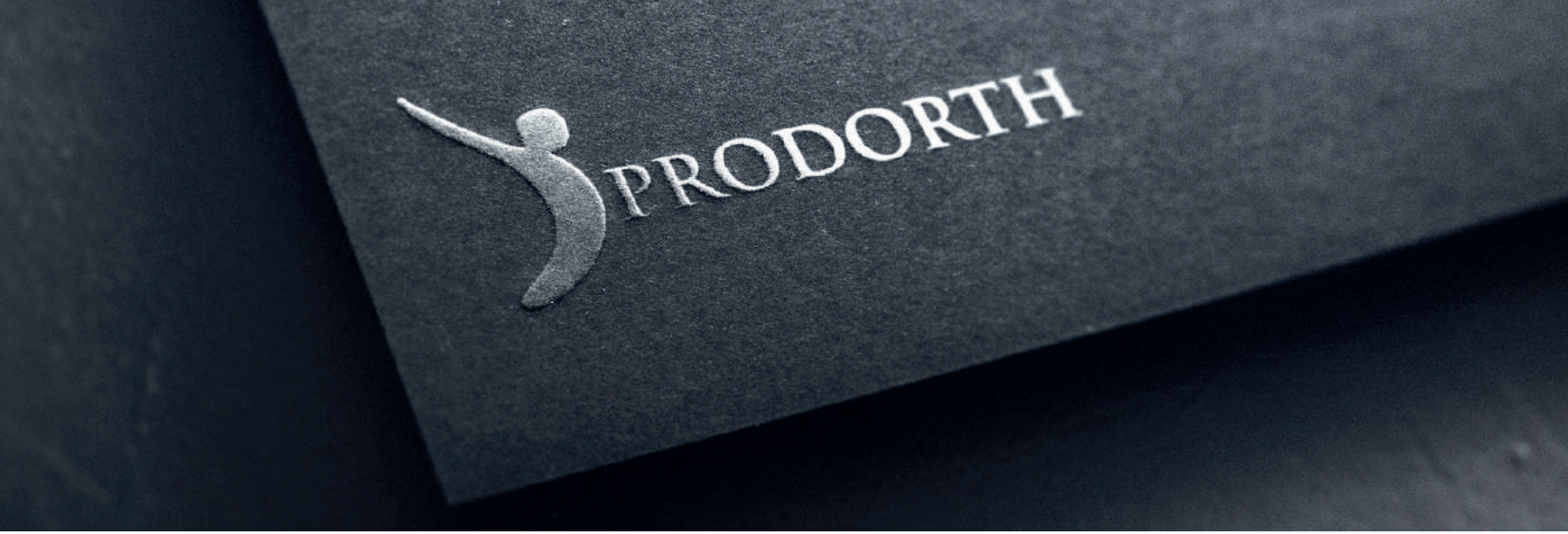
PRODORTH

SPINE PRODUCTS

SPINE PRODUCTS

CONTENTS

“High Quality and innovation are the first details you will notice about Prodorth products.



About Us

RD Medical is dedicated to provide the best spinal implants & instruments to the market as it's founded and supported by mechanical and materials engineers who are experienced in the fields of both designing and manufacturing, as well as by the consultancy of clinical experts.

We always follow new approaches and develop advanced methods to accommodate our products with the top notch technologies of the field in order to guarantee the satisfaction and approval of surgeons. Therefore, research and development are major factors in our dynamic organization which requires our involvement in interdisciplinary studies. We also conducted meticulous researches to improve our products based on multiple experiences of attending surgical operations.

We always see the great results of integrating advanced scientific methods and clinically driven ideas to guarantee better health recovery experience.

Since the establishment of RD Medical, communication and service quality have been significantly improved with distributors.

Our mission

Providing innovative, detailed oriented products which contribute to the success of surgical operations and proved to be satisfactory to surgeons along with its effect on reducing the healing time of patients.

We guarantee the continuity of the excellence of our products through working with a dynamic and experienced engineering team to satisfy the need of high-quality products and fast supply in the sector.

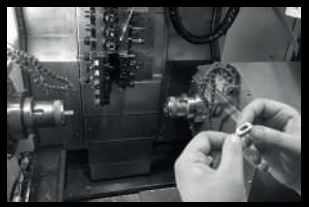
We respect the know-how and appreciate its value.

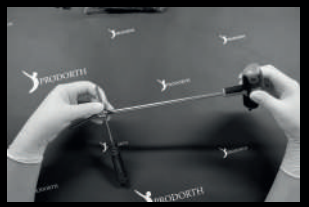
Our vision

We aim to provide our service to the worldwide medical sector and gain an international recognition of Prodorth brand as one of the major spinal implant & instruments supplier with the determination to enlarge our product line to accommodate the ever-rising need of the medical sector.

Some of Prodorth products are pending for patent and we are always excited to follow up the cutting edge technologies which lead us for the best solutions for our customers.

RD Medical Inc.

Quality Management

In our opinion, "A sustainable quality mentality" is the most critical fact for the permanency of a company. The main approach of RD MEDICAL is to maintain high quality products for the long run, an approach which aims at earning trust and building loyalty with our customers who we aim to serve for the long term.

All our manufacturing processes are followed up and managed in accordance with the medical device directive 93/42/EEC, ISO 13485:2016 and CE standards. At the same time, the transition to the 2017/745/EC Medical Device Regulation (MDR) is in progress.

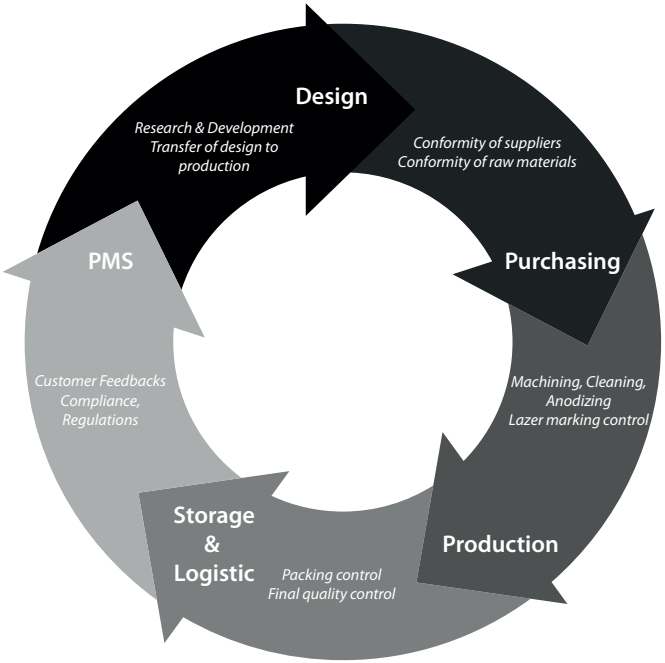
Instead of using these certificates just as keys for trade, we prefer managing our business according the requirements of these systems. ISO 13485:2016 Quality Management System is efficiently adapted on the organization of RD Medical and provides a 100% traceability from initial to final product.

