



THERAPIES

# CD HORIZON® SOLERA® 5.5/6.0

SPINAL SYSTEM

Surgical Technique

ENABLING TECHNOLOGIES

SERVICES & SUPPORT

**INTEGRATED**  
SPINE SOLUTIONS

**MICHELSON**  
**TECHNOLOGY**  
**AT WORK**

CAPSTONE® PEEK Spinal System, CLYDESDALE® Spinal System, CRESCENT® Spinal System—PEEK, CRESCENT® Spinal System—Titanium, and SOVEREIGN® Spinal System incorporate technology developed by Gary K. Michelson, MD.



## Profile. Performance. Efficiency.

3.1 From the thoracic spine to the ilium, the CD HORIZON® SOLERA® Spinal System facilitates surgeon choice and flexibility across patient types with a variety of implant options for treating multiple spinal pathologies with one system family. The CD HORIZON® SOLERA® 4.75 Spinal System is detailed in another technique UC201105109EE. The CD HORIZON® SOLERA® 5.5/6.0 Spinal System offers the opportunity to reduce overall metal mass and profile, and provide surgeon choice without compromising implant integrity, as seen in mechanical testing when compared to the CD HORIZON® LEGACY™ System<sup>1</sup>. Mechanical testing is not indicative of human clinical outcomes. The technology platform offered with this system is backed by more than 30 years and 600,000 cases of CD HORIZON® clinical experience and Medtronic expertise<sup>2</sup>. The CD HORIZON® SOLERA® Spinal Systems is also compatible various enabling technologies that are complementary the therapy treatment. 3.1

Risks associated with these spinal implants include loosening, disassembly, bending and/or breakage of components.

<sup>1</sup> Based on mechanical testing of the CHROMALOY™ and CHROMALOY™ Plus rod construct per ASTM F1798.

<sup>2</sup> Based on internal sales estimates.

# Iliac Fixations 3.1.

## SOLERA LATERAL CONNECTORS

Closed and Side-loading Lateral Connectors are color-coded by rod channel diameter and connect to 4.75, 5.5, 6.0, and 6.35mm diameter rods as shown below (Figure 66). The titanium break-off set screw (779170005) should

Rod Size Compatibility				Lateral Connectors	Set Screw	Screw Connection Compatibility			
4.75mm	5.5mm	6.0mm	6.35mm			4.75mm	5.5mm	?	?
●						●	●	●	
●						●	●	●	
	●	●						●	●
	●	●					●	●	●
			●					●	●

Figure 66

be used with these connectors. The smooth posts of the connectors are offered in 20mm to 70mm lengths and are compatible with 4.75, 5.5, 6.0, and 6.35mm CD HORIZON® System Screws (Figure 67)



Figure 67

When performing iliac fixation, Closed and Side-Loading Lateral Connectors may be used to facilitate construct assembly (Figure 68). These connectors are compatible with long CD HORIZON® SOLERA® Multi-Axial Screws, CD HORIZON® Closed Multi-Axial Iliac Screws and CD

HORIZON® Fixed Angle Iliac Screws to allow intraoperative flexibility (Figure 69). For information on iliac fixation and connector placement, please refer to the CD HORIZON® Iliac Fixation Surgical Technique.

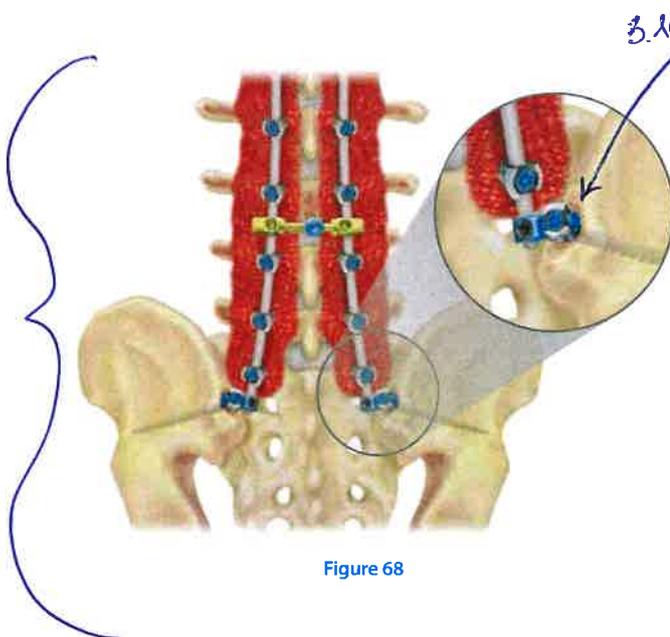


Figure 68



Closed Head Fixed Iliac Screw 7045855

Closed Head Multi-Axial Screw 7049855

Long Multi-Axial Screw 5540030 (5.5/6.0mm)

Figure 69

## Postoperative Care and Mobilization

Prior to closure, do a final check to ensure that the set screws are symmetrically seated in the screw heads and sheared off, that the bone graft has not become dislodged during manipulation, and that a proper count of all sheared-off set screw heads is correct (Figure 78).

Appropriate postoperative monitoring following evaluation of the extent of the surgical procedure and the patient's overall medical status is essential. Deep vein anti-embolic treatment should be considered for all patients, along with active pulmonary toilet, fluid balance, nutritional status, and monitoring of neurologic function. Prophylactic antibiotics may be continued for a brief duration following surgery until the wound seals. Finally, postoperative bracing may be considered for longer fusions depending upon individual surgeon preference.

A structured, progressive physical therapy program is essential to mobilize the patient in order to diminish postoperative complications and to rehabilitate the patient sufficiently for discharge. During the inpatient rehabilitation period, patients should be carefully instructed in the appropriate methods of getting in and out of bed, stair climbing, and brace application, as well as how long to sit and various other activities of daily living. Patients who lag behind a normal recovery period proportional to the extent of their surgery should be expediently considered for transfer to a rehabilitation inpatient facility.

Finally, postoperative follow-up for a minimum of two years is crucial to assess the progression of fusion and, equally important, the patient's clinical improvement.

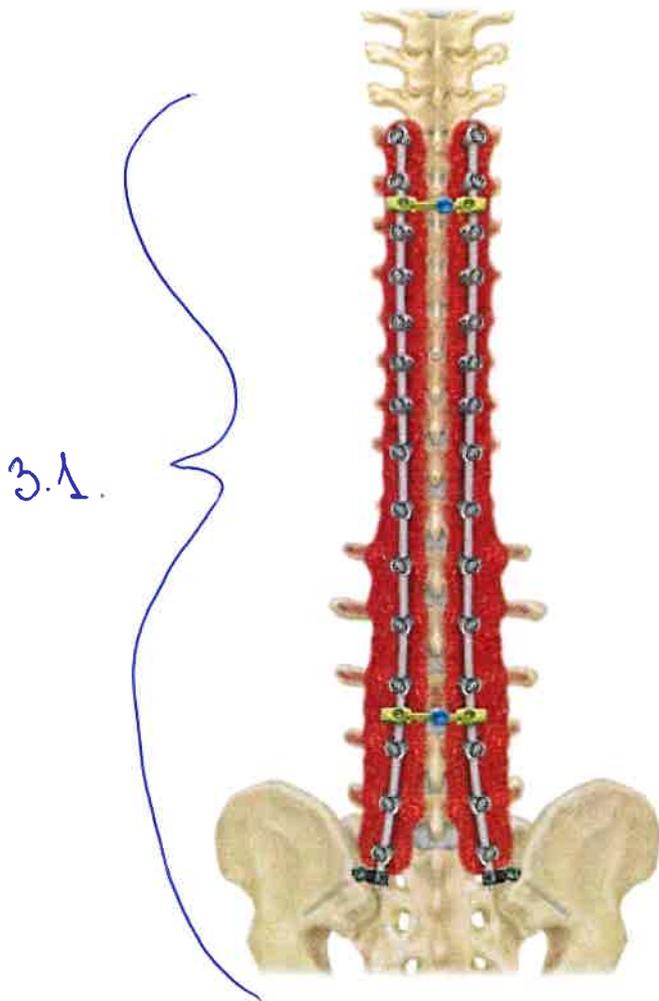


Figure 78

3.1

## Overview

### Pedicle Screw Type and Influences on Placement and Positioning

3.1.

The CD HORIZON® SOLERA™ Spinal System offers different screw types for use with the CD HORIZON® LONGITUDE® II System. Each screw type offers specific functionality and require specific adjustment of the orientation of the screw in the vertebra to maximize the functionality of the screw.

**Multi-Axial Screws (MAS):** These screws can be inserted with the bone screw shaft at the most convenient angle of insertion. The freely mobile head will accommodate a variety of entry points and screw trajectories within the limits of the head's ability to tilt and accommodate to the position of the spinal rod.

**Fixed Angle Screw (FAS):** This screw must be inserted perpendicular to the anticipated position of the rod to facilitate set screw engagement. There is no accommodation to the position of the spinal rod, thus attention to the position of the implant saddle and spinal rod sagittal profile prior to final tightening is essential. In the thoracic spine this necessitates positioning the screw in the straightforward approach as opposed to the anatomic approach within the pedicle.

**Sagittal Adjusting Screw (SAS):** Use of the Sagittal Adjusting Screw is similar to the Fixed Angle Screw in that the pedicle screw head position is fixed in relation to the bone screw shaft allowing for medial/lateral or derotation control/correction. In addition, the SAS allows for placement of thoracic screws in either the anatomic or straightforward orientation as the saddle within the screw head can accommodate the sagittal profile of the spinal rod with up to +/-13° of variation. Furthermore, the SAS allows for sagittal balance adjustment due to the fixed relation between the pedicle screw head and bone screw shaft and the accommodation of the spinal rod position.

7c)



CD HORIZON® SOLERA™ System  
5.5/6.0mm Screws accept 5.5mm  
and 6.0mm rods to accommodate  
construct demand.



Multi-Axial Screw (MAS)

Fixed Angle Screw (FAS)

Sagittal Adjusting Screw (SAS)

CD HORIZON® LONGITUDE® II System is compatible with CD HORIZON® SOLERA™ 4.75mm and 5.5/6.0mm cannulated screws as well as CD HORIZON® LEGACY™ 5.5mm cannulated screws.

5

# YOUR TRUSTED SOLUTION BECAUSE POSTERIOR CERVICAL SHOULD BE EASIER

Infinity™  
Occipitocervical-Upper Thoracic System 3-1



**Medtronic**  
Further, Together

**MICHELSON  
TECHNOLOGY  
AT WORK**



IMPLANTS DESIGNED FOR EASY CONSTRUCT CONNECTIONS

## Cervical Thoracic Transition Implants

Wide variety of transition options for flexibility in construct planning. Connecting 3.2 and 3.5mm rods to 4.75mm, 5.5mm, and newly offered 6.0mm/6.35mm\*\*

### Cervical Thoracic Transition Rods

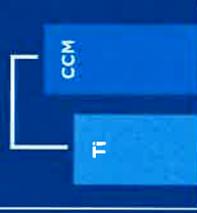
Transition Rods in Titanium and Chromalloy™ Plus



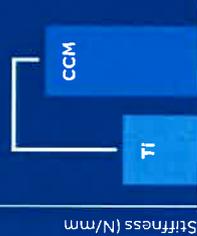
3.5mm-4.75mm Tapered Rod  
3.5mm-5.5mm Tapered Rod  
3.5mm-6.0mm Tapered Rod

Shown to have greater stiffness & strength when compared to Titanium, the metal properties and mechanical performance data of Chromalloy™ Plus make this rod material a viable and preferred choice to provide increased construct strength and meet the high construct demands of C.T.J. procedures.

11.6% Increased Strength



104.6% Increased Stiffness



The Infinity™ Chromalloy™ Plus tapered rods are 11.6% stronger and 104.6% stiffer than the Infinity™ Titanium tapered rods in a four-point static bend test.\*\*

## Dominos

### Offset Dominos

Allows for medial/lateral offsets at transition point

### Open to Open Offset Dominos

- Enables revision/extension of a construct
- Enables dual rod constructs

### Axial Dominos

- Allows for axial alignment of rods at transition point
- Stepped design feature to accommodate dorsal height differences between rods



## MAS Extension Connectors

- Enables revision/extension of a construct
- Enables dual rod constructs
- Zero "Run on the Rod" Transition Point
- Simplified assembly steps\*



The MAS extension connectors are intended to be used with 3.5mm and larger diameter multi axial screws. The MAS extension connectors are not intended to be used with 3.0mm screws.



IMPLANTS DESIGNED FOR EASY CONSTRUCT CONNECTIONS

# OPTIMIZED CONNECTING COMPONENTS VERSATILITY WITH SIMPLIFIED ASSEMBLY

## Multiple Crosslink Designs

- Crosslink® Connector, Rod-to-Rod Design**
- Rotating rod connection point to allow for attachment at different levels of the construct



## Crosslink® Connector, MAS-to-MAS Design

- Connects to the top of a multi axial screw head in cases where adjacent screw heads are in close proximity to one another
- With integrated connector set screw to reduce implantation steps\*



## Common to both Crosslink Connector Designs

- Adjustable design and various sizes to accommodate varying distances between rods
- Lower profile at the apex of the crosslink arch\*
- Internal center set screw and ability to use the MAS Counter Torque improves screwdriver interface during final tightening of the central lock

## Lateral Offset Connectors

- Dorsal height adjustment capabilities to accommodate screw height differences
- Open and closed lateral connectors available in 10mm, 13mm, and 19mm lengths
- The lateral offset connectors are intended to be used with 3.5mm and larger diameter multi axial screws. The lateral offset connectors are not intended to be used with 3.0mm screws



Open Lateral Connector



Closed Lateral Connector



Open Angled Connector

## Laminar Hooks

- Available in 4.5mm and 6.0mm openings
- Available in standard and offset designs



Laminar Hook, Offset



Laminar Hook, Standard

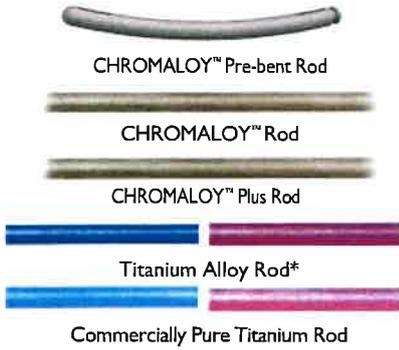
\* As compared to Vertex Select™ Reconstruction System

\*\* Based on internal four-point bending test data using 3.5mm to 4.75mm Titanium and Chromalloy™ Plus Tapered Rods – ASTM F2183

