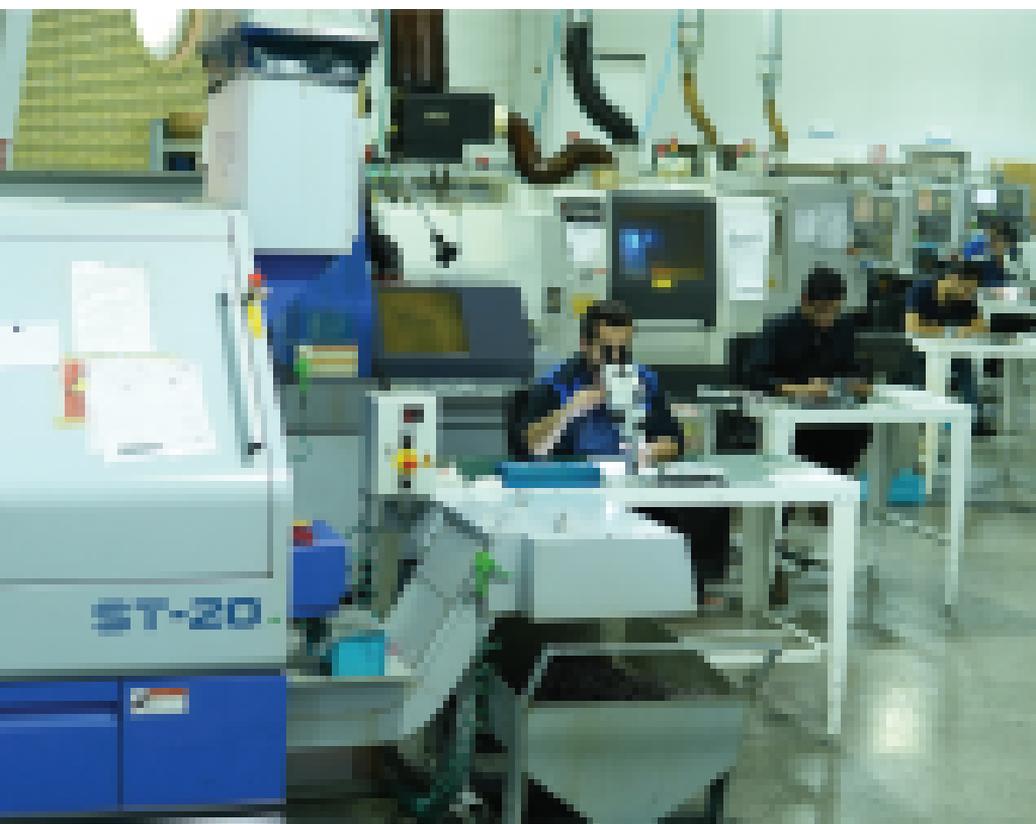


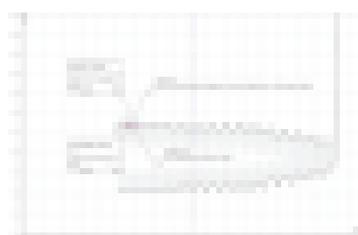
State-of-the-Art Manufacturing Infrastructure

Produce. Innovate. Grow.

At **ITW**, we build everything that's crafted with advanced CNC technology, robotic surface treatment, and ISO-class precision standards.

Where does most perfection — **it's being made** — take, tested and made.