Our main task with respect to Quality Management is ensuring a complete control in a reliable and continuous production quality with machining, polishing, washing, color anodizing and laser marking units within our organization.

Biomechanical and biocompatibility tests were performed in accordance with ASTM and ISO standards which are required to launch our products to the market reliably, in addition all Prodorth products are firstly used by our surgeons and only launched to market after the successful clinical outcomes are obtained.

RD Medical has identified the problems during surgical operations and contacted surgeons on this issue. These feedbacks and internal discussions, analysis and wide researches provide new approaches which leads to new ideas.

Research and development to offer the innovative solutions will be always the priority of RD Medical to which "R&D" initials were adopted.



CE 2292

ISO 13485:2016

CERTIFICATES

All our manufacturing processes are followed up and managed inaccordance with the medical device directive 93/42/EEC and a well-established ISO 13485:2016 system. At the same time, the transition to the 2017/745/EC Medical Device Regulation (MDR) is in progress.

CE CERTIFICATE

ISO13485:2016
INSTRUMENTS

ISO13485:2016
IMPLANTS

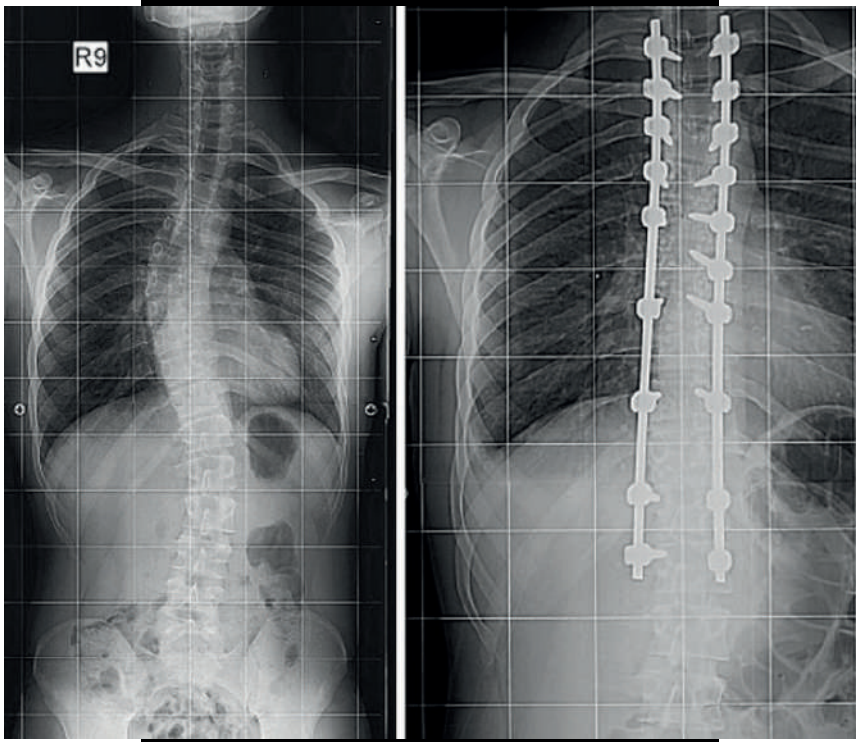
FSC
INSTRUMENTS

FSC
IMPLANTS

PRODORTH
TRADEMARK

S33+
TRADEMARK

PRD+
TRADEMARK



Customer Satisfaction

Prodorth began its journey with the principle of "Human First" and always proceed in this way.

Knowledge combined with technology and innovator approach...

"Customer Satisfaction" is not just a catch phrase for us as we aim at maintaining long term relationships with our customers.

Therefore, we are highly aware that we have to provide a perfect after-sale services. In our opinion high quality should not be a privilege, but rather a standard in medical industry, hence we are always keen on following up the latest technologies and keep on investing in our technical staff in order to keep the level of our products' quality intact.

RD Medical Inc.

Brand Awareness

Providing innovative, detailed oriented products which contribute to the success of surgical operations and proved to be satisfactory to surgeons along with its effect on reducing the healing time of patients.

We guarantee the continuity of the excellence of our products through working with a dynamic and experienced engineering team to satisfy the need of high-quality products and fast supply in the sector. We respect the know-how and appreciate its value.

EURO SPINE MEDICA


PRODORTH


PRODORTH


PRODORTH

Teams

RD MEDICAL was established by engineers and this basement always provide a vision such as motivating our employees to improve the capability of technical approach. Our staff are consisted of mechanical and materials engineers (planning & production), technicians, qualified researchers and well-trained operators.

Distributorship

One of the initial goals of Prodorth is supplying highest quality implants with the finest conditions to our customers. Therefore we pay a great attention to our products, a policy which stems from our belief that all people deserve to receive a top-notch healthcare.

Thus we always aim to provide an excellent service to our customers as we are keen to establish a long term relationship with them.

Prodorth services are available in various locations worldwide. Agents and distributors' information is kept confidential with us. For further information please don't hesitate to contact us.

Our customer service will be happy to answer all your queries.

Distribution details;

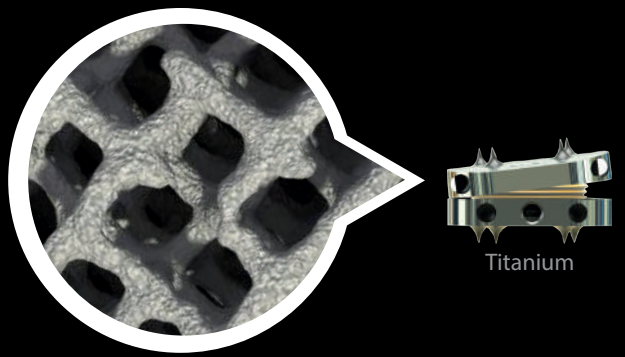
- Distribution zone
- Discount rates
- Training with your staff and technical support
- Contents of our goods
- Distribution contract

Products & Raw Materials

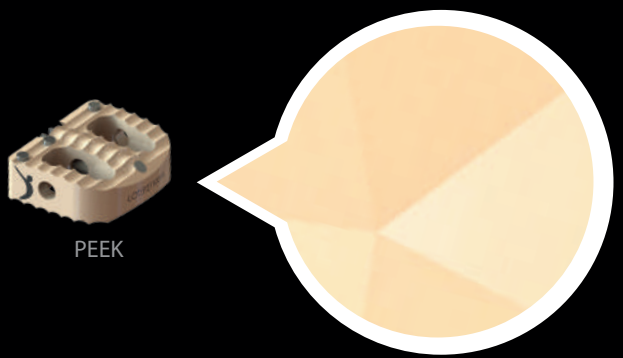
Material selection is one of the most important point for implants. Titanium Alloy (Ti6Al4V-Grade 5 / ISO 5832-3 / ASTM F136) and PEEK (Polyether-ether-kethon / ASTM F2026) are used as raw materials for all Prodorth products and these are all originated from EU and USA. Both material are biocompatible and adequate for long term use (C = Permanent (> 30 days)).