\*\*\* Open to Open Offset Domino and MAS Extension Connector

\* As compared to Vertex Select™ Reconstruction System

5.5/6.0MM RODS



Commercially Pure Titanium	CHROMALLOY™	Description
1553201030	1555501030	30mm Pre-bent 5.5mm rod
1553201035	1555501035	35mm Pre-bent 5.5mm rod
1553201040	1555501040	40mm Pre-bent 5.5mm rod
1553201045	1555501045	45mm Pre-bent 5.5mm rod
1553201050	1555501050	50mm Pre-bent 5.5mm rod
1553201055	1555501055	55mm Pre-bent 5.5mm rod
1553201060	1555501060	60mm Pre-bent 5.5mm rod
1553201070	1555501070	70mm Pre-bent 5.5mm rod
1553201080	1555501080	80mm Pre-bent 5.5mm rod
1553201090	1555501090	90mm Pre-bent 5.5mm rod
1553201100	1555501100	100mm Pre-bent 5.5mm rod
1553201110	1555501110	110mm Pre-bent 5.5mm rod
1553201120	1555501120	120mm Pre-bent 5.5mm rod

CHROMALLOY™ PLUS	Titanium Alloy	Commercially Pure Titanium	CHROMALLOY™	Description
1556000500*	1554200500	1553200500	1555000500*	500mm Straight 5.5mm rod
1606000500*	1604200500	1603200500	1605000500*	500mm Straight 6.0mm rod

\*A lined rods can be ordered by replacing the 5h digit undelined from 0 to 2 (ex: 1605200500)

5.5/6.0MM SAGITTAL ADJUSTING SCREWS



Catalog Number	Description		Catalog Number	Description	
55811004520*	4.5mm x 20mm	●	55811006530*	6.5mm x 30mm	●
55811004525	4.5mm x 25mm	●	55811006535	6.5mm x 35mm	●
55811004530	4.5mm x 30mm	●	55811006540	6.5mm x 40mm	●
55811004535	4.5mm x 35mm	●	55811006545	6.5mm x 45mm	●
55811004540	4.5mm x 40mm	●	55811006550	6.5mm x 50mm	●
55811004545	4.5mm x 45mm	●	55811006555*	6.5mm x 55mm	●
55811005530	5.5mm x 30mm	●	55811007535	7.5mm x 35mm	●
55811005535	5.5mm x 35mm	●	55811007540	7.5mm x 40mm	●
55811005540	5.5mm x 40mm	●	55811007545	7.5mm x 45mm	●
55811005545	5.5mm x 45mm	●	55811007550	7.5mm x 50mm	●
55811005550	5.5mm x 50mm	●	55811007555*	7.5mm x 55mm	●

May be ordered as an extra instrument.

8

3.1 When treating thoracic and thoracolumbar fractures or tumors with anterior instrumentation, the approach is usually from the patient's left side, particularly below the diaphragm. If indications warrant, the operation can be accomplished from the patient's right side. The preoperative axial MRI or CT scan should be reviewed to ensure the aorta is midline. A left deviation of the aorta may require a right-sided approach above the diaphragm.

It is important to ensure the patient is positioned in a true lateral position and that the position is maintained throughout the procedure (Figure 1).

The appropriate intervertebral discs and vertebral body are removed from the desired fusion area, using a variety of general surgical instruments.

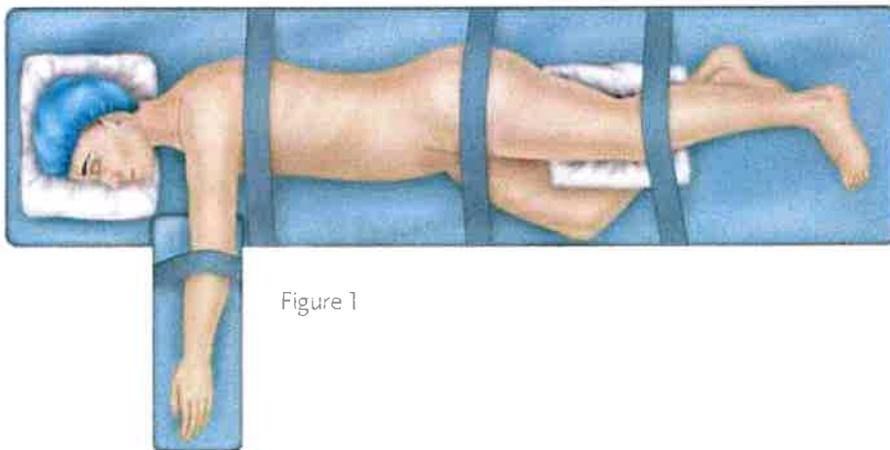


Figure 1

## Important Information

### PURPOSE

3.1  
The CD HORIZON<sup>®</sup> Spinal System is intended to help provide immobilization and stabilization of spinal segments as an adjunct to fusion of the thoracic, lumbar, and/or sacral spine.

### DESCRIPTION

3.1  
3.3  
The CD HORIZON<sup>®</sup> Spinal System consists of a variety of shapes and sizes of rods, hooks, screws, CROSSLINK<sup>®</sup> Plates, staples and connecting components, as well as implant components from other Medtronic spinal systems, which can be rigidly locked into a variety of configurations, with each construct being tailor-made for the individual case.

3.5  
3.5  
A subset of CD HORIZON<sup>®</sup> Spinal System components may be used for posterior pedicle screw fixation in pediatric cases. These constructs may be comprised of a variety of shapes and sizes of rods (ranging in diameter from 3.5mm to 6.35mm), hooks, screws, CROSSLINK<sup>®</sup> Plates, and connecting components. Similarly to the CD HORIZON<sup>®</sup> implants used in adult cases, these components can be rigidly locked into a variety of configurations, with each construct being tailor-made for the individual case.

Certain components within the CD HORIZON<sup>®</sup> Spinal System are specifically excluded for use in pediatric patients. These include PEEK rods, Shape Memory Alloy Staples, SPIRE<sup>™</sup> Plates and DYNALOK<sup>®</sup> bolts. All screws used in pediatric cases are only cleared for use via a posterior approach. All of the components used in pediatric cases are fabricated from medical grade stainless steel, medical grade titanium, titanium alloy, and medical grade cobalt-chromium-molybdenum alloy.

Certain implant components from other Medtronic spinal systems can be used with the CD HORIZON<sup>®</sup> Spinal System in non-pediatric cases. These components include TSRH<sup>®</sup> rods, hooks, screws, plates, CROSSLINK<sup>®</sup> plates, connectors, staples, washers, GDLH<sup>®</sup> rods, hooks, connectors and CROSSLINK<sup>®</sup> bar and connectors; LIBERTY<sup>®</sup> rods and screws; DYNALOK<sup>®</sup> PLUS and DYNALOK CLASSIC<sup>®</sup> bolts along with rod/bolt connectors; and Medtronic Multi-Axial rods and screws. Please note that certain components are specifically designed to connect to specific rod diameters, while other components can connect to multiple rod diameters. Care should be taken so that the correct components are used in the spinal construct.

CD HORIZON<sup>®</sup> hooks are intended for posterior use only. CD HORIZON<sup>®</sup> staples and CD HORIZON<sup>®</sup> ECLIPSE<sup>®</sup> rods and associated screws are intended for anterior use only. However, for patients of smaller stature and pediatric patients, CD HORIZON<sup>®</sup> 4.5mm rods and associated components may be used posteriorly.

The CD HORIZON<sup>®</sup> Spinal System implant components are fabricated from medical grade stainless steel, medical grade titanium, titanium alloy, medical grade cobalt-chromium-molybdenum alloy, or medical grade PEEK OPTIMA-LT1. Certain CD HORIZON<sup>®</sup> Spinal System components may be coated with hydroxyapatite. No warranties expressed or implied are made. Implied warranties of merchantability and fitness for a particular purpose or use are specifically excluded. See the MDT Catalog for further information about warranties and limitations of liability.

### Never use stainless steel and titanium implant components in the same construct.

Medical grade titanium, titanium alloy, and/or medical grade cobalt-chromium-molybdenum alloy may be used together. Never use titanium, titanium alloy, and/or medical grade cobalt-chromium-molybdenum alloy with stainless steel in the same construct.

The CD HORIZON<sup>®</sup> Spinal System also includes anterior staples made of Shape Memory Alloy (Nitinol – NiTi). Shape Memory Alloy is compatible with titanium, titanium alloy, and cobalt-chromium-molybdenum alloy. Do not use with stainless steel. These staples are not to be used in pediatric patients.

PEEK OPTIMA-LT1 implants may be used with stainless steel, titanium, or cobalt-chromium-molybdenum alloy implants. CD HORIZON<sup>®</sup> PEEK Rods are not to be used with CROSSLINK<sup>®</sup> Plates or in pediatric patients.

To achieve best results, do not use any of the CD HORIZON<sup>®</sup> Spinal System implant components with components from any other system or manufacturer unless specifically allowed to do so in this or another Medtronic document. As with all orthopaedic and neurosurgical implants, none of the CD HORIZON<sup>®</sup> Spinal System components should ever be reused under any circumstances.

### INDICATIONS

3.2  
The CD HORIZON<sup>®</sup> Spinal System with or without SEXTANT<sup>®</sup> instrumentation is intended for posterior, non-cervical fixation as an adjunct to fusion for the following indications: degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e., fracture or dislocation); spinal stenosis; curvatures (i.e., scoliosis, kyphosis and/or lordosis); tumor; pseudarthrosis; and/or failed previous fusion.

Except for hooks, when used as an anterolateral thoracic/lumbar system, the CD HORIZON<sup>®</sup> Spinal System may also be used for the same indications as an adjunct to fusion.

With the exception of degenerative disc disease, the CD HORIZON<sup>®</sup> LEGACY<sup>®</sup> 3.5mm rods and the CD HORIZON<sup>®</sup>

# Technology Application

## PROCEDURE

The CD HORIZON® SOLERA™ Spinal System is used to immobilize and stabilize segments as an adjunct to fusion of the thoracic, lumbar, and sacroiliac spine for the following indications:

- » Degenerative Disc Disease
- » Adolescent Idiopathic Scoliosis
- » Spondylolisthesis
- » Trauma
- » Spinal Stenosis
- » Curvatures
- » Tumor
- » Pseudarthrosis
- » Failed Previous Fusion

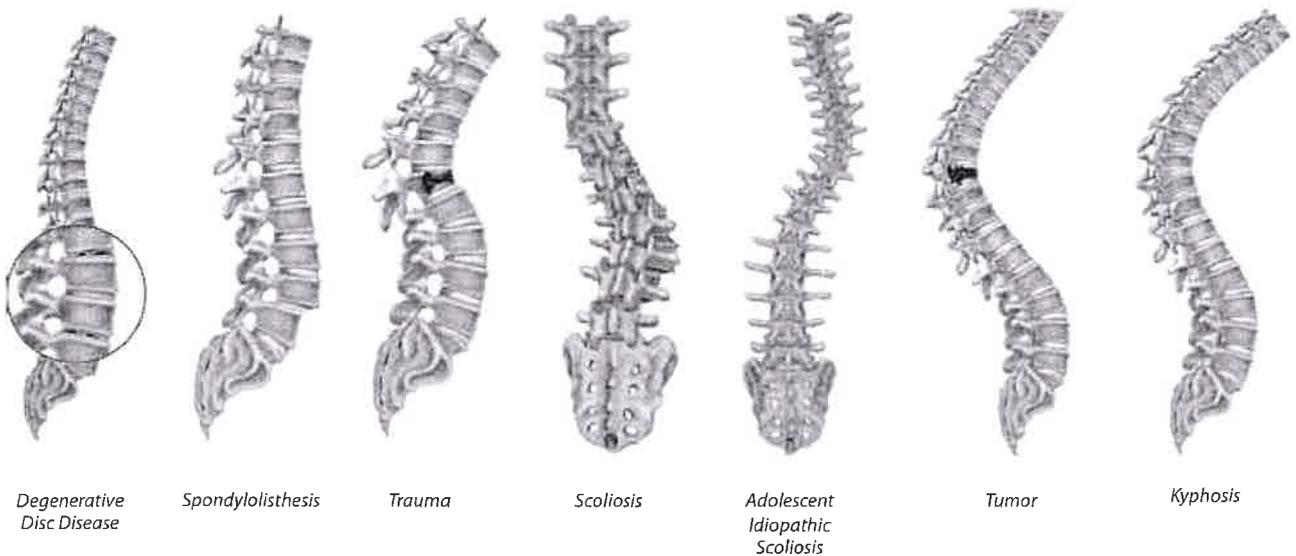
3.2

## GOALS OF SPINAL FUSION INCLUDE:

- » Reduce or correct spinal deformity
- » Reduce back and/or leg pain
- » Preserve or improve neurologic function
- » Return to activities of daily living

## ALTERNATIVE TREATMENT OPTIONS

- » **Nonsurgical treatment.** Nonsurgical, conservative treatments, including spinal injections and physical therapy, are commonly used and are generally recommended or required before spinal fusion.
- » **Surgical decompression without fusion.** Decompression of neural structures in the absence of fusion has demonstrated quality outcomes for certain indications, often related to which there is no existing or iatrogenic deformity or instability of the spine.
- » **Surgical fusion without instrumentation.** Fusion of vertebrae was originally attempted without the use of stabilizing implants. Uninstrumented lumbar spinal fusion procedures are rare due to risk of pseudarthrosis, or failure to fuse. Pedicle screw fixation has been used in the U.S. since 1969 and has become the recognized standard of care.