Surface Analysis Results

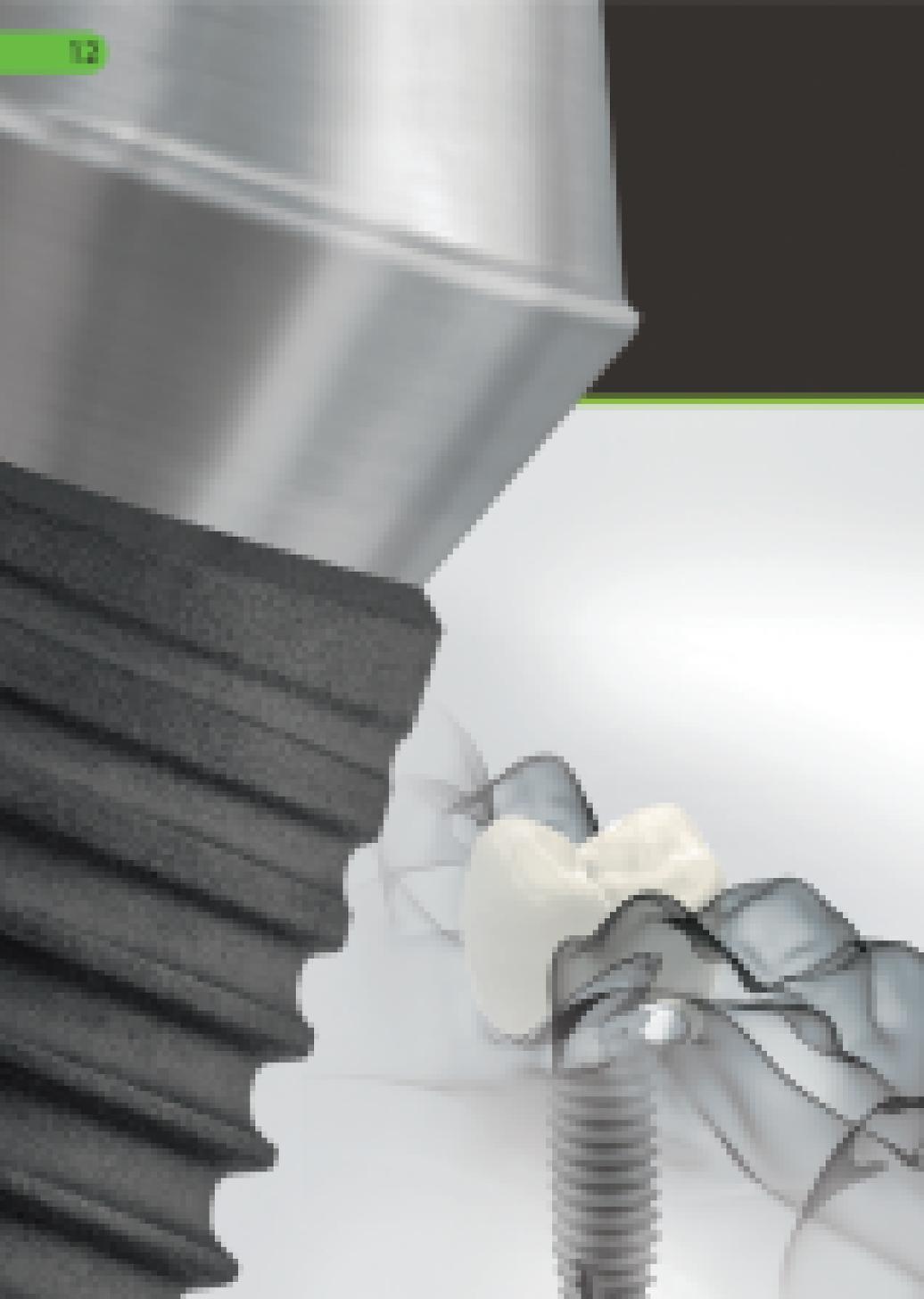
The porous structure imparts large surface area and provides chemical properties, such as porosity. The physical properties, such as surface texture, shape, roughness, hydrophilicity and mechanical strength, create the right cell attachment location and microenvironment for cell colonization.

From the chemical composition viewpoint, the scaffold material must exhibit high biocompatibility and corrosion resistance to prevent adverse reactions in the biological environment.

Most importantly, the cell response to the scaffold is dictated by surface characteristics and nature composition. It is a good idea to incorporate various cells and biomolecules into the scaffold by utilizing diverse strategies using the tools of SEM, XPS, etc. Moreover, cell-cell differentiation tests are more complex than cell-cell proliferation tests demonstrating the cell proliferation.

SEM MAG: 2.00Kx





Packaging & Labeling

- Double-Sealing
- Including Initiator Capsule & Filter Paper
- On-site-activated Sterilization



-  Lot number
-  Reference code
-  Sterilization symbol

 No children supply kit

 For single use only

 Read instruction carefully

 Temperature sensitive

 Keep away from heat

 Keep away from water

 Recyclable



- ▶ Always open the package to release the air from the capsule.