PEEK material is a remarkable raw material with its unique properties;

- Biocompatible
- It does not cause any lesional problems
- Has elastical and hardness features near to bone tissue
- Titanium alloy materials give an opaque image under X-Ray, besides PEEK materials is able to be viewed transparently. This provides a more efficient follow-up for the bone fusion through the implant material at post-operative period.

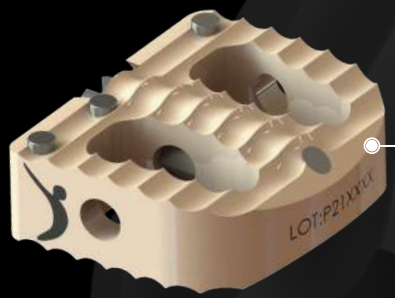


Titanium



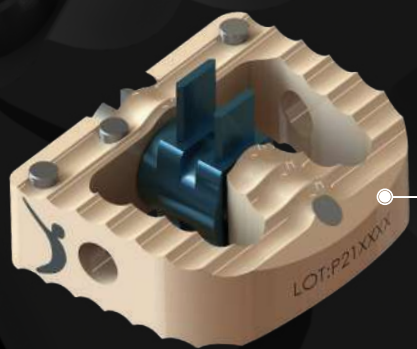
PEEK

CERVICAL PEEK CAGE
BLADED CERVICAL PEEK CAGE



PROYSTER™

PROYSTER-M™



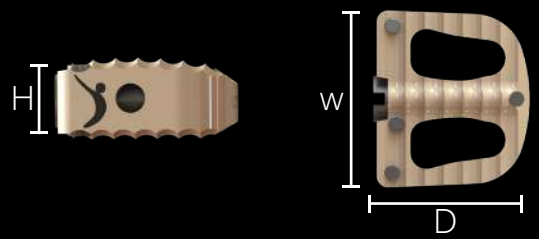
PROYSTER-D™

Prodorth Cervical Peek Cages provide a great hold on to the endplates with its blade, which allows it to be used without a plate.

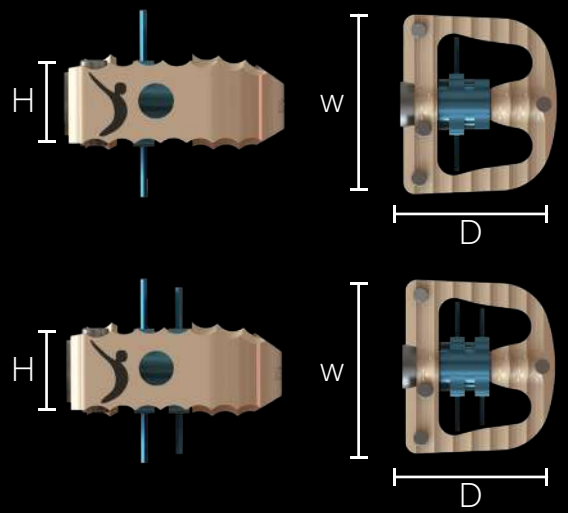
One of the best advantage of Prodorth Cervical Peek Cages is offering a very simple application which is found user-friendly by surgeons.

Prodorth Cervical Peek Cages with mono / double blade options and regular cervical peek cages are available on request.

- Toothed surface is designed to prevent migration
- As for the bladed options, blades provides a more reliable hold on to the endplates
- Anatomical geometry
- Enhanced cage-inserter connection, designed to withstand rotational forces and user-friendly instrumentation to facilitate the procedure
- X-ray marker pins for the visibility
- Made of PEEK material, originated from EVONIK Industries Germany. While titanium alloy materials give opaque image under X-Ray, PEEK materials is able to be seen transparently. This provides efficient follow up of the bone fusion through the implant at the targeted periods
- Maximized Strong Construction / Large Fusion Space ratio
- Various sizes and footprints are available



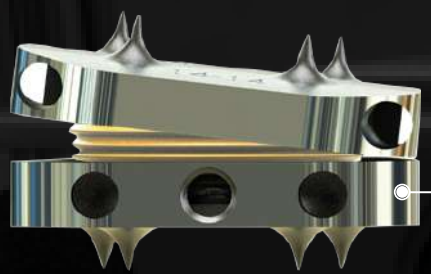
FOOTPRINTS :
12x14 mm , 14x14 mm , 14x16 mm
HEIGHTS :
4-8 mm (by 1 mm increments)



FOOTPRINTS :
12x14 mm , 14x14 mm , 14x16 mm
HEIGHTS :
4-8 mm (by 1 mm increments)

MOTION PRESERVATION

MOTION PRESERVATION

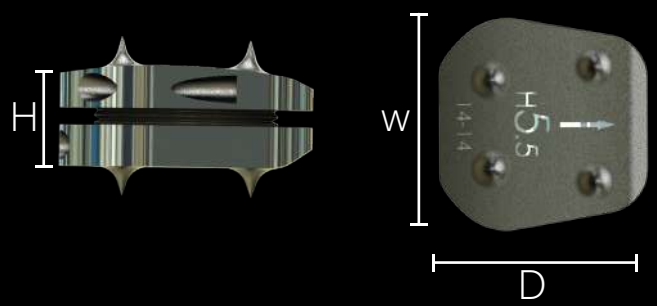


PROCORAL™

It is an alternative to the commonly performed anterior cervical discectomy and fusion (ACDF), a surgical procedure that is designed to address the pathology by eliminating motion at the diseased disc level.