# Follow Your Implants. Follow Your Inventory.



## VERIFY YOUR IMPLANTS



### VERIFY™ Implant Tracking System

3.4

- » Tracks actual OR implant use by Lot Number and Part Number for each patient
- » Electronically captures implant data to facilitate billing through documentation accuracy over manual data capture
- » Allows for implant identification in the event of a revision surgery

Handheld Scanner Reads Part Number and Lot Number on 2D Barcode



Hook

Connector

Set Screw

Multi-Axial Screw

CD HORIZON® X10 CROSSLINK® Plate

Pre-Contoured Rod

# Enhanced Fixation

## OSTEOGRIP® Dual Lead Thread Form Offers:

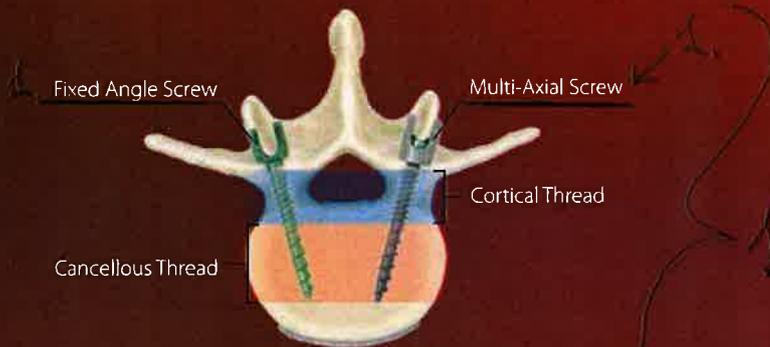
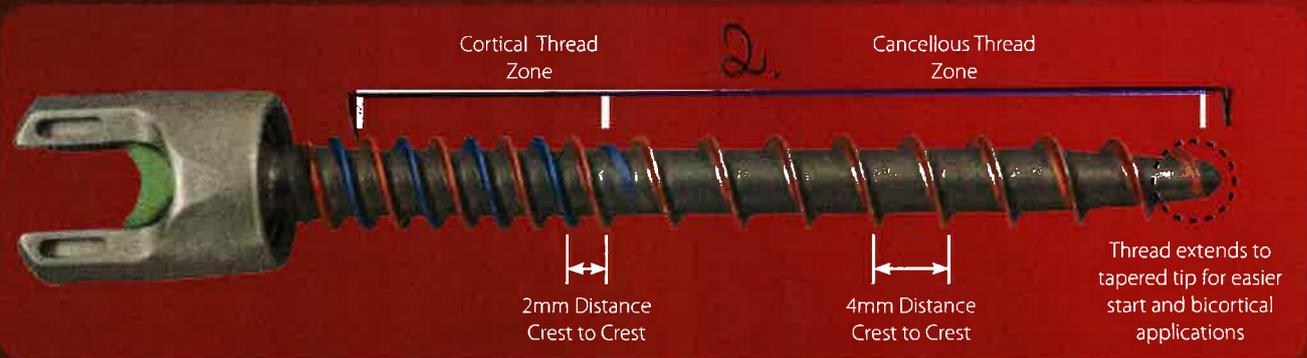
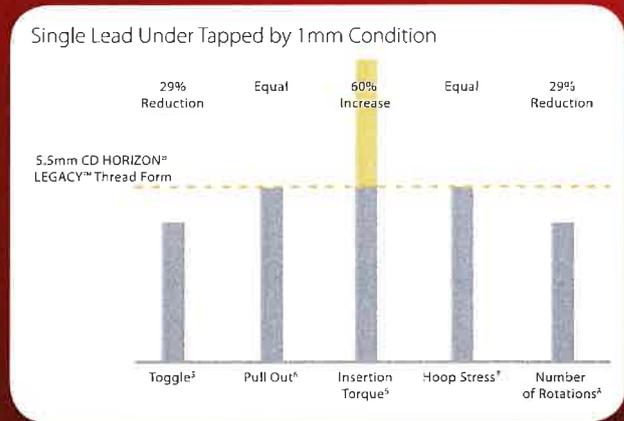
- » 51% toggle reduction<sup>5</sup>
- » 29% fewer insertion rotations<sup>8</sup>

These benefits were gained while maintaining an equal amount of hoop stress.<sup>7</sup>

Risks associated with these spinal implants include fracture, microfracture, resorption, damage, or penetration of spinal bone.

- » Tapered tip facilitates insertion into a prepped pedicle
- » Thread at tip allows for bicortical applications

Improper positioning and placement of implants may cause damage.



5 Based on internal testing on animal model. Testing not indicative of human clinical outcome.  
 6 Based on internal testing in a cadaver model. Testing not indicative of human clinical outcome.  
 7 Based on bench top mechanical testing. Testing not indicative of human clinical outcome.  
 8 Based on thread pitch.

## Implant Options/Color Coding



Multi-Axial Screw



Closed Multi-Axial Iliac Screw\*



Fixed Angle Screw



Fixed Angle Iliac Screw\*



Hook



Break-off Set Screw



4.75mm/6.35mm  
Lateral Connector\*



Break-off Iliac Set Screw



CD HORIZON® X10 CROSSLINK®  
Fixed Plate



CD HORIZON® X10 CROSSLINK® Plate

### Multi-Axial Screw Color-coding



1.0mm



1.0mm



5.0mm



6.5mm



7.5mm



9.5mm



10.5mm

### Fixed Angle Screw Color-coding



4.5mm



5.0mm



5.5mm



6.5mm



7.5mm

\*May be ordered separately.

## Implant Features

### BREAK-OFF SET SCREW



- Features a blunt start thread, reducing the chances of the set screw starting off-axis to the tulip
- The thread pattern on the set screw and the geometry of the tulip head forces the set screw to start in "one way"
- The reverse angle threadform maximizes the surface contact of the set screw threads with the tulip head
- The G4 reverse angle threadform patented technology also allows for a good tactile feedback and a reduced risk of head slay, hence reducing the chance of cross-threading
- The break-off patented technology improves security of final tightening by ensuring accurate tightening torque

### ROD OPTIONS



- Multiple material types and rod diameters for construct tailoring and intraoperative flexibility
- Precontoured and Precut CHROMALLOY™ and Commercially Pure Titanium rods
- Straight CHROMALLOY™, CHROMALLOY™ Plus, Commercially Pure Titanium, and Titanium Alloy Rods
- See "Product Ordering Information" on page 58 for the comprehensive list of rod options

### CD HORIZON® X10 CROSSLINK PLATE®



- Compatible with CHROMALLOY™, CHROMALLOY™ Plus, and Titanium Rods
- Adjustable or fixed length options
- Adjustable plate attaches to the rod in the coronal, sagittal, or transverse planes in any orientation
- 6.35 X10 Crosslink® plate compatible with 6.0 rods diameter offering

### CD HORIZON® LEGACY™ HOOKS\*



- Compatible with CHROMALLOY™, CHROMALLOY™ Plus, and Titanium Rods
- Anatomic design to mimic the posterior spinal elements

### CD HORIZON® LEGACY™ ILIAC SPINE SYSTEM\*



- Closed fixed head iliac screws available in 0°, 10°, and 20° angles
- Closed Multi-Axial Screws (CMAS) provide flexibility to position the screw head
- Lateral connectors compatible with CHROMALLOY™, CHROMALLOY™ Plus, and Titanium Rods
- Lateral connectors allow medial/lateral adjustability which may prevent the need for coronal rod bending

# Product Ordering Information

## 5.5/6.0MM TITANIUM FIXED ANGLE SCREWS *7a)*



Catalog Number	Description	Color
55410004520*	4.5mm x 20mm	Red
55410004525	4.5mm x 25mm	Red
55410004530	4.5mm x 30mm	Red
55410004535	4.5mm x 35mm	Red
55410004540	4.5mm x 40mm	Red
55410004545	4.5mm x 45mm	Red
55410004550*	4.5mm x 50mm	Red
55410005525*	5.5mm x 25mm	Green
55410005530	5.5mm x 30mm	Green
55410005535	5.5mm x 35mm	Green
55410005540	5.5mm x 40mm	Green
55410005545	5.5mm x 45mm	Green
55410005550	5.5mm x 50mm	Green
55410005555*	5.5mm x 55mm	Green
55410006525*	6.5mm x 25mm	Blue

*3.1.1.*

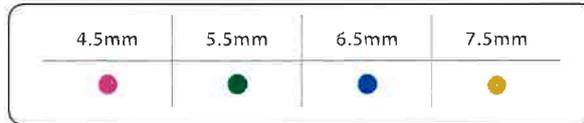
*3.1.2.*

Catalog Number	Description	Color
55410006530	6.5mm x 30mm	Blue
55410006535	6.5mm x 35mm	Blue
55410006540	6.5mm x 40mm	Blue
55410006545	6.5mm x 45mm	Blue
55410006550	6.5mm x 50mm	Blue
55410006555	6.5mm x 55mm	Blue
55410007530*	7.5mm x 30mm	Yellow
55410007535	7.5mm x 35mm	Yellow
55410007540	7.5mm x 40mm	Yellow
55410007545	7.5mm x 45mm	Yellow
55410007550	7.5mm x 50mm	Yellow
55410007555	7.5mm x 55mm	Yellow
55410007560*	7.5mm x 60mm	Yellow

*3.1.1.*

*3.1.2.*

Screw Color-coding Size Reference



## 5.5/6.0MM COBALT-CHROME REDUCTION MULTI-AXIAL SCREW (RMAS) *7d)*



Catalog Number	Description	Color
55890004525*	4.5mm x 25mm	Red
55890004530	4.5mm x 30mm	Red
55890004535	4.5mm x 35mm	Red
55890004540*	4.5mm x 40mm	Red
55890004545*	4.5mm x 45mm	Red
55890005525*	5.5mm x 25mm	Green
55890005530	5.5mm x 30mm	Green
55890005535	5.5mm x 35mm	Green
55890005540	5.5mm x 40mm	Green
55890005545	5.5mm x 45mm	Green
55890005550	5.5mm x 50mm	Green
55890005555*	5.5mm x 55mm	Green

Catalog Number	Description	Color
55890006525*	6.5mm x 25mm	Blue
55890006530	6.5mm x 30mm	Blue
55890006535	6.5mm x 35mm	Blue
55890006540	6.5mm x 40mm	Blue
55890006545	6.5mm x 45mm	Blue
55890006550	6.5mm x 50mm	Blue
55890006555*	6.5mm x 55mm	Blue
55890006560*	6.5mm x 60mm	Blue
55890007535*	7.5mm x 35mm	Yellow
55890007540	7.5mm x 40mm	Yellow
55890007545	7.5mm x 45mm	Yellow
55890007550	7.5mm x 50mm	Yellow
55890007555*	7.5mm x 55mm	Yellow
55890007560*	7.5mm x 60mm	Yellow

May be ordered as an extra instrument.

8  
5.5/6.0MM COBALT CHROME/TITANIUM MULTI-AXIAL SCREWS



Catalog Number	Description	
55840004525	4.5mm x 25mm	●
55840004530	4.5mm x 30mm	●
55840004535	4.5mm x 35mm	●
55840004540	4.5mm x 40mm	●
55840004545	4.5mm x 45mm	●
55840004550	4.5mm x 50mm	●
55840004555*	4.5mm x 55mm	●
5584000525*	5.5mm x 25mm	●
5584000530	5.5mm x 30mm	●
5584000535	5.5mm x 35mm	●
5584000540	5.5mm x 40mm	●
5584000545	5.5mm x 45mm	●
5584000550	5.5mm x 50mm	●
5584000555	5.5mm x 55mm	●
55840005560*	5.5mm x 60mm	●
55840006525*	6.5mm x 25mm	●
55840006530	6.5mm x 30mm	●
55840006535	6.5mm x 35mm	●
55840006540	6.5mm x 40mm	●
55840006545	6.5mm x 45mm	●
55840006550	6.5mm x 50mm	●
55840006555	6.5mm x 55mm	●
55840006560	6.5mm x 60mm	●
55840006565*	6.5mm x 65mm	●

7b) 3.2.1. 3.2.2.

Catalog Number	Description	
55840007525*	7.5mm x 25mm	●
55840007530*	7.5mm x 25mm	●
55840007535	7.5mm x 35mm	●
55840007540	7.5mm x 40mm	●
55840007545	7.5mm x 45mm	●
55840007550	7.5mm x 50mm	●
55840007555*	7.5mm x 55mm	●
55840007560*	7.5mm x 60mm	●
55840008530	8.5mm x 30mm	●
55840008535	8.5mm x 35mm	●
55840008540	8.5mm x 40mm	●
55840008545	8.5mm x 45mm	●
55840008550	8.5mm x 50mm	●
55840008555	8.5mm x 55mm	●
55840008560	8.5mm x 60mm	●
55840009530	9.5mm x 30mm	●
55840009535	9.5mm x 35mm	●
55840009540	9.5mm x 40mm	●
55840009545	9.5mm x 45mm	●
55840009550	9.5mm x 50mm	●
55840009555	9.5mm x 55mm	●
55840009560	9.5mm x 60mm	●

3.2.1. 3.2.2.

SPECIAL CASE WITH LONGER SCREW EXIST IN 6.5, 7.5, 8.5 AND 9.5 DIAMETERS (LEAD TIME EXPECTED)

Catalog Number	Description	
5584000x570	x.5mm x 70mm	● ● ● ●
5584000x580	x.5mm x 80mm	● ● ● ●
5584000x590	x.5mm x 90mm	● ● ● ●
5584000x500	x.5mm x 100mm	● ● ● ●

5.5/6.0MM TITANIUM SET SCREWS



9 {

Catalog Number	Description
5540030	Break-off Set Screws
5540230	5.5/6.0 Reduction Set Screws

3.3. u 3.9

## Product Ordering Information *Continued*

### TITANIUM CLOSED MULTI-AXIAL ILIAC SCREWS\*



Catalog Number	Description	Catalog Number	Description
70465540	5.5mm x 40mm	70467560	7.5mm x 60mm
70465550	5.5mm x 50mm	70467570	7.5mm x 70mm
70465560	5.5mm x 60mm	70467580	7.5mm x 80mm
70466550	6.5mm x 50mm	70468570	8.5mm x 70mm
70466560	6.5mm x 60mm	70468580	8.5mm x 80mm
70466570	6.5mm x 70mm	70468590	8.5mm x 90mm

3.12.1      3.12.2      3.12.1      3.12.2

### TITANIUM ILIAC SCREWS\*



Catalog Number	Description	Catalog Number	Description
7040650	6.5mm x 50mm, 0°	7041780	7.5mm x 80mm, 10°
7040660	6.5mm x 60mm, 0°	7041870	8.5mm x 70mm, 10°
7040670	6.5mm x 70mm, 0°	7041880	8.5mm x 80mm, 10°
7040760	7.5mm x 60mm, 0°	7041890	8.5mm x 90mm, 10°
7040770	7.5mm x 70mm, 0°	7042650	6.5mm x 50mm, 20°
7040780	7.5mm x 80mm, 0°	7042660	6.5mm x 60mm, 20°
7040870	8.5mm x 70mm, 0°	7042670	6.5mm x 70mm, 20°
7040880	8.5mm x 80mm, 0°	7042760	7.5mm x 60mm, 20°
7040890	8.5mm x 90mm, 0°	7042770	7.5mm x 70mm, 20°
7041650	6.5mm x 50mm, 10°	7042780	7.5mm x 80mm, 20°
7041660	6.5mm x 60mm, 10°	7042870	8.5mm x 70mm, 20°
7041670	6.5mm x 70mm, 10°	7042880	8.5mm x 80mm, 20°
7041760	7.5mm x 60mm, 10°	7042890	8.5mm x 90mm, 20°
7041770	7.5mm x 70mm, 10°		

3.13.1      3.13.2      3.13.1      3.13.2

### TITANIUM ILIAC SET SCREWS



Catalog Number	Description
7049855	Hex Break-off Set Screws
7045855	Set Screw for Fixed Titanium Iliac Screw

### TITANIUM ILIAC LATERAL CONNECTORS



Catalog Number	Description
5443110	4.75mm/6.35mm Closed, 10mm
5443120	4.75mm/6.35mm Closed, 20mm
5443130	4.75mm/6.35mm Closed, 30mm
5443160	4.75mm/6.35mm Closed, 60mm
7041310	5.5mm/6.35mm Closed, 10mm
7041320	5.5mm/6.35mm Closed, 20mm
7041330	5.5mm/6.35mm Closed, 30mm
7041360	5.5mm/6.35mm Closed, 60mm
7041410	6.35mm/6.35mm Closed, 10mm
7041420	6.35mm/6.35mm Closed, 20mm
7041430	6.35mm/6.35mm Closed, 30mm
7041460	6.35mm/6.35mm Closed, 60mm

\*Lateral Connectors must be used with CD HORIZON® System Iliac Screws.