BLP Implant

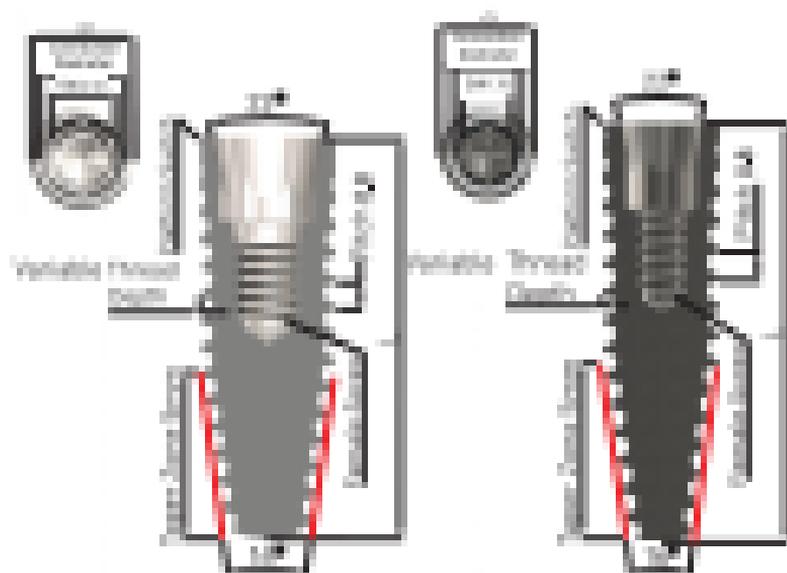


Wisely Chosen, Simply Done...

Fixture Diameter

Fixture Length	Nominal		High Precision			
	g1.0	g1.5	g0.7	g4.0	g4.5	g0.5
L1.0					☒	☒
L2.0		☒	☒	☒	☒	☒
L3.0	☒	☒	☒	☒	☒	☒
L4.0	☒	☒	☒	☒	☒	☒
L5.0	☒	☒	☒	☒	☒	☒

☒ Drawing Code







Prosthetics & Auxiliaries



wisely chosen, simply done...

Cover Screw

Polymethylmethacrylate
Resin Implants



Indicated for Bonelevel Management

- Soften Resin
- Pre-attach the Resin
- Use the Thread

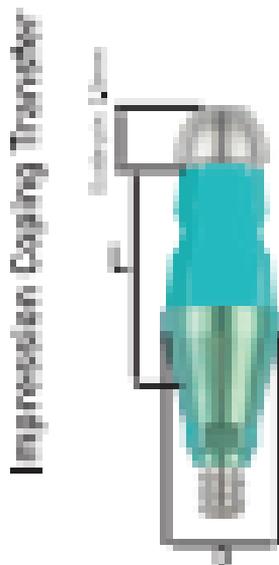
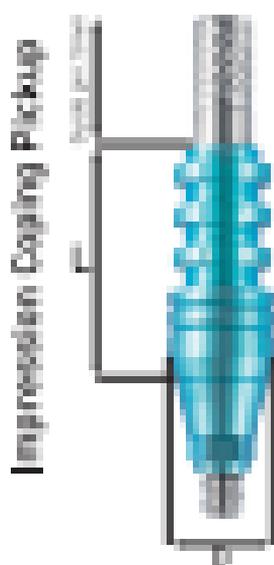
Healing Abutment

Polymethylmethacrylate
Resin or Resin II Resin

① Narrow

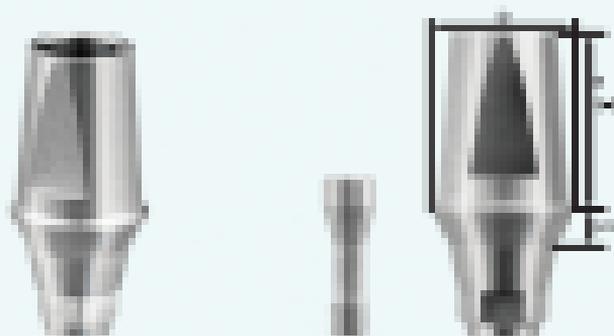
② Regular





Type		Diameter	Length	Ref.
Regular Line				
Coping	Short	4.0	71.0	ICPS 4010
		5.0	71.0	ICPS 5010
	Long	4.0	91.0	ICPS 4020
		5.0	91.0	ICPS 5020
Transfer	Short	4.0	61.0	ICTS 4010
		5.0	61.0	ICTS 5010
	Long	4.0	81.0	ICTL 4010
		5.0	81.0	ICTL 5010
Reverse Line				
Pickup	Short	4.0	71.0	ICPS 4010R
	Long	4.0	91.0	ICPS 4020R
Transfer	Short	4.0	61.0	ICTS 4010R
	Long	4.0	81.0	ICPS 4020R