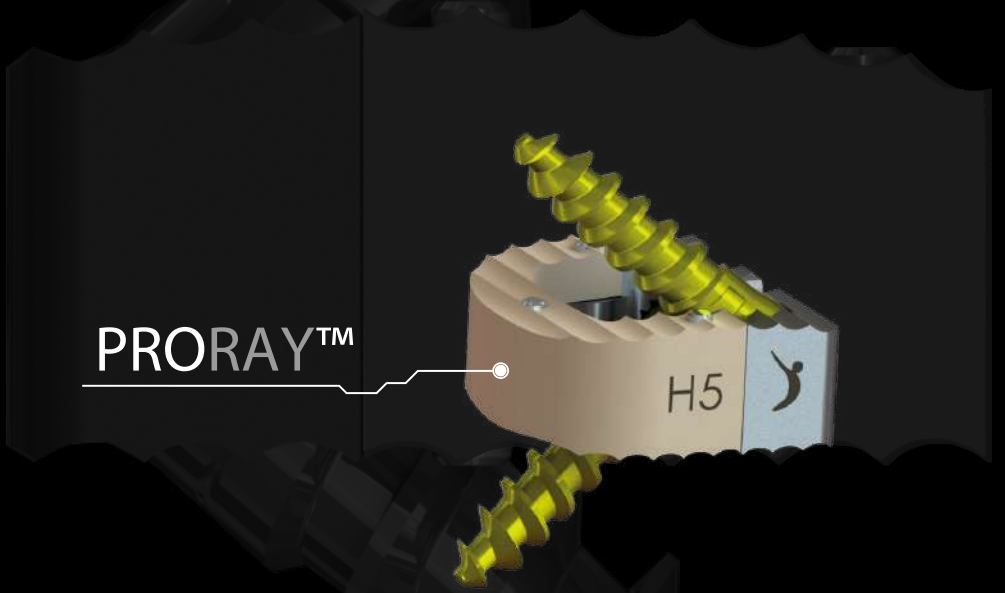
Artificial disc replacement (ADR) surgery—also known as a total disc arthroplasty or total disc replacement (TDR)—is typically performed for a patient with a cervical disc herniation that is causing significant neck pain and/or arm pain that has not responded to nonsurgical treatment options and is significantly affecting the individual's quality of life and ability to function.

- Completely made of titanium and PEEK
- PEEK material at the internal mechanism provides a super-smooth surface for a perfect motion capability
- PEEK cover which is shaped as a ring, placed around the internal mechanism in order to prevent the bone-fusion into the disc prosthesis
- One-piece and anatomical design
- Motion preservation
- Dark anodized and rough surface options are available
- Wide range of motion for flexion, extension, lateral bending and rotation
- Minimizing the scratching by the coating
- Smart design for the most effective movement capability
- Spikes for the enhanced hold on to vertebral bodies
- Reliable and stable connection with the instrument designed to withstand rotational forces and streamlined instrumentation
- Appropriate for Smith-Robinson approach
- Ti6Al4V (Grade 5) is used as raw materials for Prodorth Cervical Disc Prosthesis and these are originated only from our reliable partners in USA. PEEK material is supplied from EVONIK INDUSTRIES Germany. All certificates are available on request



FOOTPRINTS :
12x14 mm , 14x14 mm , 14x16 mm
HEIGHTS :
5-8,5 mm (by 0,5 mm increments)

STAND ALONE CAGE
STAND ALONE CAGE

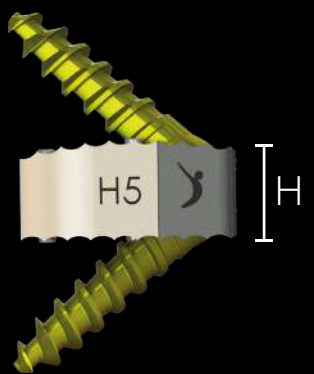


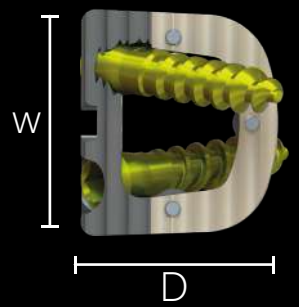
Prodorth Stand-Alone Cervical PEEK Cage System provides an improved stability with the screws on it.

The system offers an interbody fusion device with screw fixation and is intended to be used in ACDF procedures. Prodorth PEEK cage with titanium screws and locking mechanism provides a stable fixation without the need of an anterior plate.

Prodorth Stand-Alone Cervical PEEK Cage System keeps the cervical spine's natural sagittal anatomic profile while providing anterior column support and contribution to the fusion.

- Zero profile
- Self-locking screws
- Optimized screw angulation
- Prodorth Cervical Stand Alone System offers a simple application which is found user-friendly by surgeons. Therefore, the instrumentation of this system has been simplified as possible to meet the general requirements.
- X-ray marker pins for the visibility
- Maximized Strong Construction / Large Fusion Space ratio
- Titanium internal structure for top-notch strength
- Three footprints and four height options are available
- Prodorth Cervical PEEK cage with screws is available in different footprints and heights and made of a combination of PEEK (ASTM F2026) which is a polymer based composite material and Ti6Al4V (ASTM F 136). PEEK material's modulus of elasticity is similar to vertebral bodies and it gives radiolucent imaging





FOOTPRINTS :
12x14 mm , 14x14 mm , 14x16 mm
HEIGHTS :
5-8 mm (by 1 mm increments)

SCREWS :
Ø3-3,5 mm
LENGTHS:
10-16 mm (by 2 mm increments)

ANTERIOR CERVICAL PLATE SYSTEM

ANTERIOR CERVICAL PLATE SYSTEM

PROCTOPUS™

Prodorth Cervical Plate System is designed to meet the clinical expectations of anterior cervical surgery and it offers a wide range of plates and screw sizes. Fixation is provided by screws inserted into the vertebral body of the cervical spine using an anterior approach.

- Low profile (2,0 mm) pre-bended plates
- Variety in plate sizes which provides a convenience for implant selection for surgeons
- User-friendly instrumentation
- Single driver to place screws and secure the locking mechanism
- Different bone screws can be identified by their unique color coding
- High degree of screw angulations
- Simplified locking mechanism of the screws
- Self-tapping screws
- Deep screw threads for high pull-out strength
- Wide graft spaces
- Prodorth Cervical Plate System consists of cervical plates, locking caps, bone screws, and the instruments required for implanting this specific system. All implant components are made from a titanium alloy grade 5 (ASTM F136 / ISO 5832-3)