Product Ordering Information *continued*

Cannulated Multi-Axial Screws

79



4.75mm	5.5/6.0mm	Description
54840014530	55840014530	4.5mm x 30mm
54840014535	55840014535	4.5mm x 35mm
54840014540	55840014540	4.5mm x 40mm
	55840015530	5.5mm x 30mm
54840015535	55840015535	5.5mm x 35mm
54840015540	55840015540	5.5mm x 40mm
54840015545	55840015545	5.5mm x 45mm
54840015550	55840015550	5.5mm x 50mm
54840016535	55840016535	6.5mm x 35mm
54840016540	55840016540	6.5mm x 40mm
54840016545	55840016545	6.5mm x 45mm
54840016550	55840016550	6.5mm x 50mm
54840016555	55840016555	6.5mm x 55mm
54840017530		7.5mm x 30mm
54840017535	55840017535	7.5mm x 35mm
54840017540	55840017540	7.5mm x 40mm
54840017545	55840017545	7.5mm x 45mm
	55840017550	7.5mm x 50mm
	55840017555	7.5mm x 55mm
	55840018590	8.5mm x 90mm
	55840018500	8.5mm x 100mm
	55840019590	9.5mm x 90mm
	55840019500	9.5mm x 100mm
	55840019511	9.5mm x 110mm
	55840011590	10.5mm x 90mm
	55840011500	10.5mm x 100mm
	55840011511	10.5mm x 110mm

CD HORIZON® SOLERA™ SEXTANT® Set Screws



Catalog Number	Description
5440430	4.75mm Titanium Non-sterile Break Off SEXTANT Set Screws
5540430	5.5/6.0mm Titanium Non-sterile Break Off SEXTANT Set Screws

19

SURGICAL  
TECHNIQUE

## CD Horizon™ Solera™ 5.5/6.0mm Fenestrated Screw Set

(4h)

CD Horizon Solera Fenestrated Screws provide immediate enhanced fixation in poor bone quality due to advance stage tumors through the application of Medtronic Fenestrated Screw Cement.



Medtronic

MICHELSON  
TECHNOLOGY  
AT WORK

20

# PRODUCT ORDERING INFORMATION

SPSSF550 CD Horizon Solera Fenestrated Screw Set 5.5/6.0mm  
 5.5/6.0mm Fenestrated Multi-Axial Screws, Cobalt Chrome

7h)

Item Number	Description	Quantity
55840024530	4.5mm x 30mm	6
55840024535	4.5mm x 35mm	6
55840024540	4.5mm x 40mm	6
55840024545	4.5mm x 45mm	4
55840024550	4.5mm x 50mm	4
55840025530	5.5mm x 30mm	6
55840025535	5.5mm x 35mm	8
55840025540	5.5mm x 40mm	12
55840025545	5.5mm x 45mm	12
55840025550	5.5mm x 50mm	8
55840026530	6.5mm x 30mm	4
55840026535	6.5mm x 35mm	6
55840026540	6.5mm x 40mm	12
55840026545	6.5mm x 45mm	12
55840026550	6.5mm x 50mm	12
55840026555	6.5mm x 55mm	6
55840027530	7.5mm x 30mm	4
55840027535	7.5mm x 35mm	6
55840027540	7.5mm x 40mm	6
55840027545	7.5mm x 45mm	8
55840027550	7.5mm x 50mm	8
55840027555	7.5mm x 55mm	4
7480741T	Adapter Driver T25	10
7480755T	Lock Sleeve Driver for 5.5/6.0	10
7480760	Stabilization Clip	2

Bone Filler Device (BFD) Disposable add on items:

Reference	Description	Quantity
A07A	Cement Mixer	1
A22	Multi-Tap Adapter Size 2	1

CDS Disposable add on items:

Reference	Description	Quantity
A07A	Cement Mixer	1
CC02A	CDS Cement Cartridges	1
CDS3A	Cement Gun And Bone Filler Size 3	1

Bone Cement add on item:

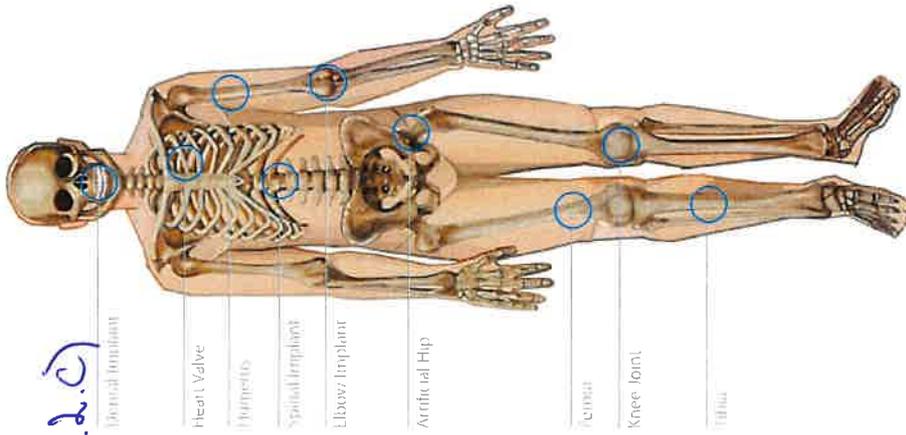
Reference	Description
7480724-CAN	Medtronic Fenestrated Screw Cement

For a listing of indications, contraindications, precautions, warnings, and potential adverse events, please refer to the Instructions for Use.

21

## CD HORIZON® ASTUTE™ System Overview

The CD HORIZON® ASTUTE™ Spinal System is designed to treat conditions of the lumbar spine as an adjunct to fusion. The CD HORIZON® ASTUTE™ Spinal System is compatible with the Solera 5/6/0 system. The Astute™ Rod is made of Polyetheretherketone (PEEK). A material which has many applications in medical.



3.4.2.c)

### History of PEEK Material

- More than 20 years of medical applications has been used in
  - Dental implants
  - Heart valves/stents
  - Artificial joints
  - Spinal implants

### Biocompatibility of PEEK Material

- Meets all biological requirements
- Cytotoxicity (influence on cell growth)
- Systemic toxicity (assess possible contact hazards)
- Genotoxicity (alteration of DNA or genes)
- Implantation (biological response to implantation)
- Chronic toxicity (evaluation of chronic toxicity)
- Carcinogenicity (determination of cancer risk)
- Biocompatibility

3.4.2.c)

### CD HORIZON® SOLERA® 5/5/6.0 Multi-Axial Screw

- Has 10% less overall volume than CD HORIZON® LEGACY™ 5/6/35mm MMS
- Is compatible with a 5.5mm or a 6.0mm rod diameter
- Features OS HOSS® dual lead threadform
- Is designed with a dual-lead thread (fully compatible with PEEK, CHROMALLOY™, CHROMALLOY™ Plus, and Titanium Rods, allowing real-time rod choices in the OR to customize the stiffness and strength of the construct
- Has a saddle which is color-coded by bone screw diameter

### Important Note

The CD HORIZON® Spinal System has not been evaluated for safety, heating, migration or compatibility in the magnetic resonance environment

CD HORIZON® ASTUTE™ Spinal System rods are not to be used with CD HORIZON® SOLERA® 5/5/6.0 fixed angle and sagittal adjusting screws. Doing so could lead to disassembly, bending and/or breakage of any or all of the components



### CD HORIZON® ASTUTE™ Spinal System Rod

• Is available in 7 curvatures (normal and lordotic)—to match patient lumbar anatomy



• Have the patented TorsionLock™ ends for easy insertion

• Are pre-bent and manufactured to length with a unique oval cross-section

### Note

The CD HORIZON® SOLERA® 5/5/6.0 system provides a multiple rod option for construct tailoring and intraoperative flexibility. In addition to the Astute™ Rod system the SOLERA® 5/5/6.0 screw is compatible with all the below rod material systems



BalanC® Rod



CHROMALLOY™ Pre-bent Rod



CHROMALLOY™ Rod



CHROMALLOY™ Plus Rod



Titanium Alloy Rod



Commercially Pure Titanium Rod

### Break Off Set Screw

- Features a blunt start thread, reflecting the clearance of the set screw starting off with a low ridge
- Is designed so the thread pattern matches the geometry of the Bolt head which cause the set screw to start in one way
- For a true break off thread, continued to set screws using the CD HORIZON® SOLERA™ threaded rod

### Important Note

Always use the purple CD HORIZON® ASTUTE™ set screw with the CD HORIZON® ASTUTE™ Rods and CD HORIZON® BalanC® Rods. This is essential to prevent construct failure as the design of the set screw accommodates for the PEEK material used in the rod. The use of another set screw could lead to disassembly, bending and/or breakages of any or all of the components.



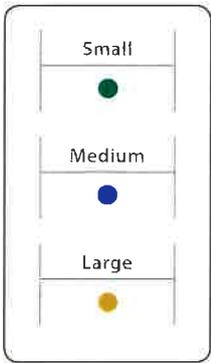
Blunt Start Thread Cut

## Product Ordering Information *Continued*

### TITANIUM HOOKS



Hook Color-Coding Size Reference



5.5/6.0mm	5.5mm	6.35mm	Description	
5541102	7541102	7641202	Pedicle Hook, Small	●
5541103	7541103	7641203	Pedicle Hook, Medium	●
5541104	7541104	7641204	Pedicle Hook, Large	●
5541112	7541112	7641212	Wide Blade Hook, Small	●
5541113	7541113	7641213	Wide Blade Hook, Medium	●
5541114	7541114	7641214	Wide Blade Hook, Large	●
5541122	7541122	7641222	Narrow Blade Hook, Small	●
5541123	7541123	7641223	Narrow Blade Hook, Medium	●
5541124	7541124	7641224	Narrow Blade Hook, Large	●
5541133	7541133	7641133	Ramped, Wide Blade, Medium	●
5541142	7541142	7641142	Ramped, Narrow Blade, Small	●
5541143	7541143	7641143	Ramped, Narrow Blade, Medium	●
	7541153		Lumbar Supralaminar, Medium	●
	7541162	7641162	Lumbar Angled Blade, Small	●
	7541163	7641163	Lumbar Angled Blade, Medium	●
5541173	7541172		Extended Body Hook, Small	●
5541174	7541173	7641173	Extended Body Hook, Medium	●
5541188	7541174	7641174	Extended Body Hook, Large	●
5541189	7541188	7641188	Thoracic Angled Blade, Right	
5541198	7541189	7641189	Thoracic Angled Blade, Left	
5541199	7541198	7641198	Right Offset Hook, Large	●
7541199	7541199	7641199	Left Offset Hook, Large	●

3.7.1

### CD HORIZON® X10 CROSSLINK® PLATES, TITANIUM



5.5mm	6.35mm	Description	
8115516	8116416	16mm Fixed	} 3.6.
8115519	8116419	19mm Fixed	
8115522	8116422	22mm Fixed	
8115525	8116425	25mm Fixed	
8115528	8116428	28mm-30mm MULTISPAN	} 3.5.
8115530	8116430	30mm-34mm MULTISPAN	
8115534	8116434	34mm-36 mm MULTISPAN	
8115536	8116436	36mm-39mm MULTISPAN	
8115539	8116439	39mm-45mm MULTISPAN	
8115545	8116445	45mm-58mm MULTISPAN	
8115558	8116458	58mm-80mm MULTISPAN	
8110855	8110855	Set Screw	

23

## Hook Site Preparation, Options and Insertion

The CD HORIZON SOLERA Spinal System is compatible with a number of top-loading hooks of different anatomic shapes and sizes (see hook implants chart, page 66)

3.7.1.

The surgeon must choose the appropriate hook based on the individual patient's anatomy, deformity degree and type, method of correction chosen, and amount of compression/distraction that will be needed to provide proper and stable purchase of the implants.

NOTE: Prior to implantation of the hooks, break off the VERIFY! Implant Tracking tag and retain it in the Tag Sorter so that it can be scanned at the end of the surgery.

Several different instruments can be used for hook insertion. For instance, the Straight or Lateral Implant Holder combined with the Hook Pusher (Figure 81).



Figure 81

### PEDICAL HOOK

The Pedicle Hook may be used from T1 to T10. The hook blade is always cephalad (up-going) and is in the infralaminar position. The facet capsule is divided, and a portion of the inferior facet process may be removed to facilitate insertion of the hook (Figure 82). Once the pedicle has been clearly identified with the help of the Pedicle finder (Figure 83), the hook may be inserted.

If needed, a mallet can be used to impact the Hook Pusher to drive the Pedicle Hook. It is important that the Pedicle Hook is placed into the joint cavity (Figure 84) and is not splitting the inferior articular process (Figure 85).