Height Adjustment Constantly

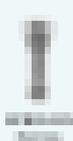


Recommended Spinning Torque (N·m)

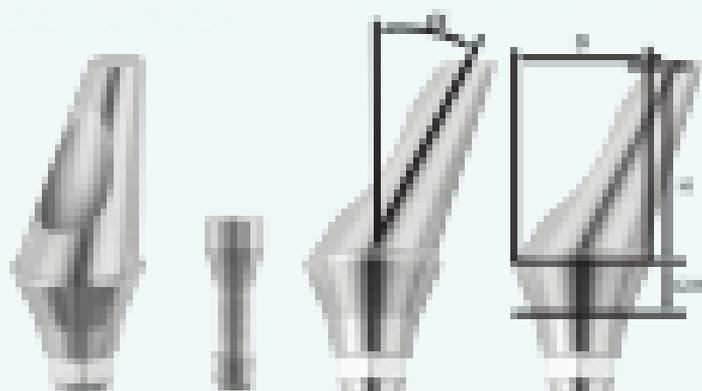
Tool	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
HT-121	12	2000000	2000000	2000000	2000000	2000000
HT-124	12	2000000	2000000	2000000	2000000	2000000
HT-121	12	2000000	2000000	2000000	2000000	2000000
HT-124	12	2000000	2000000	2000000	2000000	2000000
HT-121	12	2000000	2000000	2000000	2000000	2000000
HT-124	12	2000000	2000000	2000000	2000000	2000000

Recommended Spinning Torque (N·m)

Tool	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
HT-12	12	2000000	2000000	2000000	2000000	2000000
HT-12	12	2000000	2000000	2000000	2000000	2000000
HT-12	12	2000000	2000000	2000000	2000000	2000000
HT-12	12	2000000	2000000	2000000	2000000	2000000
HT-12	12	2000000	2000000	2000000	2000000	2000000
HT-12	12	2000000	2000000	2000000	2000000	2000000
HT-12	12	2000000	2000000	2000000	2000000	2000000



Angled Abutment Cementable



Recomendaciones de longitud de DTH's

DTH's	Color	DTH's			
		10	12	14	16
04-10	Orange	10	12	14	16
04-12	Orange	12	14	16	18

Recomendaciones de longitud de DTH's

DTH's	Color	DTH's			
		10	12	14	16
04-10	Green	10	12	14	16
04-12	Green	12	14	16	18
04-14	Green	14	16	18	20
04-16	Green	16	18	20	22
04-18	Green	18	20	22	24
04-20	Green	20	22	24	26



DTH's 10

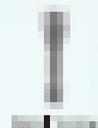
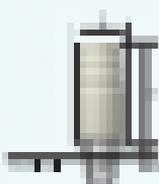


DTH's 16

UCLA Mounting

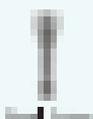
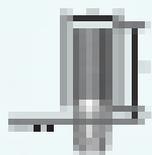
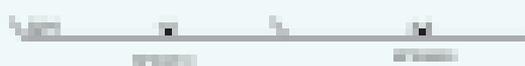