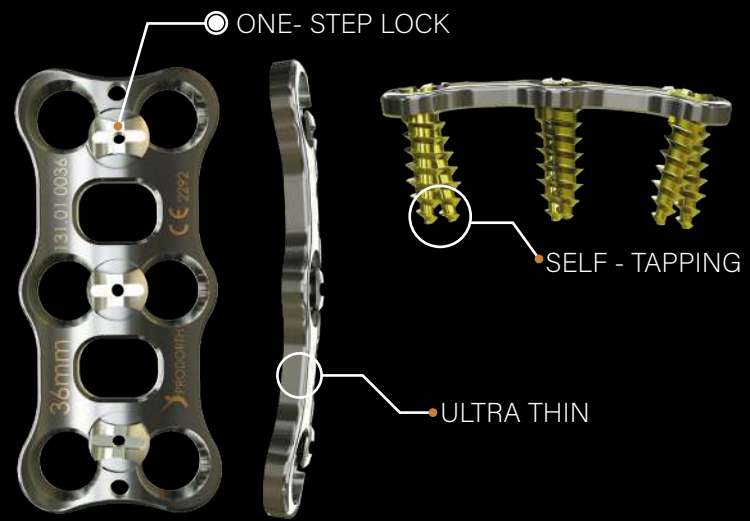
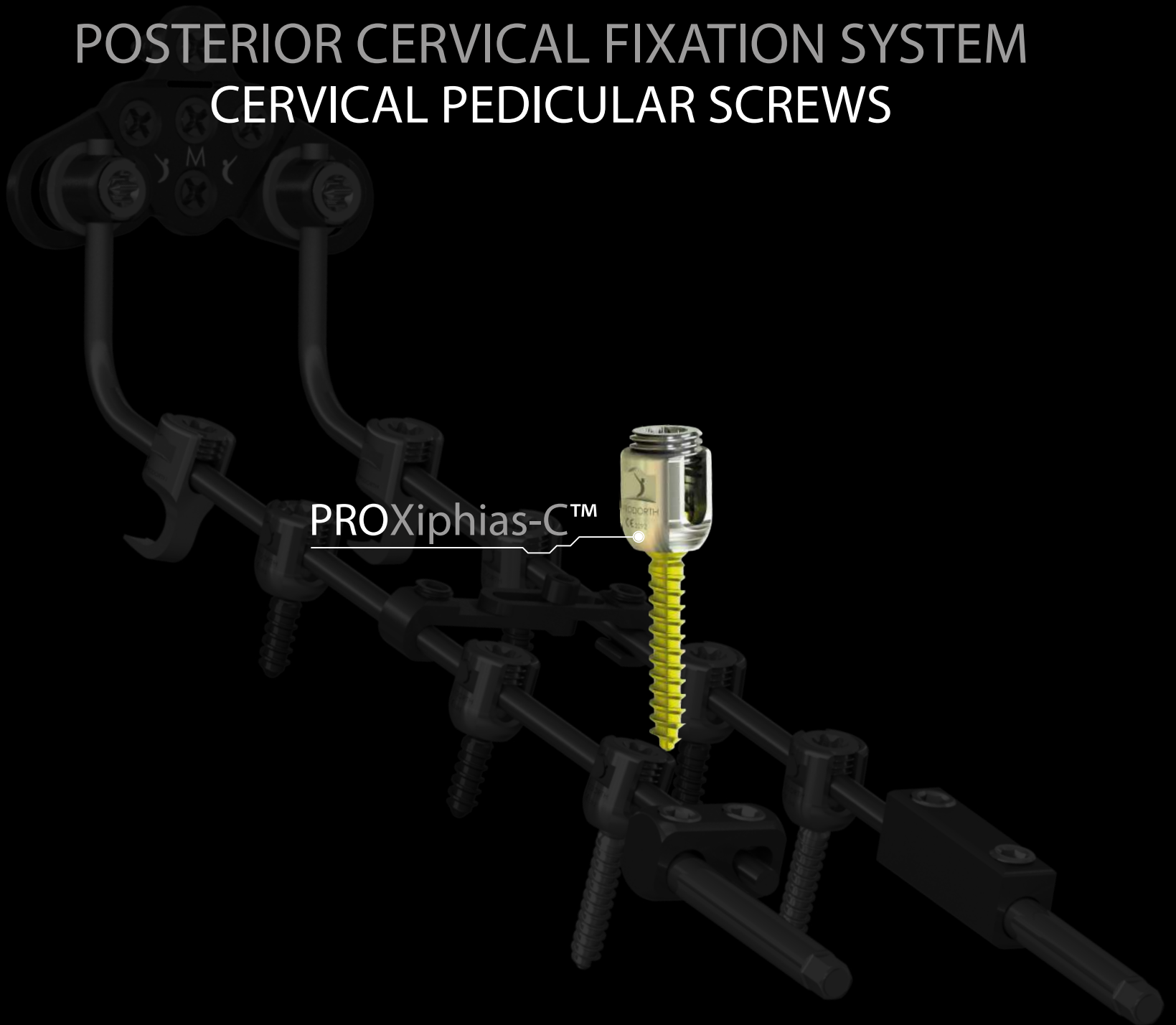


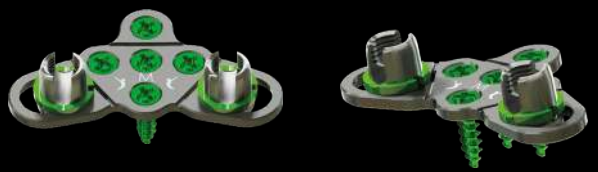
PLATE LEVELS:
1 Level (20-32 mm)
2 Level (34-48 mm)
3 Level (50-74 mm)
4 Level (77-100 mm)

POSTERIOR CERVICAL FIXATION SYSTEM
CERVICAL PEDICULAR SCREWS



Prodorth Posterior Cervical Fixation System offers multiple screws, hooks, rods with hexagonal tips, transition rods, occipital plates and different type of connectors for a better match to patient anatomy.

- Friction head screw feature
- Offers wide range of angulation
- Five points of fixation on the occipital plate
- Colour-coded implants for easy identification and user-friendly instrumentation to facilitate the procedure
- Self-tapping Screws for a proper and safe placement and are available in 3.5 mm & 4.0 mm diameters



Occipital Plates

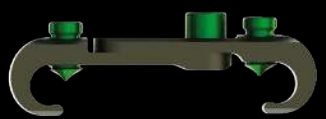
SIZES : Small, Medium, Large

Cervical Pedicular Screws

Ø3,5-4,0 mm
LENGTHS: 10 -34 mm (by 2 mm increments)

Cervical Linear Connectors

SIZES : 30-60 mm (by 10 mm increments)