Figure 82



Figure 83



Pedicle Hook



CORRECT

Figure 84



INCORRECT

Figure 85

## Product Ordering Information

### Instrument Set

4.75mm	5.5/6.0mm	Description	Item Number	Description
5484332	5584001	Ring Counter Torque	5484331	4.75mm RMAS Lock Sleeve Driver
5484307	5584134	Beale Reducer	5584331	5.5/6.35mm RMAS Lock Sleeve Driver
5484333	5585336	Rocker, Extended	7485207	7mm Extended Sleeve
5484335	5585335	Tab Breaker	7485214	14mm Extended Sleeve
5484336	5584009	RMAS Breakoff Driver	G900000	Ratcheting Handle
5484338	5584005	Non-Breakoff Plug Starter		
5484337	5584002	Non-Breakoff Provisional Driver Insert		

### Implants

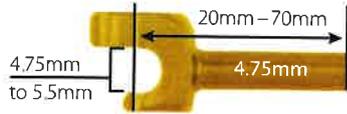
4.75mm	5.5/6.0mm	Description
5440230	5540230	Reduction Set Screw <b>3.9</b>
54890004525	55890004525	4.5mm x 25mm
54890004530	55890004530	4.5mm x 30mm
54890004535	55890004535	4.5mm x 35mm
54890004540	55890004540	4.5mm x 40mm
54890005525	55890005525	5.5mm x 25mm
54890005530	55890005530	5.5mm x 30mm
54890005535	55890005535	5.5mm x 35mm
54890005540	55890005540	5.5mm x 40mm
54890005545	55890005545	5.5mm x 45mm
54890005550	55890005550	5.5mm x 50mm
54890006530	55890006530	6.5mm x 30mm
54890006535	55890006535	6.5mm x 35mm
54890006540	55890006540	6.5mm x 40mm
54890006545	55890006545	6.5mm x 45mm
54890006550	55890006550	6.5mm x 50mm
54890006555	55890006555	6.5mm x 55mm
54890007535	55890007535	7.5mm x 35mm
54890007540	55890007540	7.5mm x 40mm
54890007545	55890007545	7.5mm x 45mm
54890007550	55890007550	7.5mm x 50mm
54890007555		7.5mm x 55mm

**3.8.1.**      **3.8.2**

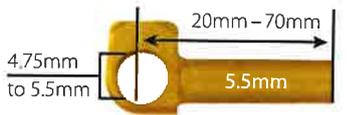


Multi-Axial Reduction Screw with Set Screw

SIDE LOADING LATERAL CONNECTORS



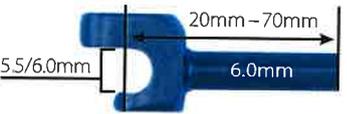
Catalog Number	Description
<u>4.75mm to 4.75mm</u>	
5444220	4.75mm Side Loading Lateral Connector, 4.75mm Post, 20mm Length
5444225	4.75mm Side Loading Lateral Connector, 4.75mm Post, 25mm Length
5444235	4.75mm Side Loading Lateral Connector, 4.75mm Post, 35mm Length
5444270*	4.75mm Side Loading Lateral Connector, 4.75mm Post, 70mm Length



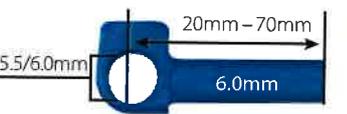
Catalog Number	Description
<u>4.75mm to 5.5mm</u>	
5454120	4.75mm Closed Lateral Connector, 5.5mm Post, 20mm Length
5454125	4.75mm Closed Lateral Connector, 5.5mm Post, 25mm Length
5454135	4.75mm Closed Lateral Connector, 5.5mm Post, 35mm Length
5454170*	4.75mm Closed Lateral Connector, 5.5mm Post, 70mm Length



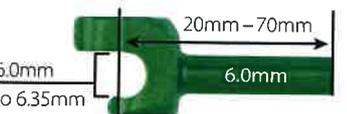
Catalog Number	Description
<u>5.5/6.0mm to 5.5mm</u>	
5554220	5.5/6.0mm Side Loading Lateral Connector, 5.5mm Post, 20mm Length
5554225	5.5/6.0mm Side Loading Lateral Connector, 5.5mm Post, 25mm Length
5554235	5.5/6.0mm Side Loading Lateral Connector, 5.5mm Post, 35mm Length
5554270*	5.5/6.0mm Side Loading Lateral Connector, 5.5mm Post, 70mm Length



Catalog Number	Description
<u>5.5/6.0mm to 6.0mm</u>	
5564220	5.5/6.0mm Side Loading Lateral Connector, 6.0mm Post, 20mm Length
5564225	5.5/6.0mm Side Loading Lateral Connector, 6.0mm Post, 25mm Length
5564235	5.5/6.0mm Side Loading Lateral Connector, 6.0mm Post, 35mm Length
5564270*	5.5/6.0mm Side Loading Lateral Connector, 6.0mm Post, 70mm Length



Catalog Number	Description
<u>5.5/6.0mm to 6.0mm</u>	
5564120	5.5/6.0mm Closed Lateral Connector, 6.0mm Post, 20mm Length
5564125	5.5/6.0mm Closed Lateral Connector, 6.0mm Post, 25mm Length
5564135	5.5/6.0mm Closed Lateral Connector, 6.0mm Post, 35mm Length
5564170*	5.5/6.0mm Closed Lateral Connector, 6.0mm Post, 70mm Length



Catalog Number	Description
<u>6.35mm to 6.0mm</u>	
5764220*	6.35mm Side Loading Lateral Connector, 6.0mm Post, 20mm Length
5764225*	6.35mm Side Loading Lateral Connector, 6.0mm Post, 25mm Length
5764235*	6.35mm Side Loading Lateral Connector, 6.0mm Post, 35mm Length
5764270*	6.35mm Side Loading Lateral Connector, 6.0mm Post, 70mm Length

3.11.1.

3.10.1.

May be ordered as extras

26

## CD HORIZON® Spinal System MEDTRONIC® Rod Connector Set

The CD-HORIZON® Spinal System MEDTRONIC® Rod Connector Set is a dedicated set of rod-to-rod connectors designed to extend existing rod constructs in multilevel revision surgeries and to ease construct assembly during complex deformity correction procedures. Each implant set, either titanium or stainless steel, provides connector options for multiple rod diameters. Connector options include closed/closed domino, closed/open axial, side-loading/closed domino, and a lateral connector for sagittal rods.

### Implant Features

- Compatible with rod diameters ranging from 4.0mm to 6.35mm
- Smaller footprint and improved axial grip over previous design
- Allows inline connection of same or different rod diameter
- Available in titanium and stainless steel\* Never use Stainless Steel and Titanium implant component in the same spinal construct
- Connection flexibility with large and small offset options
- Shorter run-on-rod eases connection to existing fusion constructs
- Color-coded\*\* according to rods diameter

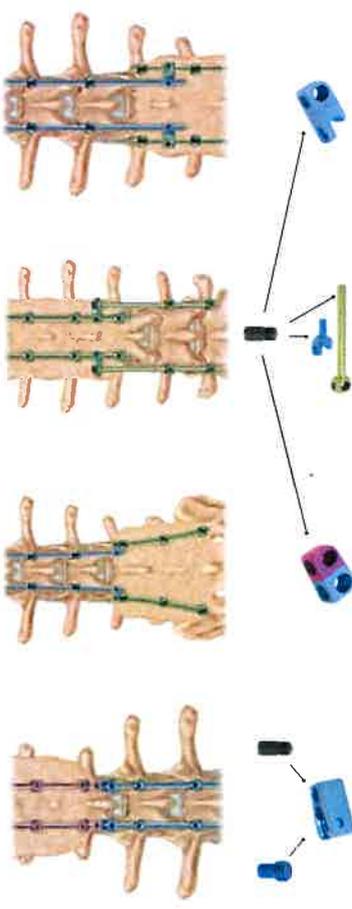
\*stainless steel implant are not color-coded and available upon special request

Connector Color	Rod Diameter Range
Purple	4.0mm to 4.5mm
Blue	4.75mm to 5.5mm
Green	6.0mm to 6.35mm

+ only closed side of 5.5 connector can accommodate 4.75 mm rod / open side connector accommodate only 5.0 to 5.5mm rod range.

### Potential risks associated with the use of this device include, but are not limited to:

- Early or late loosening of any or all of the components
- Tissue or nerve damage caused by improper positioning and placement of implants or instruments
- Postoperative change in spinal curvature, loss of correction height, and/or reduction
- Nonunion (or pseudarthrosis), delayed union, or mal-union



- Small offset between rods
- Allows connection of different rod diameters
- Improved axial grip over previous design
- May be used in 4-rod primary deformity correction constructs
- May be used for simple fusion extends on; particularly useful in thoracic region
- Allows inline connection of same or different rod diameters
- Open side mimics the CD HORIZON® LEGACY™ Fixed Angle Screw design (compatible with Rocker instrument, use the same set screw)
- May be used for simple fusion extends on; particularly useful in thoracic region
- May be used for construct where sagittal alignment varies
- May be used for revision and fusion extensions
- The hole of the sagittal rod is to accommodate only the lateral connector
- The open-eye connector have not been tested for iliac fixation
- May be used for construct where sagittal alignment varies
- Improved axial grip over previous design
- May be used to extend an existing rod construct or change rod diameters
- Larger offset between rods than the Closed/Closed Domino
- Smaller footprint and improved axial grip over previous design
- May be used to extend an existing rod construct or change rod diameters

## Product Ordering Information

### Closed/Open Axial Connectors

Titanium Part Number	Stainless Steel Part Number	Description	Run on the Rod (Closed)	Run on the Rod (Open)	Width (Closed)	Width (Open)	Height	Length
778114545	778214545	Closed 4.5mm/Open 4.5mm	9.7mm	9.8mm	7.8mm	11.2mm	11.3mm	20.2mm
779115545	778215545	Closed 5.5mm/Open 4.5mm	9.7mm	9.8mm	8.8mm	11.2mm	12.1mm	20.2mm
778116555	778216555	Closed 6.35mm/Open 4.5mm	9.7mm	9.8mm	8.8mm	12.7mm	12.1mm	21.2mm
779116565	778216565	Closed 6.35mm/Open 6.35mm	9.7mm	9.8mm	9.8mm	13.4mm	13.2mm	21.2mm
779115565	778215565	Closed 5.5mm/Open 6.35mm	9.7mm	9.8mm	8.8mm	13.4mm	13.2mm	22.6mm

### Closed/Closed Dominos

Titanium Part Number	Stainless Steel Part Number	Description	Run on the Rod	Width	Distance Between Rod Centers	Heights
778214545	778214545	Closed 4.5mm/Closed 4.5mm	8.7mm	18.7mm	9.2mm	11.4mm, 11.3mm
779214555	778214555	Closed 4.5mm/Closed 5.5mm	8.7mm	19.2mm	9.8mm	11.4mm, 12.3mm
778215545	778215545	Closed 5.5mm/Closed 5.5mm	8.7mm	20.1mm	10.3mm	12.5mm, 12.3mm
779215555	778215555	Closed 5.5mm/Closed 6.35mm	8.7mm	20.7mm	10.7mm	12.5mm, 13.0mm
778216545	778216545	Closed 6.35mm/Closed 6.35mm	8.7mm	21.3mm	11.1mm	13.0mm, 13.0mm

### Side-Loading/Closed Dominos

Titanium Part Number	Stainless Steel Part Number	Description	Height Above the Rod	Height Below the Rod	Run on the Rod	Width	Height	Distance Between Rod Centers
778214545	778214545	Side-Loading 4.5mm/Closed 4.5mm	3.9mm	2.6mm	10.0mm	21.9mm	11.7mm	12.6mm
779214555	778214555	Side-Loading 5.5mm/Closed 4.5mm	3.9mm	2.6mm	10.0mm	23.2mm	12.7mm	13.1mm
778215545	778215545	Side-Loading 5.5mm/Closed 5.5mm	3.9mm	2.6mm	10.0mm	24.2mm	12.7mm	13.1mm
779215555	778215555	Side-Loading 6.35mm/Closed 5.5mm	3.9mm	2.6mm	10.0mm	24.9mm	13.6mm	13.8mm
778216545	778216545	Side-Loading 6.35mm/Closed 6.35mm	3.9mm	2.6mm	10.0mm	25.5mm	13.6mm	14.2mm
779216555	778216555	Side-Loading 6.35mm/Closed 6.35mm	3.9mm	2.94mm	10.0mm	24.8mm	13.0mm	13.5mm

### Lateral Connectors

Titanium Part Number	Stainless Steel Part Number	Description	Height Above the Rod	Height Below the Rod	Run on the Rod	Width	Post Diameter
702210	702210	Side-Loading 4.5mm/2mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702230	702230	Side-Loading 4.5mm/3mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702240	702240	Side-Loading 4.5mm/4mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702250	702250	Side-Loading 4.5mm/5mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702260	702260	Side-Loading 4.5mm/6mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702270	702270	Side-Loading 4.5mm/7mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702280	702280	Side-Loading 4.5mm/8mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702290	702290	Side-Loading 4.5mm/9mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702300	702300	Side-Loading 4.5mm/10mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702310	702310	Side-Loading 4.5mm/11mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702320	702320	Side-Loading 4.5mm/12mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702330	702330	Side-Loading 4.5mm/13mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702340	702340	Side-Loading 4.5mm/14mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702350	702350	Side-Loading 4.5mm/15mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702360	702360	Side-Loading 4.5mm/16mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702370	702370	Side-Loading 4.5mm/17mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702380	702380	Side-Loading 4.5mm/18mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702390	702390	Side-Loading 4.5mm/19mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702400	702400	Side-Loading 4.5mm/20mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702410	702410	Side-Loading 4.5mm/21mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702420	702420	Side-Loading 4.5mm/22mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702430	702430	Side-Loading 4.5mm/23mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702440	702440	Side-Loading 4.5mm/24mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702450	702450	Side-Loading 4.5mm/25mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702460	702460	Side-Loading 4.5mm/26mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702470	702470	Side-Loading 4.5mm/27mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702480	702480	Side-Loading 4.5mm/28mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702490	702490	Side-Loading 4.5mm/29mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702500	702500	Side-Loading 4.5mm/30mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702510	702510	Side-Loading 4.5mm/31mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702520	702520	Side-Loading 4.5mm/32mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702530	702530	Side-Loading 4.5mm/33mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702540	702540	Side-Loading 4.5mm/34mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702550	702550	Side-Loading 4.5mm/35mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702560	702560	Side-Loading 4.5mm/36mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702570	702570	Side-Loading 4.5mm/37mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702580	702580	Side-Loading 4.5mm/38mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702590	702590	Side-Loading 4.5mm/39mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702600	702600	Side-Loading 4.5mm/40mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702610	702610	Side-Loading 4.5mm/41mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702620	702620	Side-Loading 4.5mm/42mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702630	702630	Side-Loading 4.5mm/43mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702640	702640	Side-Loading 4.5mm/44mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702650	702650	Side-Loading 4.5mm/45mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702660	702660	Side-Loading 4.5mm/46mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702670	702670	Side-Loading 4.5mm/47mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702680	702680	Side-Loading 4.5mm/48mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702690	702690	Side-Loading 4.5mm/49mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702700	702700	Side-Loading 4.5mm/50mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702710	702710	Side-Loading 4.5mm/51mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702720	702720	Side-Loading 4.5mm/52mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702730	702730	Side-Loading 4.5mm/53mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702740	702740	Side-Loading 4.5mm/54mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702750	702750	Side-Loading 4.5mm/55mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702760	702760	Side-Loading 4.5mm/56mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702770	702770	Side-Loading 4.5mm/57mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702780	702780	Side-Loading 4.5mm/58mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702790	702790	Side-Loading 4.5mm/59mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702800	702800	Side-Loading 4.5mm/60mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702810	702810	Side-Loading 4.5mm/61mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702820	702820	Side-Loading 4.5mm/62mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702830	702830	Side-Loading 4.5mm/63mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702840	702840	Side-Loading 4.5mm/64mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702850	702850	Side-Loading 4.5mm/65mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702860	702860	Side-Loading 4.5mm/66mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702870	702870	Side-Loading 4.5mm/67mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702880	702880	Side-Loading 4.5mm/68mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702890	702890	Side-Loading 4.5mm/69mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702900	702900	Side-Loading 4.5mm/70mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702910	702910	Side-Loading 4.5mm/71mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702920	702920	Side-Loading 4.5mm/72mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702930	702930	Side-Loading 4.5mm/73mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702940	702940	Side-Loading 4.5mm/74mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702950	702950	Side-Loading 4.5mm/75mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702960	702960	Side-Loading 4.5mm/76mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702970	702970	Side-Loading 4.5mm/77mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702980	702980	Side-Loading 4.5mm/78mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
702990	702990	Side-Loading 4.5mm/79mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm
703000	703000	Side-Loading 4.5mm/80mm Length	4.1mm	2.7mm	10.0mm	13.6mm	4.5mm

### Sagittal Rods

Titanium Part Number	Stainless Steel Part Number	Description	Run on the Post	Width	Height	Post Diameter
778160945	778260945	4.5mm/70mm Length	8.3mm	14.7mm	13.2mm	4.5mm
778167055	778267055	5.5mm/70mm Length	8.3mm</			

# Introduction and surgical overview

This technique describes the workflow for a CD Horizon™ Spinal System Medtronic™ Rod Connector (MRC) procedure.