GEAR SIDE SHAFT SIDE



GEAR SIDE PIN SIDE

Temporary Mounting

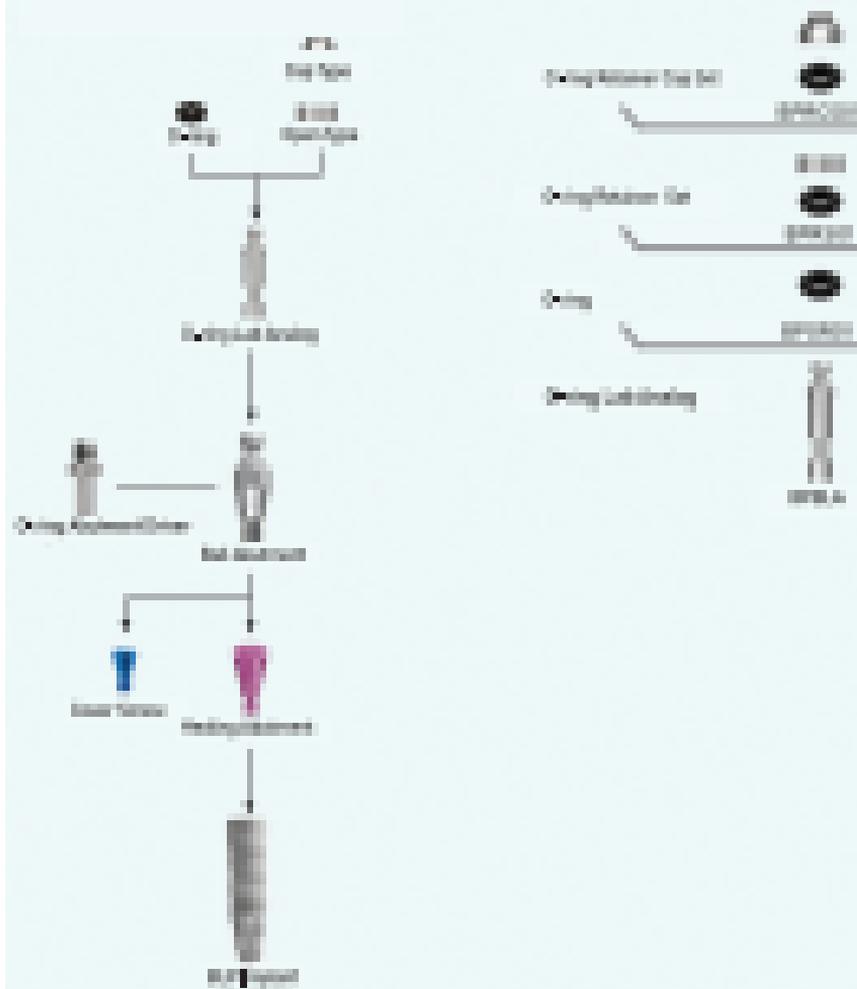


Ball Mounting

Supports 1000g (22lb) max



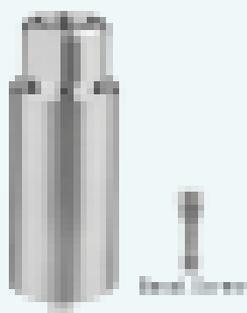
Prosthetic Diagram Full Adjustment Overview



Pre-Milled Abutment

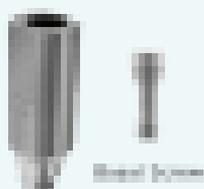
Model	System	Abutment	Ref. Code
Acute	Waxless	10	09940010
Acute	Waxless	12	09940012
Acute	Waxless	16	09940016

Model	System	Abutment	Ref. Code
Acute	Regular	10	09940010
Acute	Regular	12	09940012
Acute	Regular	16	09940016