Cervical Multiaxial Connectors

SIZES : 20-30 mm , 30-40 mm , 40-50 mm

Laminar Narrow Blade

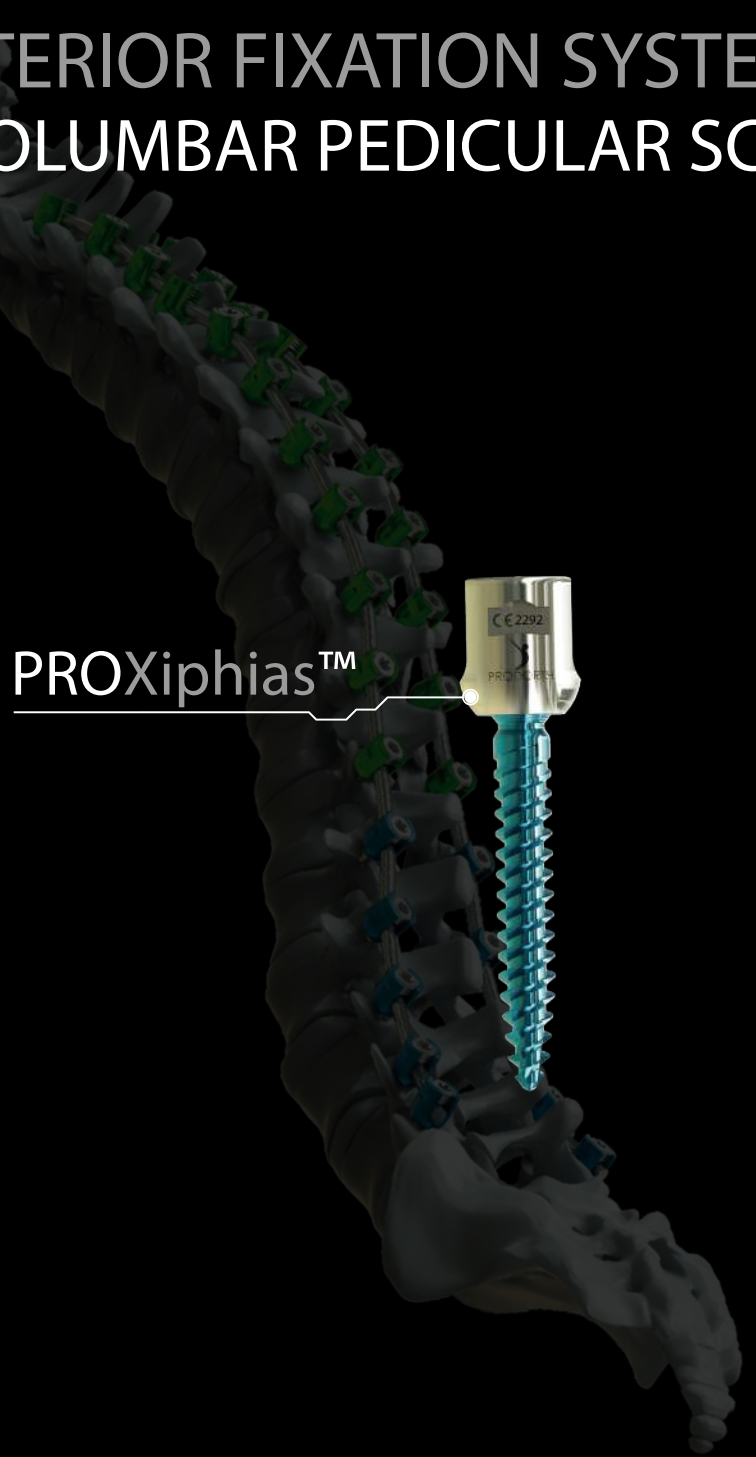
Laminar Wide Blade

Pedicular

Cervical Hooks

SIZES : Small, Medium, Large

POSTERIOR FIXATION SYSTEM
THORACOLUMBAR PEDICULAR SCREWS



Prodorth Pedicular Screws have a unique design with V-Shaped highly sharp threads, as well as a polished surface which results in successful clinical outcomes with long-term stability.

As it's proven so far, there is a direct relationship between the profile of the pedicle screws and the pull-out strength, hence a strict quality control process is performed on the threads during the production.

- Stronger connection with friction head screw feature
- More reliable tightening with the torx design of setscrew. Reverse angled thread design of setscrew
- Offers wide range of angulation
- Cutting flute design for facilitating initial insertion to bone
- Mono threaded and double threaded options are available on request. In addition, double threaded Pedicle Screws have been designed for decreasing the number of rotations of the screw to reduce the operation time of the entire surgery
- Integratable with posterior cervical systems
- Improved features for use in deformity cases
- Conventional and commonly preferred application
- Strong tulip design to prevent head splay
- Wide range of Polyaxial & Monoaxial screws, connectors and hooks to meet a multitude of patient pathologies
- Colour-coded implants for easy identification and user-friendly instrumentation to streamline the procedure
- Titanium / Ti6Al4V (ASTM F 136) is used as raw materials for Prodorth pedicle screws and these are originated only from our reliable partners in USA

Polyaxial Screw

Ø3,5-8,0 mm (by 0,5 mm increments)
LENGTHS: 25-120 mm (by 5 mm increments)

Monoaxial Screw

Ø3,5-8,0 mm (by 0,5 mm increments)
LENGTHS: 25-120 mm (by 5 mm increments)

L. Polyaxial Screw

Ø4,5-7,5 mm (by 0,5 mm increments)
LENGTHS: 25-80 mm (by 5 mm increments)

L. Monoaxial Screw

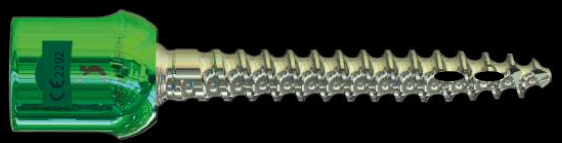
Ø4,5-7,5 mm (by 0,5 mm increments)
LENGTHS: 25-80 mm (by 5 mm increments)

POSTERIOR FIXATION SYSTEM
FENESTRATED PEDICULAR SCREWS

PROXiphias-F™

Prodorth Fenestrated Screw System which is also known as Cannulated Screw System is intended to be used for osteoporotic pathologies, fractures, and osteotomies.