The system allows for construct extensions and provides titanium rod-to-rod connectors designed with numerous rod diameters and materials in mind.

Implants are color-coded according to rod diameter.

## Top Loading Color Coding Reference

- = 4.75mm\*
- = 4.75mm - 5.5mm/6.0mm
- = 5.5mm/6.0mm - 5.5mm/6.0mm

## MRC Color Coding Reference

Implants are color-coded according to rod diameter. Color Coding Reference is for Titanium Implants Only.

- = 4.5mm
- = 4.75mm\*
- = 4.75mm/5.5mm\*  
(4.75mm side is magenta, 5.5mm side is blue)\*
- = 5.5mm
- = 5.5mm/6.0mm\*
- = 6.35mm

## MRC Implant

### Closed/Closed Domino



Smaller offset between rods than the Side-Loading Domino  
Allows connection of different rod diameters  
May be used in 4-rod primary deformity correction constructs

### Side-Loading/Closed Domino



Larger offset between rods than the Closed/Closed Domino  
May be used to extend an existing rod construct or change rod diameters

### Closed/Open Axial Connector



Allows inline connection of same or different rod diameters  
Open side is compatible with Rocker instrument for rod seating  
May be used for simple fusion extensions; particularly useful in thoracic region

### Lateral Connector and Sagittal Rod



May be used for construct extensions particularly where sagittal alignment varies  
May be used for revision

## Set Screws



MRC universal set screw except for the open end of the Axial Connector



Set screws for the open end of the Axial Connector are color coded

## Top-Loading Connectors

### Top/Top-Load Connector\*



Allows dual top-loading connection of same or different rod diameters  
Compatible with rod diameters ranging from 4.75mm to 6.0mm

### Side-Loading/Top-Load Connector\*



Allows side and top-loading connection of same or different rod diameters  
Compatible with rod diameters ranging from 5.5mm to 6.0mm



Compatible break-off set screw  
4.75mm 5440030  
5.5/6.0mm 5540030

**Tapered Rods**

- 3.15.1 ■ One piece connection and allows for axial alignment of rods at the cervical-thoracic transition point
- 3.15.2 ■ Wide range of sizes for flexibility in construct planning
  - Enable connection from a 3.5mm rod diameter to 4.75mm, 5.5mm, and 6.0mm rod diameters
- Available in Titanium and Chromaloy Plus



3.5mm-4.75mm Tapered rod



3.5mm-5.5 Tapered Rod



3.5mm-6.0 Tapered Rod

**Rod Connector Options**

**Lateral Offset Connectors**

- Allows for medial/lateral offset to accommodate nonlinear screws patterns
- Dorsal height adjustment capabilities to accommodate screw height differences
- Open, closed, and angled connector options:
  - Open and Closed lateral connectors available in:
    - 10mm, 13mm, and 19mm lengths
  - Angled lateral connector available in:
    - 19mm length
- The lateral offset connectors are intended to be used with 3.5mm and larger diameter multi axial screws. The lateral offset connectors are not intended to be used with 3.0mm screws.



Open Lateral Connector



Closed Lateral Connector



Open Angled Connector

INFINITY™ OCCIPITOCERVICAL-UPPER THORACIC SYSTEM  
PART NUMBERS & SET CONFIGURATIONS

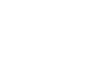
3.15.3



Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (NonSterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)
G3606071	MAS Extension Connector 4.5/4.75mm								3							
G3606072	MAS Extension Connector 5.5/6.0/6.35mm								3							
3603706	Rod Tapered 3.5/4.75mm x 420mm						3									
3603707	Rod Tapered 3.5/5.5mm x 420mm						3									
3603806	Rod Tapered 3.5/4.75 x 420mm CCM						3									
3603807	Rod Tapered 3.5/5.5 x 420mm CCM						3									
G3603709	Tapered Rod 3.5/6.0 x 420mm Ti															x
G3603809	Tapered Rod 3.5/6.0 x 420mm CCM+															x
G3603708	Tapered Rod 3.5/6.0 x 600mm Ti															x
G3603808	Tapered Rod 3.5/6.0 x 600mm CCM+															x
7753704	Tapered Rod 3.5mm/4.75mm 600mm															Vertex Shelf Item
7753705	Tapered Rod 3.5mm/5.5mm 600mm															Vertex Shelf Item
7753804	Tapered Rod 3.5mm/4.75mm CCM+ 600mm															Vertex Shelf Item
7753805	Tapered Rod 3.5mm/5.5mm CCM+ 600mm															Vertex Shelf Item
<b>Occipital Screw Connectors</b>																
3600300	Connector OC Eyelet Standard				4											
3600301	Connector OC Eyelet Offset				4											
<b>Occipital Adjustable Plate</b>																
3600600	OC Adjustable Plate, Small				1											
3600601	OC Adjustable Plate				1											
<b>Occipital Bone Screws</b>																
3600406	OC Screw 4.5 x 6mm				5											
3600408	OC Screw 4.5 x 8mm				5											
3600410	OC Screw 4.5 x 10mm				5											
3600412	OC Screw 4.5 x 12mm				5											

20

INFINITY™ OCCIPITOCERVICAL-UPPER THORACIC SYSTEM  
PART NUMBERS & SET CONFIGURATIONS

Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (NonSterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)
<b>CROSSLINK™ Connectors and Lateral Connectors</b>																
	3602510	Connector Lateral Open 10mm	2													
	G3602513	Connector Lateral Open 13mm							2							
	G3602519	Connector Lateral Open 19mm														x
	3602519A	Connector Lateral Open Angled 19mm			2											
	3601510	Connector Lateral Closed 10mm	2													
	G3601513	Connector Lateral Closed 13mm							2							
	G3601519	Connector Lateral Closed 19mm														x
	G3602525	Crosslink MAS to MAS S							1							
	3602526	Crosslink MAS to MAS M	2													
	G3602527	Crosslink MAS to MAS L							1							
	G3602535	Crosslink Rod to Rod S							1							
	3602536	Crosslink Rod to Rod M	2													
	G3602537	Crosslink Rod to Rod L							1							
<b>Set Screws</b>																
	3600315	Set Screw Standard	26													
	3602615	Set Screw Closed Connector Flat	6													
<b>Cervical to Thoracic Transition Options</b>																
	3601350	Domino Offset 3.2/3.5 to 3.2/3.5mm					3									
	3601475	Domino Offset 3.2/3.5 to 4.5/4.75mm					3									
	3601550	Domino Offset 3.2/3.5 to 5.5/6.0mm					3									
	3603350	Domino Offset O/O 3.2/3.5 to 3.2/3.5mm					3									
	3603475	Domino Offset O/O 3.2/3.5 to 4.5/4.75mm					3									
	3603635	Domino Offset O/O 3.2/3.5 - 5.5/6.0/6.35mm					3									
	G3602350	Domino Axial 3.2/3.5 to 3.2/3.5mm							3							
	G3602475	Domino Axial 3.2/3.5 to 4.5/4.75mm							3							
	G3602550	Domino Axial 3.2/3.5 to 5.5/6.0mm							3							
	G3606069	MAS Extension Connector 3.2/3.5mm							3							

31

Product Ordering Information

IMPLANTS

PART #	DESCRIPTION
6541019	Rostral Staple, 19mm
6541021	Rostral Staple, 21mm
6541023	Rostral Staple, 23mm
6541025	Rostral Staple, 25mm
6541119	Caudal Staple, 19mm
6541121	Caudal Staple, 21mm
6541123	Caudal Staple, 23mm
6541125	Caudal Staple, 25mm
6541213	Single Staple, 13mm
6541215	Single Staple, 15mm
6541217	Single Staple, 17mm
6543520	Fixed Angle Screw, 5.5mm x 20mm
6543525	Fixed Angle Screw, 5.5mm x 25mm
6543530	Fixed Angle Screw, 5.5mm x 30mm
6543535	Fixed Angle Screw, 5.5mm x 35mm
6543540	Fixed Angle Screw, 5.5mm x 40mm
6543545	Fixed Angle Screw, 5.5mm x 45mm
6543550	Fixed Angle Screw, 5.5mm x 50mm
6543620	Fixed Angle Screw, 6.5mm x 20mm
6543625	Fixed Angle Screw, 6.5mm x 25mm
6543630	Fixed Angle Screw, 6.5mm x 30mm
6543635	Fixed Angle Screw, 6.5mm x 35mm
6543640	Fixed Angle Screw, 6.5mm x 40mm
6543645	Fixed Angle Screw, 6.5mm x 45mm
6543650	Fixed Angle Screw, 6.5mm x 50mm
6543655	Fixed Angle Screw, 6.5mm x 55mm
6543660	Fixed Angle Screw, 6.5mm x 60mm
7440020	Breakoff Set Screw, Titanium

PART #	DESCRIPTION
8110713	CROSSLINK® Plate, 13mm
8110714	CROSSLINK® Plate, 14mm
8110715	CROSSLINK® Plate, 15mm
8110716	CROSSLINK® Plate, 16mm
8110717	CROSSLINK® Plate, 17mm
8110718	CROSSLINK® Plate, 18mm
8110719	CROSSLINK® Plate, 19mm

8699050	5.5mm x 50mm Rod
8699055	5.5mm x 55mm Rod
8699060	5.5mm x 60mm Rod
8699065	5.5mm x 65mm Rod
8699070	5.5mm x 70mm Rod
8699075	5.5mm x 75mm Rod
8699080	5.5mm x 80mm Rod
8699085	5.5mm x 85mm Rod
8699090	5.5mm x 90mm Rod
8699095	5.5mm x 95mm Rod
8699100	5.5mm x 100mm Rod

869-022	5.5mm CP4 Lined Rod (500mm Length)
---------	------------------------------------

3.17

3.18

3.18

3.19.1 3.19.2

3.21

3.22

3.20

32

3.23 Product Ordering Information *continued*

Cannulated Multi-Axial Screws



4.75mm	5.5/6.0mm	Description
54840014530	55840014530	4.5mm x 30mm
54840014535	55840014535	4.5mm x 35mm
54840014540	55840014540	4.5mm x 40mm
	55840015530	5.5mm x 30mm
54840015535	55840015535	5.5mm x 35mm
54840015540	55840015540	5.5mm x 40mm
54840015545	55840015545	5.5mm x 45mm
54840015550	55840015550	5.5mm x 50mm
54840016535	55840016535	6.5mm x 35mm
54840016540	55840016540	6.5mm x 40mm
54840016545	55840016545	6.5mm x 45mm
54840016550	55840016550	6.5mm x 50mm
54840016555	55840016555	6.5mm x 55mm
54840017530		7.5mm x 30mm
54840017535	55840017535	7.5mm x 35mm
54840017540	55840017540	7.5mm x 40mm
54840017545	55840017545	7.5mm x 45mm
	55840017550	7.5mm x 50mm
	55840017555	7.5mm x 55mm
	55840018590	8.5mm x 90mm
	55840018500	8.5mm x 100mm
	55840018511	8.5mm x 110mm
	55840019590	9.5mm x 90mm
	55840019500	9.5mm x 100mm
	55840019511	9.5mm x 110mm
	55840011590	10.5mm x 90mm
	55840011500	10.5mm x 100mm
	55840011511	10.5mm x 110mm

3.23

3.23

CD HORIZON® SOLERA™ SEXTANT® Set Screws



Catalog Number	Description
5440430	4.75mm Titanium Non-sterile Break Off SEXTANT Set Screws
5540430	5.5/6.0mm Titanium Non-sterile Break Off SEXTANT Set Screws

3.24

## Product Ordering Information *continued*

### CD HORIZON® LONGITUDE® II 5.5mm Percutaneous Rods



Catalog Number	Description
1555006070	70mm Straight Cobalt Chrome
1555006080	80mm Straight Cobalt Chrome
1555006090	90mm Straight Cobalt Chrome
1555006100	100mm Straight Cobalt Chrome
1555006110	110mm Straight Cobalt Chrome
1555006120	120mm Straight Cobalt Chrome
1555006130	130mm Straight Cobalt Chrome
1555006140	140mm Straight Cobalt Chrome
1555006150	150mm Straight Cobalt Chrome
1555006160	160mm Straight Cobalt Chrome
1555006170	170mm Straight Cobalt Chrome
1555006180	180mm Straight Cobalt Chrome
1555006190	190mm Straight Cobalt Chrome
1555006200	200mm Straight Cobalt Chrome
1555006210	210mm Straight Cobalt Chrome
1555006220	220mm Straight Cobalt Chrome
1555006230	230mm Straight Cobalt Chrome
1555006240	240mm Straight Cobalt Chrome
1555006250	250mm Straight Cobalt Chrome
1555006260	260mm Straight Cobalt Chrome