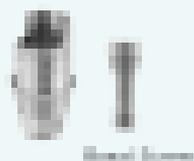
Scan Body

Model	System	Ref. Code
Acute	Waxless	09940010
Acute	Regular	09940010



Ti Base

Model	System	Ref. Code
Wax	Waxless	09940010
Wax	Regular	09940010





Polaris Surgical Kit



BLT Drill

Hardening with **60** Rockwell

Sharp drill with **1/4** Flutes

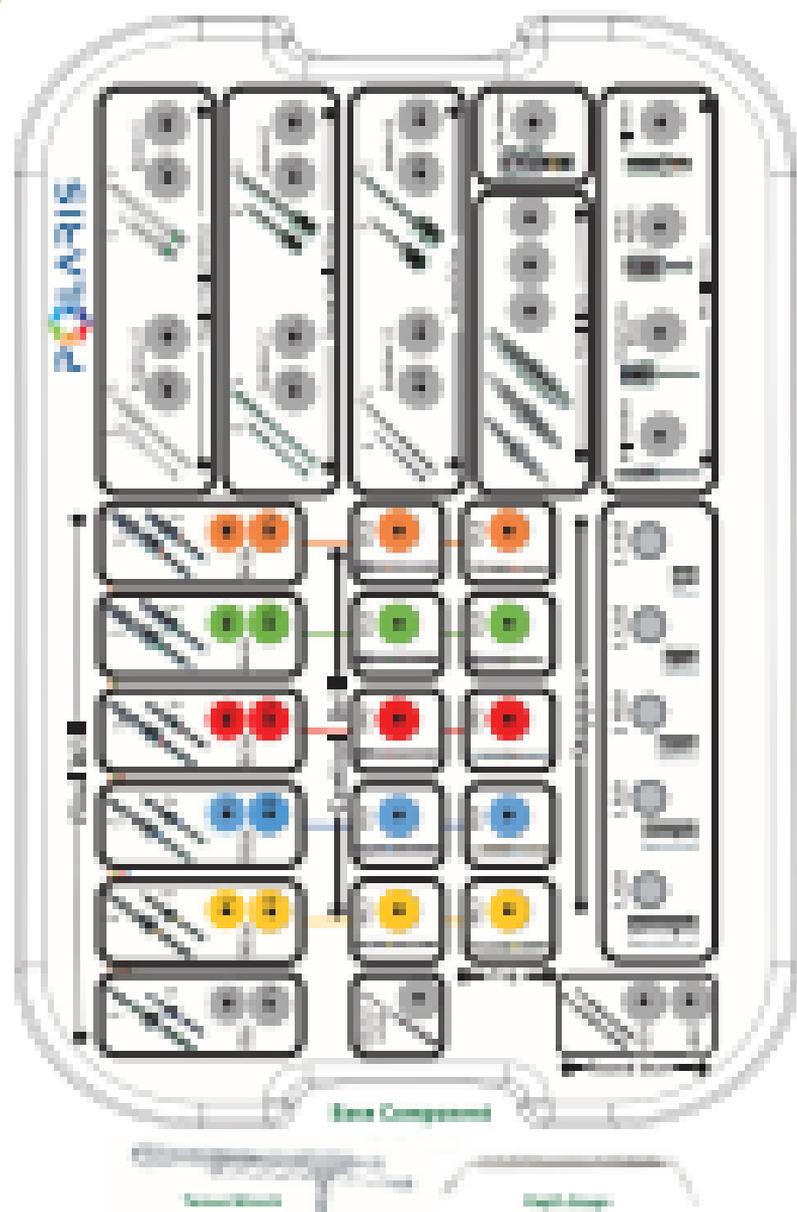
Coated with **4** TiN

Use Length up to **200** mm

Best collection property



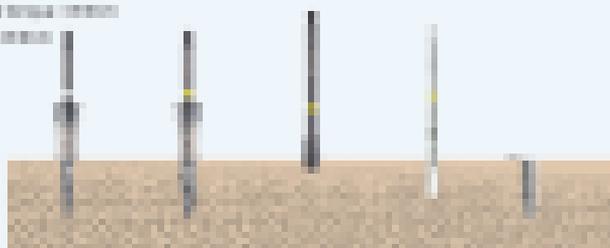




Booth | Procedures

• **Booth | Standard 1000 Series**

• **Booth | Standard 1000 Series**



Room 1000 Series

Room 1000 Series

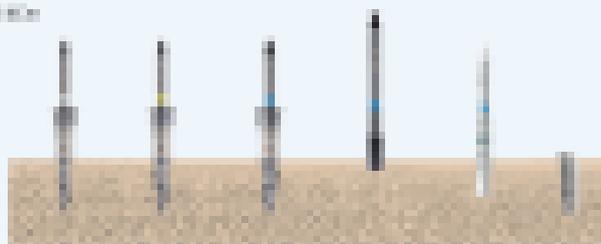
Room 1000 Series

Room 1000 Series



• **Booth | Standard 1000 Series**

• **Booth | Standard 1000 Series**



Room 1000 Series

Room 1000 Series

Room 1000 Series

Room 1000 Series