- Cement injectable design
- Offered along with practical instrument for a smooth cement injection



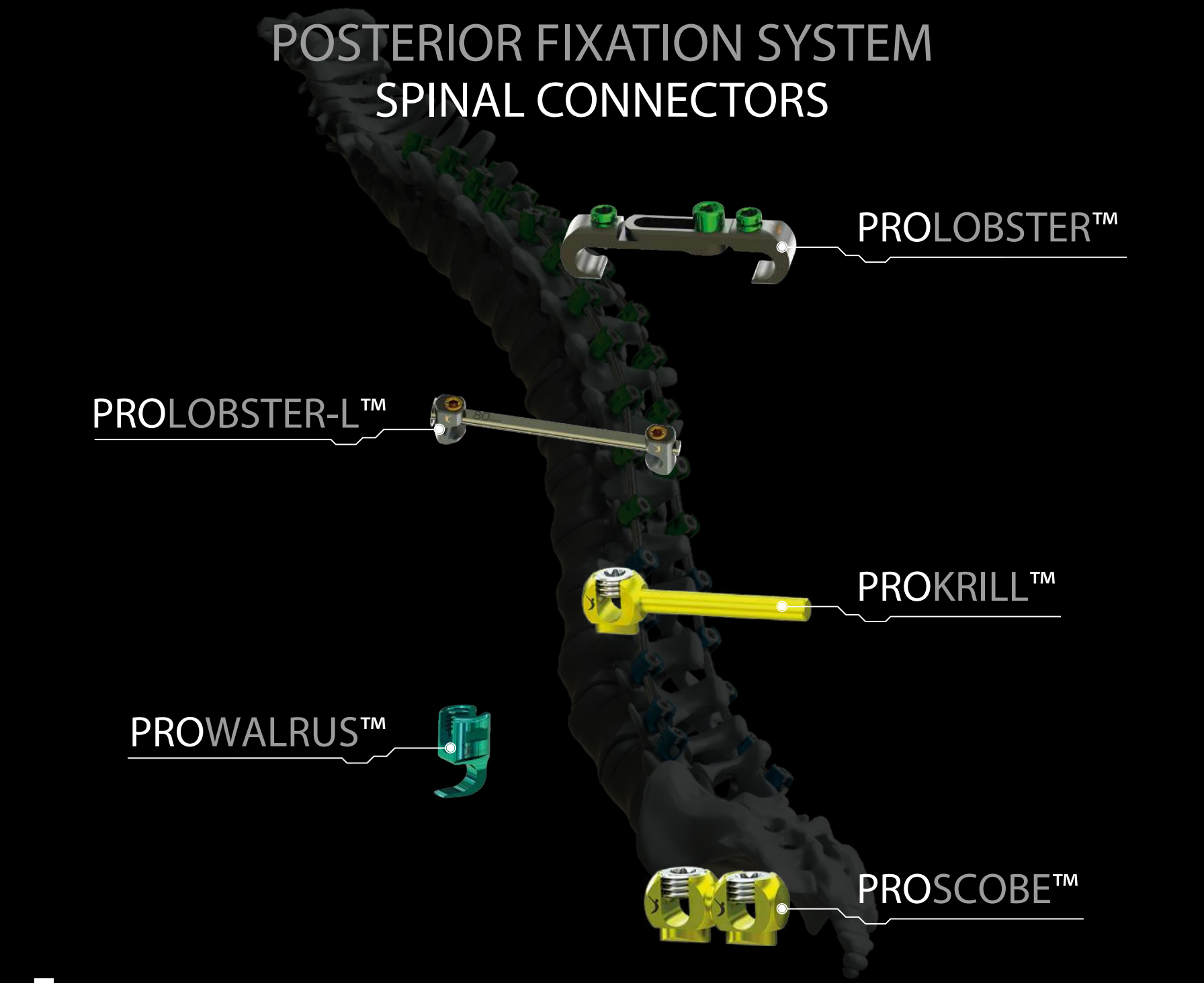
Cannulated Screw

Ø5,0-7,5 mm (by 0,5 mm increments)
LENGTHS: 30-80 mm (by 5 mm increments)

Listhesis Cannulated Screw

Ø5,0-7,5 mm (by 0,5 mm increments)
LENGTHS: 30-80 mm (by 5 mm increments)

POSTERIOR FIXATION SYSTEM
SPINAL CONNECTORS



We offer mainly four types of connectors as Multiaxial (PROLOBSTER™), Linear (PROLOBSTER-L™) and (PROWALRUS™), Domino (PROSCOBE™) and Lateral Connectors (PROKRILL™) as well as various designs considering the needs of our clients.

- Wide range of connectors provide eliminating the need to remove existing construction for revision cases

Spinal Multiaxial Connectors

SIZES : 30-45 mm , 38-53 mm , 45-60 mm , 53-68 mm , 60-75 mm

Spinal Linear Connectors

SIZES : 40-100 mm (by 10 mm increments)

Spinal Lateral Connectors

SIZES: Short, Long
TYPES: Open, Closed

Laminar Narrow Blade | Laminar Wide Blade | Pedicular

Spinal Hooks

SIZES : Small, Medium, Large

Single | Double | Double-II | Quadruple | Pres | T30

Spinal Domino Connectors

CONVENIENT with Ø3,5 - 5,5 mm RODS

POSTERIOR FIXATION SYSTEM
SPINAL RODS

Titanium - Transition - Peek - Curved

- Provides an enchanced stress distribution
- 3,5 mm (cervical system), 5,5 mm and 6,0 in diameter and 40 mm to 600 mm in length rods are available

Titanium Rod

SIZES : Ø3,5 & Ø5,5 & Ø6,0 mm
LENGTHS: 40-600 mm

Transition Rod

SIZES : Ø5,5 to Ø3,5 mm Transition

Curved Rod

SIZE : Ø5,5 mm
LENGTHS:
40-120 mm (by 10 mm increments)

Peek Rod

SIZE : Ø5,5 mm
LENGTHS:
40-120 mm (by 10 mm increments)

TRANSFORAMINAL LUMBAR INTERBODY FUSION

TLIF PEEK CAGE

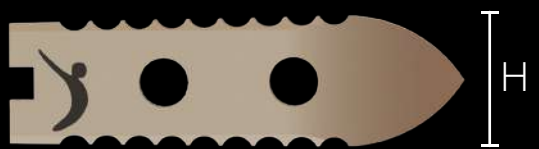
Prodorth TLIF Cage has a unique placement procedure and it's intended to restore the degenerative disc pathologies.