3.25.1

### CD HORIZON® LONGITUDE® II 4.75mm Percutaneous Rods



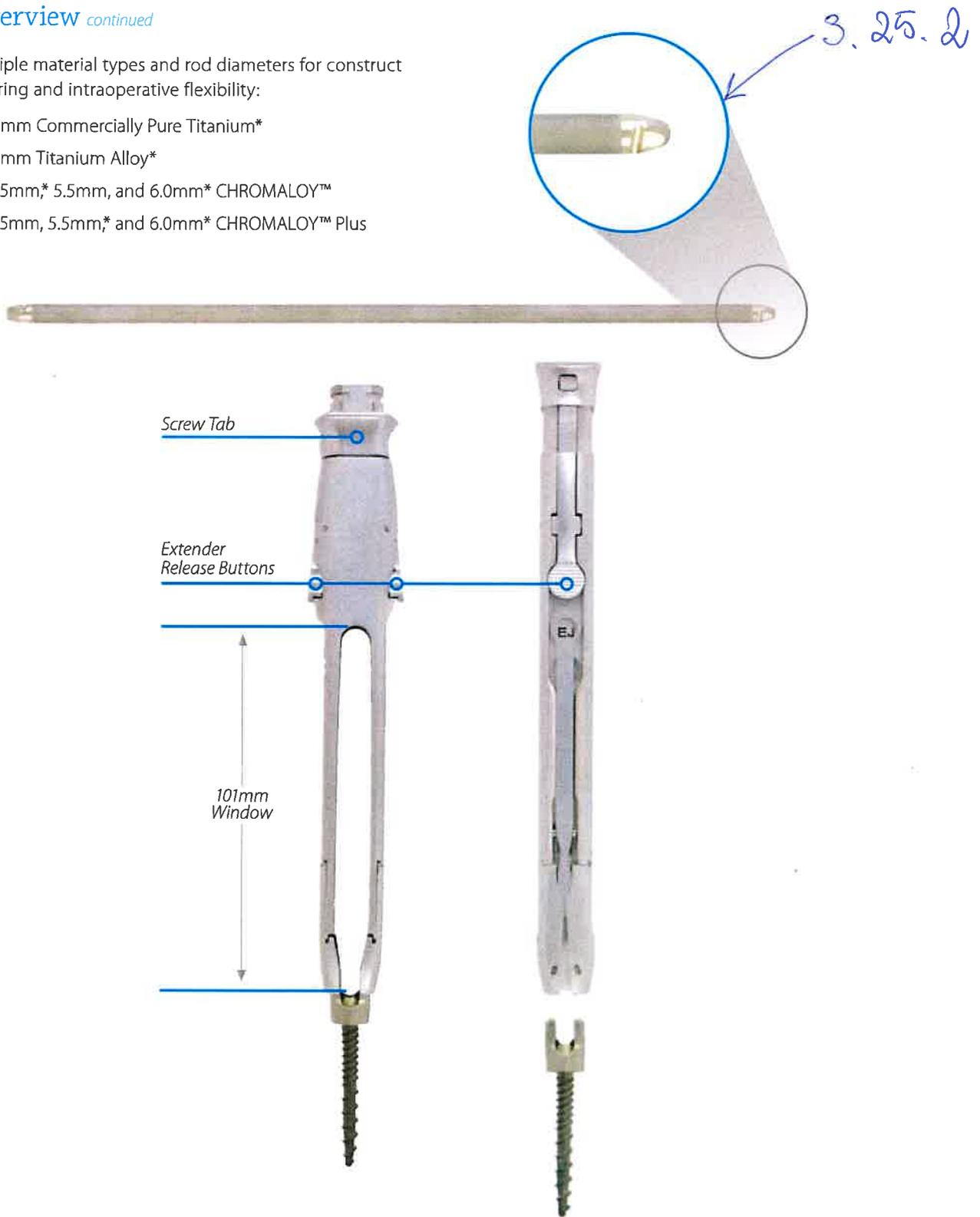
Catalog Number	Description
1476006070	70mm Straight Cobalt Chrome Plus
1476006080	80mm Straight Cobalt Chrome Plus
1476006090	90mm Straight Cobalt Chrome Plus
1476006100	100mm Straight Cobalt Chrome Plus
1476006110	110mm Straight Cobalt Chrome Plus
1476006120	120mm Straight Cobalt Chrome Plus
1476006130	130mm Straight Cobalt Chrome Plus
1476006140	140mm Straight Cobalt Chrome Plus
1476006150	150mm Straight Cobalt Chrome Plus
1476006160	160mm Straight Cobalt Chrome Plus
1476006170	170mm Straight Cobalt Chrome Plus
1476006180	180mm Straight Cobalt Chrome Plus
1476006190	190mm Straight Cobalt Chrome Plus
1476006200	200mm Straight Cobalt Chrome Plus
1476006210	210mm Straight Cobalt Chrome Plus
1476006220	220mm Straight Cobalt Chrome Plus

34

### Overview *continued*

Multiple material types and rod diameters for construct tailoring and intraoperative flexibility:

- » 5.5mm Commercially Pure Titanium\*
- » 5.5mm Titanium Alloy\*
- » 4.75mm,\* 5.5mm, and 6.0mm\* CHROMALOY™
- » 4.75mm, 5.5mm,\* and 6.0mm\* CHROMALOY™ Plus



Screw Extender  
(Screw Extenders are available for 4.75mm and 5.5/6.0mm screws.)

\*May be ordered as an extra.

# THE PAK/XPAK NEEDLE IS USED TO AID IN PEDICLE HOLE PREPARATION DURING A CANNULATED PEDICLE SCREW SPINE PROCEDURE.

## Two types of PAK needle

- Trocar tip
- Bevel tip (Denoted by light blue handle)
- Cannula is 5.898 inches in length

## Two types of XPAK needle

- Trocar tip
- Bevel tip (Denoted by light blue handle)
- Cannula is 9.169 inches in length

## Sterile package



## Using the PAK or X PAK needle\*

- Select the desired tip type.
- Tap the needle into the pedicle. *3.26*
- Assess with imaging the position of the PAK needle.
- Advance the PAK needle to the desired depth. *3.26*
- Disengage the handle by turning it 90 degrees and lifting up. The shaft remains in the pedicle.
- Place a guidewire into the shaft.
- Proceed with next surgical steps.

\* Manufactured by Boston Endo-Surgical Technologies, distributed by Medtronic Sofamor Danek.

## Product ordering information\*

Part number	Description	Quantity in package
PK1001	PAK Needle, Bevel/Bevel	2 needles
PK1002	PAK Needle, Trocar/Trocar	2 needles
PK1003	PAK Needle, Trocar/Bevel	One of each type total of 2 needles
PK1004	XPAK Needle, Bevel	1 needle
PK1005	XPAK Needle, Trocar	1 needle

# Medtronic

Manufactured by:  
**Boston Endo-Surgical Technologies**  
 Division of Lacey Manufacturing Co., LLC  
 1146 Barnum Avenue  
 Bridgeport, CT 06610 USA  
 Tel: 203 336 0121  
 www.pepbe-st.com

Distributed by  
**Medtronic Sofamor Danek USA, Inc.**  
 1300 Pyramid Place  
 Memphis, TN 38132

(901) 396-3133  
 (800) 876-3133  
 Customer Service: (800) 933-2635

Please see the package insert for the complete list of indications, warnings, precautions, and other important medical information.



Consult instructions for use at this website:  
[www.medtronic.com/manuals](http://www.medtronic.com/manuals)

Note: Manuals can be viewed using a current version of any major internet browser. For best results, use Adobe Acrobat® Reader with the browser.

medtronic.com

©2017 Medtronic. All Rights Reserved. Medtronic, Medtronic logo and Further Together are trademarks of Medtronic. All other marks and trademarks are Medtronic's property. LIC201850113 EN: PAK019598-1.0

*36*

PEP BE-ST

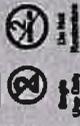
Boston Endo-Surgical  
Technologies  
Division of Lacey Manufacturing  
1148 Blarman Avenue  
Bloomington, CT 06010 USA  
Tel: 203.338.0121  
www.pipco-ellston.com  
MADE IN USA

Distributed by:  
MediMetric Solutions Direct USA, Inc.  
1800 Pyramid Place  
Memphis, TN 38132, USA  
Telephone: 800.933.8355 (In USA)  
901.296.3133 (Outside USA)  
Fax: 901.296.0354

REF PK1002

LOT BE4281

IND PAK NEEDLE-TROCAR/TROCAR



STERILE IN  
RX ONLY



Do Not Use  
If Seal  
is Damaged

CE 1639

QTY: 1 EA

Use By  
2024-08-10

LABEL ART: PK1002 Rev C

EC REF



Example Europe 20  
2514 All The Major  
The Netherlands

Consult instructions for Use

# IMPLANT FEATURES AND INSTRUMENT SET

The CD Horizon Solera Fenestrated Screw Set offers the same design and capabilities of the CD Horizon Solera Spinal System Screws, with the addition of six fenestrations near the tip.

These features allow cement to pass directly through the screw shaft and fenestrations, providing immediate enhanced fixation in cases with poor bone quality.

When used in conjunction with Medtronic Fenestrated Screw Cement, the CD Horizon Solera Fenestrated Screws are

intended to restore the integrity of the spinal column even in the absence of fusion for a limited time period in patients with advanced stage tumors involving the thoracic and lumbar spine in whom life expectancy is of insufficient duration to permit achievement of fusion. CD Horizon Solera Fenestrated Screws augmented with Medtronic HV-R Fenestrated Screw Cement are for use at spinal levels where the structural integrity of the spine is not severely compromised.

## IMPLANT

### CD Horizon Solera Fenestrated Screw

Available for CD Horizon Solera 5.5/6.0mm Spinal Systems



5.5/6.0mm

## INSTRUMENTS

### ADAPTER DRIVER

The CD Horizon Solera Fenestrated Screw Adapter Driver comes in two parts.



Quick Connect (QC) Handle



5.5/6.0mm Adapter Driver



5.5/6.0mm Lock Sleeve (reusable item)



Adapter Driver T25 (disposable item)



INFINITY™ OCCIPITOCERVICAL-UPPER THORACIC SYSTEM  
**PART NUMBERS & SET CONFIGURATIONS**



Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (NonSterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)		
G3605520	Multi Axial Transition Screw 5.5 × 20mm																X	
G3605525	Multi Axial Transition Screw 5.5 × 25mm										4							
G3605530	Multi Axial Transition Screw 5.5 × 30mm										4							
G3605535	Multi Axial Transition Screw 5.5 × 35mm										4							
G3605540	Multi Axial Transition Screw 5.5 × 40mm										4							
<b>Partially Threaded Multi Axial Screws</b>																		
G360PT3518	Partially Threaded Multi Axial Screw 3.5 × 18mm																	X
G360PT3520	Partially Threaded Multi Axial Screw 3.5 × 20mm																	X
360PT3522	Partially Threaded Multi Axial Screw 3.5 × 22mm					2												
360PT3524	Partially Threaded Multi Axial Screw 3.5 × 24mm					2												
360PT3526	Partially Threaded Multi Axial Screw 3.5 × 26mm					2												
360PT3528	Partially Threaded Multi Axial Screw 3.5 × 28mm					2												
360PT3530	Partially Threaded Multi Axial Screw 3.5 × 30mm					2												
G360PT3532	Partially Threaded Multi Axial Screw 3.5 × 32mm																	X
G360PT3534	Partially Threaded Multi Axial Screw 3.5 × 34mm																	X
G360PT3536	Partially Threaded Multi Axial Screw 3.5 × 36mm																	X
G360PT3538	Partially Threaded Multi Axial Screw 3.5 × 38mm																	X
G360PT3540	Partially Threaded Multi Axial Screw 3.5 × 40mm																	X
G360PT4018	Partially Threaded Multi Axial Screw 4.0 × 18mm																	X
G360PT4020	Partially Threaded Multi Axial Screw 4.0 × 20mm																	X
360PT4022	Partially Threaded Multi Axial Screw 4.0 × 22mm					2												
360PT4024	Partially Threaded Multi Axial Screw 4.0 × 24mm					2												
360PT4026	Partially Threaded Multi Axial Screw 4.0 × 26mm					2												
360PT4028	Partially Threaded Multi Axial Screw 4.0 × 28mm					2												

3.28.2

3.28.1

40

INFINITY™ OCCIPITOCERVICAL-UPPER THORACIC SYSTEM  
PART NUMBERS & SET CONFIGURATIONS

Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (NonSterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)
360PT4030	Partially Threaded Multi Axial Screw 4.0 × 30mm				2											
G360PT4032	Partially Threaded Multi Axial Screw 4.0 × 32mm															x
G360PT4034	Partially Threaded Multi Axial Screw 4.0 × 34mm															x
G360PT4036	Partially Threaded Multi Axial Screw 4.0 × 36mm															x
G360PT4038	Partially Threaded Multi Axial Screw 4.0 × 38mm															x
G360PT4040	Partially Threaded Multi Axial Screw 4.0 × 40mm															x
<b>Laminar Hooks</b>																
G3606073	Hook Laminar 4.5mm											2				
G3606073L	Hook Laminar 4.5mm Offset L											2				
G3606073R	Hook Laminar 4.5mm Offset R											2				
G3606074	Hook Laminar 5.0mm											2				
G3606074L	Hook Laminar 5.0mm Offset L											2				
G3606074R	Hook Laminar 5.0mm Offset R											2				
<b>Pre-Cut Rods</b>																
3603725	Rod Pre-Cut 3.5mm × 25mm	2														
3603730	Rod Pre-Cut 3.5mm × 30mm	2														
3603740	Rod Pre-Cut 3.5mm × 40mm	2														
3603750	Rod Pre-Cut 3.5mm × 50mm	2														
3603760	Rod Pre-Cut 3.5mm × 60mm	2														
3603770	Rod Pre-Cut 3.5mm × 70mm	2														
3603780	Rod Pre-Cut 3.5mm × 80mm	2														
G7753870	Rod Pre-Cut 3.5mm × 70mm CCM								2							
G7753880	Rod Pre-Cut 3.5mm × 80mm CCM								2							
G7753890	Rod Pre-Cut 3.5mm × 90mm CCM								2							
G7753900	Rod Pre-Cut 3.5mm × 100mm CCM								2							
<b>Straight Rods</b>																
3602240	Rod 3.2 × 240mm Ti	2														
3605240	Rod 3.5mm × 240mm	2														
G7750088	Rod 3.5Mm Chromaloy Plus 300mm								2							

3.28.1

3.28.1



41

# IMPLANT FEATURES

## Multi-Axial Screws

▪ 60° of angulation in ANY direction when positioned in notch on rotating base 3.29.4

▪ 30° of angulation in any direction when notch on base is not utilized 3.29.5

▪ Direct the additional angulation where it's needed with clear identification markers on the Increased Angle Positioner Tool.

▪ Friction fit saddle to maintain position to facilitate rod placement and construct assembly

▪ Tapered tip facilitates screw insertion and location of pilot hole

▪ Finer thread pitch increases engagement with bone

▪ Increased thread run out to aid in tactile feedback at full depth of thread.