- Prodorth TLIF Cage is made of a combination of PEEK (ASTM F2026) which is a polymer based composite material and Ti6Al4V (ASTM F 136). PEEK material's modulus of elasticity is similar to vertebral bodies and it gives radiolucent imaging
- Circular toothed surface design to minimize the risk of migration
- Multiple footprint options for various surgical solutions
- Anatomical design
- The implantation process is performed by a single instrument
- Enhanced cage-inserter connection, designed to withstand rotational forces
- Prodorth TLIF Cages provides an uninterrupted guidance during operation. It has a capability of movement to both directions
- It can be fixed by rotating the wheel behind the inserter, and it is easily released by loosening it. This provides an easy positioning as required
- After discectomy, the wheel is rotated clockwise while the TLIF cage is at upright position and it's introduced into intervertebral area so on. After that the wheel is loosened and the TLIF cage is released at the required position

LENGTHS : 25 & 28 mm
HEIGHTS : 7-15 mm (by 1 mm increments)

POSTERIOR LUMBAR INTERBODY FUSION
PLIF PEEK CAGE

- Enhanced cage-inserter connection, designed to withstand rotational forces
- X-Ray markers for efficient visualization during implantation
- Toothed surface design to minimize the risk of migration
- Easy to introduce with sharp ended design
- Large fusion space
- Anatomical geometry
- Made of a combination of PEEK (ASTM F2026) which is a polymer based composite material and Ti6Al4V (ASTM F 136). PEEK material's modulus of elasticity is similar to vertebral bodies and it gives radiolucent imaging



LENGTHS : 25 & 28 mm
HEIGHTS : 7-15 mm (by 1 mm increments)

POSTERIOR LUMBAR INTERBODY FUSION

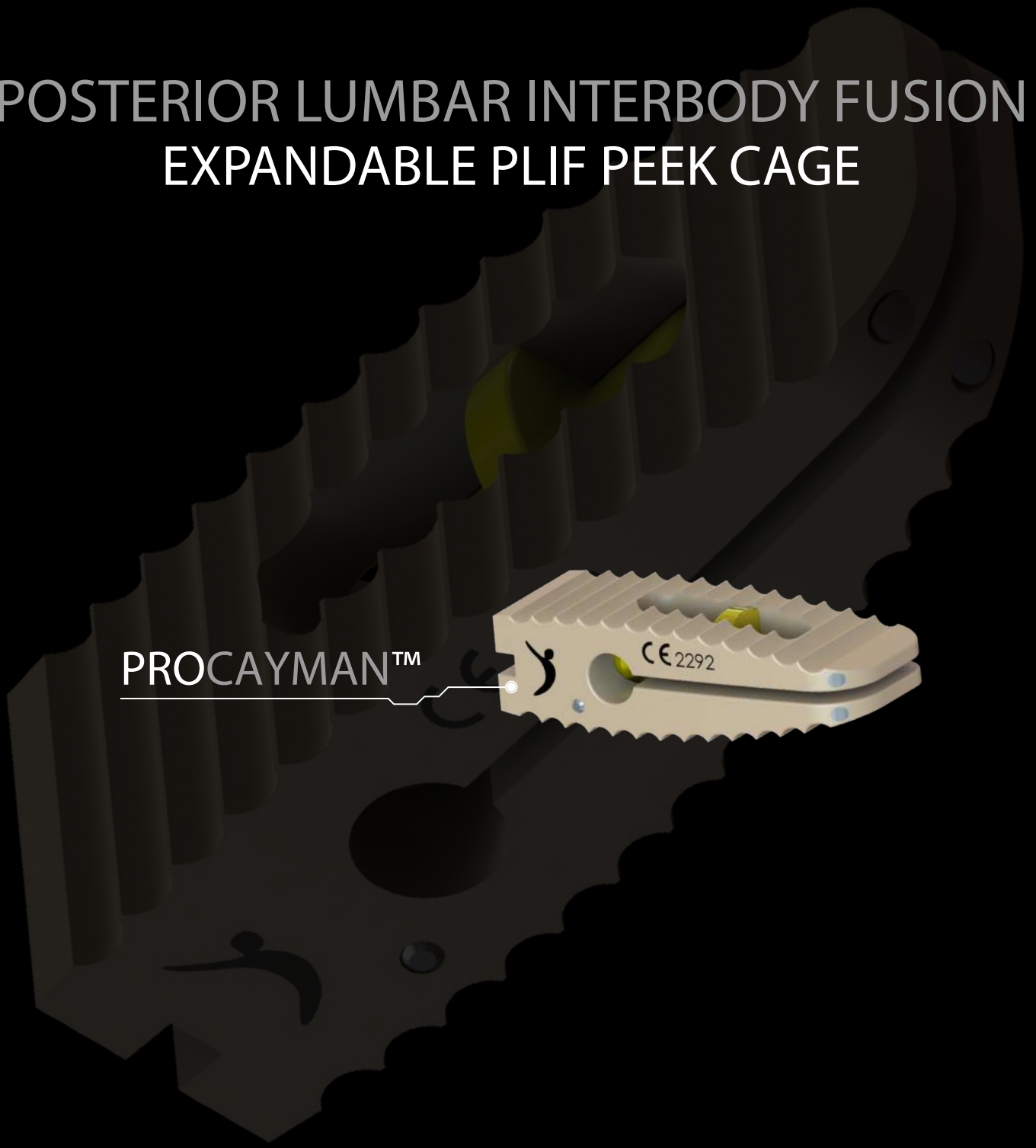
PLIF PEEK CAGE with THREAD

Promole has the titanium threads on the tip and the marker pins behind thus surgeon can follow the advance of Promole during surgery very efficiently and it can be connected with its instruments very easily.

- Once the internal bar of its inserter placed through the inserter, it can rotate the thread at the front. When the thread is rotated clockwise, Promole will be pulling itself into the intervertebral area. Likewise, it is able to be removed by rotating the thread anticlockwise
- These specifications of it provides a more reliable and efficient implantation considering the conventional PLIF procedure
- PROMOLE® Cages provides a gradually placement
- Toothed surface feature for the best holding on to the inferior and superior endplates
- PEEK material is originated from EVONIK Industries Germany
- X-ray marker pins for the visibility
- Various sizes are available on request
- PEEK material (ASTM F2026) and Titanium (ASTM F 136) is combined through the creation journey of ProMole. As it's accepted by health authorities, PEEK does not cause any lesional problems, in addition, its elasticity and hardness features are quite near to bone tissue

LENGTHS : 28 mm
HEIGHTS : 7-12 mm (by 1 mm increments)

POSTERIOR LUMBAR INTERBODY FUSION
EXPANDABLE PLIF PEEK CAGE



- Holding on to inferior and superior endplates strongly with unique surface design
- Enhanced cage-inserter connection, designed to withstand rotational forces
- X-Ray markers for efficient visualization during implantation
- Toothed surface design to minimize the risk of migration
- Easy to introduce with sharp ended design
- Large fusion space
- Anatomical geometry
- As for the expandable PLIF cages, stopping system is integrated during expansion to prevent over expansion
- Made of a combination of PEEK (ASTM F2026) which is a polymer based composite material and Ti6Al4V (ASTM F 136). PEEK material's modulus of elasticity is similar to vertebral bodies and it gives radiolucent imaging

LENGTHS : 25 & 28 mm
HEIGHTS : 7-15 mm (by 1 mm increments)

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Simplicity is the ultimate sophistication

Simplicity is the ultimate sophistication

Leonardo Da Vinci

SPINAL FIXATION SYSTEMS