▪ Tapered saddle base reduces profile by allowing the saddle to be positioned closer to bone

▪ Accepts 3.2mm and 3.5mm rods 3.29.6

▪ Variety of sizes:

– 3.0mm × 8mm - 34mm (2mm increments)\*

– 3.5mm × 8mm - 42mm (2mm increments)

– 4.0mm × 8mm - 42mm (2mm increments)

– 4.5mm × 8mm - 42mm (2mm increments)

– 5.5mm × 15mm - 40mm (5mm increments)

### Note

The thread spacing of the 5.5mm MAS is different from the smaller diameter screws, and is only compatible with the 5.0mm tap.

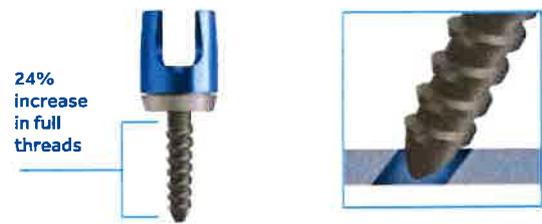
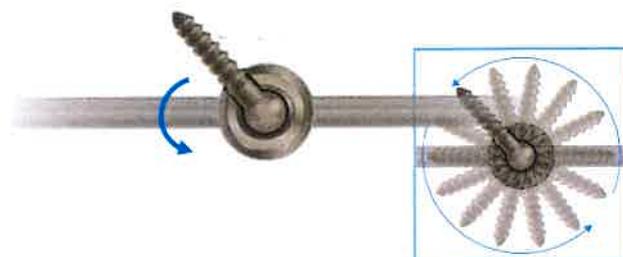
## Partially Threaded Screws

▪ Variety of diameters and lengths to accommodate unique anatomy of the C1 lateral mass

– 3.5mm × 18mm - 40mm (2mm increments)

– 4.0mm × 18mm - 40mm (2mm increments)

▪ Uniform 10mm of unthreaded screw shank length throughout all screw sizes



\*The 3.0mm multi axial screw (MAS) requires the use of MAS CROSSLINK™ at each level in which the 3.0mm screw is intended to be used.

42

# PART NUMBERS & SET CONFIGURATIONS



Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (NonSterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)	
<b>Multi Axial Screws</b>																	
G3603008	Multi Axial X-Small Screw 3.0 x 8mm									4							
G3603010	Multi Axial X-Small Screw 3.0 x 10mm									4							
G3603012	Multi Axial X-Small Screw 3.0 x 12mm									4							
G3603014	Multi Axial X-Small Screw 3.0 x 14mm									4							
G3603016	Multi Axial X-Small Screw 3.0 x 16mm									4							
G3603018	Multi Axial X-Small Screw 3.0 x 18mm									4							
G3603020	Multi Axial X-Small Screw 3.0 x 20mm																x
G3603022	Multi Axial X-Small Screw 3.0 x 22mm																x
G3603024	Multi Axial X-Small Screw 3.0 x 24mm																x
G3603026	Multi Axial X-Small Screw 3.0 x 26mm																x
G3603028	Multi Axial X-Small Screw 3.0 x 28mm																x
G3603030	Multi Axial X-Small Screw 3.0 x 30mm																x
G3603032	Multi Axial X-Small Screw 3.0 x 32mm																x
G3603034	Multi Axial X-Small Screw 3.0 x 34mm																x
G3603508	Multi Axial Screw 3.5 x 8mm																x
G3603510	Multi Axial Screw 3.5 x 10mm																x
3603512	Multi Axial Screw 3.5 x 12mm	8															
3603514	Multi Axial Screw 3.5 x 14mm	14															
3603516	Multi Axial Screw 3.5 x 16mm	8															
3603518	Multi Axial Screw 3.5 x 18mm	6															
3603520	Multi Axial Screw 3.5 x 20mm	4															
3603522	Multi Axial Screw 3.5 x 22mm	2			2		2										
3603524	Multi Axial Screw 3.5 x 24mm	2			2		2										

INFINITY™ OCCIPITOCERVICAL-UPPER THORACIC SYSTEM  
 PART NUMBERS & SET CONFIGURATIONS



Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (NonSterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)
3603526	Multi Axial Screw 3.5 x 26mm	2			2		2									
3603528	Multi Axial Screw 3.5 x 28mm	2			2		2									
3603530	Multi Axial Screw 3.5 x 30mm				2		2									
3603532	Multi Axial Screw 3.5 x 32mm				2		2									
3603534	Multi Axial Screw 3.5 x 34mm				2		2									
G3603536	Multi Axial Screw 3.5 x 36mm															x
G3603538	Multi Axial Screw 3.5 x 38mm															x
G3603540	Multi Axial Screw 3.5 x 40mm															x
G3603542	Multi Axial Screw 3.5 x 42mm															x
G3604008	Multi Axial Screw 4.0 x 8mm															x
G3604010	Multi Axial Screw 4.0 x 10mm															x
3604012	Multi Axial Screw 4.0 x 12mm	4														
3604014	Multi Axial Screw 4.0 x 14mm	4														
3604016	Multi Axial Screw 4.0 x 16mm	4														
3604018	Multi Axial Screw 4.0 x 18mm	4														
3604020	Multi Axial Screw 4.0 x 20mm	4														
3604022	Multi Axial Screw 4.0 x 22mm	2			2		2									
3604024	Multi Axial Screw 4.0 x 24mm	2			2		2									
3604026	Multi Axial Screw 4.0 x 26mm	2			2		2									
3604028	Multi Axial Screw 4.0 x 28mm	2			2		2									
3604030	Multi Axial Screw 4.0 x 30mm				2		4									
3604032	Multi Axial Screw 4.0 x 32mm				2		4									
3604034	Multi Axial Screw 4.0 x 34mm				2		4									

44

INFINITY™ OCCIPITOCERVICAL-UPPER THORACIC SYSTEM  
**PART NUMBERS & SET CONFIGURATIONS**



Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (NonSterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)	
G3604036	Multi Axial Screw 4.0 × 36mm																x
G3604038	Multi Axial Screw 4.0 × 38mm																x
G3604040	Multi Axial Screw 4.0 × 40mm																x
G3604042	Multi Axial Screw 4.0 × 42mm																x
G3604508	Multi Axial Screw 4.5 × 8mm																x
G3604510	Multi Axial Screw 4.5 × 10mm																x
G3604512	Multi Axial Screw 4.5 × 12mm																x
G3604514	Multi Axial Screw 4.5 × 14mm																x
G3604516	Multi Axial Screw 4.5 × 16mm																x
G3604518	Multi Axial Screw 4.5 × 18mm																x
G3604520	Multi Axial Screw 4.5 × 20mm																x
3604522	Multi Axial Screw 4.5 × 22mm						2										
3604524	Multi Axial Screw 4.5 × 24mm						2										
3604526	Multi Axial Screw 4.5 × 26mm						2										
3604528	Multi Axial Screw 4.5 × 28mm						2										
3604530	Multi Axial Screw 4.5 × 30mm						4										
3604532	Multi Axial Screw 4.5 × 32mm						4										
3604534	Multi Axial Screw 4.5 × 34mm						4										
G3604536	Multi Axial Screw 4.5 × 36mm																x
G3604538	Multi Axial Screw 4.5 × 38mm																x
G3604540	Multi Axial Screw 4.5 × 40mm																x
G3604542	Multi Axial Screw 4.5 × 42mm																x
G3605515	Multi Axial Transition Screw 5.5 × 15mm																x

INFINITY™ OCCIPITOCERVICAL-UPPER THORACIC SYSTEM  
 PART NUMBERS & SET CONFIGURATIONS



Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (NonSterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)		
G3605520	Multi Axial Transition Screw 5.5 × 20mm																x	
G3605525	Multi Axial Transition Screw 5.5 × 25mm										4							
G3605530	Multi Axial Transition Screw 5.5 × 30mm										4							
G3605535	Multi Axial Transition Screw 5.5 × 35mm										4							
G3605540	Multi Axial Transition Screw 5.5 × 40mm										4							
<b>Partially Threaded Multi Axial Screws</b>																		
G360PT3518	Partially Threaded Multi Axial Screw 3.5 × 18mm																	x
G360PT3520	Partially Threaded Multi Axial Screw 3.5 × 20mm																	x
360PT3522	Partially Threaded Multi Axial Screw 3.5 × 22mm					2												
360PT3524	Partially Threaded Multi Axial Screw 3.5 × 24mm					2												
360PT3526	Partially Threaded Multi Axial Screw 3.5 × 26mm					2												
360PT3528	Partially Threaded Multi Axial Screw 3.5 × 28mm					2												
360PT3530	Partially Threaded Multi Axial Screw 3.5 × 30mm					2												
G360PT3532	Partially Threaded Multi Axial Screw 3.5 × 32mm																	x
G360PT3534	Partially Threaded Multi Axial Screw 3.5 × 34mm																	x
G360PT3536	Partially Threaded Multi Axial Screw 3.5 × 36mm																	x
G360PT3538	Partially Threaded Multi Axial Screw 3.5 × 38mm																	x
G360PT3540	Partially Threaded Multi Axial Screw 3.5 × 40mm																	x
G360PT4018	Partially Threaded Multi Axial Screw 4.0 × 18mm																	x
G360PT4020	Partially Threaded Multi Axial Screw 4.0 × 20mm																	x
360PT4022	Partially Threaded Multi Axial Screw 4.0 × 22mm					2												
360PT4024	Partially Threaded Multi Axial Screw 4.0 × 24mm					2												
360PT4026	Partially Threaded Multi Axial Screw 4.0 × 26mm					2												
360PT4028	Partially Threaded Multi Axial Screw 4.0 × 28mm					2												

46

INFINITY™ OCCIPITOCERVICAL-UPPER THORACIC SYSTEM  
**PART NUMBERS & SET CONFIGURATIONS**

Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (NonSterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)
360PT4030	Partially Threaded Multi Axial Screw 4.0 × 30mm				2											
G360PT4032	Partially Threaded Multi Axial Screw 4.0 × 32mm															x
G360PT4034	Partially Threaded Multi Axial Screw 4.0 × 34mm															x
G360PT4036	Partially Threaded Multi Axial Screw 4.0 × 36mm															x
G360PT4038	Partially Threaded Multi Axial Screw 4.0 × 38mm															x
G360PT4040	Partially Threaded Multi Axial Screw 4.0 × 40mm															x
<b>Laminar Hooks</b>																
G3606073	Hook Laminar 4.5mm											2				
G3606073L	Hook Laminar 4.5mm Offset L											2				
G3606073R	Hook Laminar 4.5mm Offset R											2				
G3606074	Hook Laminar 6.0mm											2				
G3606074L	Hook Laminar 6.0mm Offset L											2				
G3606074R	Hook Laminar 6.0mm Offset R											2				
<b>Pre-Cut Rods</b>																
3603725	Rod Pre-Cut 3.5mm × 25mm	2														
3603730	Rod Pre-Cut 3.5mm × 30mm	2														
3603740	Rod Pre-Cut 3.5mm × 40mm	2														
3603750	Rod Pre-Cut 3.5mm × 50mm	2														
3603760	Rod Pre-Cut 3.5mm × 60mm	2														
3603770	Rod Pre-Cut 3.5mm × 70mm	2														
3603780	Rod Pre-Cut 3.5mm × 80mm	2														
G7753870	Rod Pre-Cut 3.5mm × 70mm CCM								2							
G7753880	Rod Pre-Cut 3.5mm × 80mm CCM								2							
G7753890	Rod Pre-Cut 3.5mm × 90mm CCM								2							
G7753900	Rod Pre-Cut 3.5mm × 100mm CCM								2							
<b>Straight Rods</b>																
3602240	Rod 3.2 × 240mm Ti	2														
3605240	Rod 3.5mm × 240mm	2														
G7750088	Rod 3.5Mm Chromaloy Plus 300mm								2							

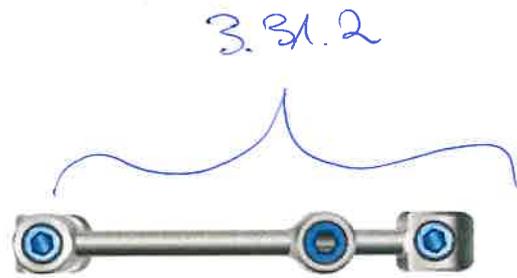


3.30

## CROSSLINK™ Connector Options

### CROSSLINK™ Connector, Rod to Rod Design

- Adjustable design and various sizes to accommodate varying distances between rods
- Lower profile at the apex of the crosslink arch
- Internal center set screw and ability to use the MAS Counter Torque improves screwdriver interface during final tightening of the central lock.



Foot Print

### CROSSLINK™ Connector, MAS to MAS Design

- Connects to the top of a multi-axial screw head in cases where adjacent screw heads are in close proximity to one another
- Integrated connector set screw reduces implantation steps
- Ability to attach to a different level above or below on each side of construct



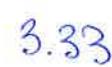
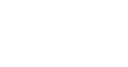
- Lower profile at the apex of the crosslink arch
- Adjustable design and various sizes to accommodate varying distances between rods
- Internal center set screw and ability to use the MAS Counter Torque improves screwdriver interface during final tightening of the central lock.
- Utilizes a locking set screw to secure into position.



### CROSSLINK™ Connector Sizing

	Small	Medium	Large
Crosslink, Rod to Rod Design	23.5mm – 30.3mm	29.5mm – 40.5mm	39.5mm – 56.5mm
Crosslink, MAS to MAS Design	23.5mm – 30.3mm	29.5mm – 40.5mm	39.5mm – 56.5mm

INFINITY™ OCCIPITOCERVICAL-UPPER THORACIC SYSTEM  
PART NUMBERS & SET CONFIGURATIONS

Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (NonSterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)	
<b>CROSSLINK™ Connectors and Lateral Connectors</b>																	
	3602510	Connector Lateral Open 10mm	2														
	G3602513	Connector Lateral Open 13mm							2								
	G3602519	Connector Lateral Open 19mm															x
	3602519A	Connector Lateral Open Angled 19mm			2												
	3601510	Connector Lateral Closed 10mm	2														
	G3601513	Connector Lateral Closed 13mm							2								
	G3601519	Connector Lateral Closed 19mm															x
	G3602525	Crosslink MAS to MAS S							1								
	3602526	Crosslink MAS to MAS M	3.31.4														
	G3602527	Crosslink MAS to MAS L							1								
	G3602535	Crosslink Rod to Rod S							1								
	3602536	Crosslink Rod to Rod M	3.32.4														
	G3602537	Crosslink Rod to Rod L							1								
<b>Set Screws</b>																	
	3600315	Set Screw Standard	26														
	3602615	Set Screw Closed Connector Flat	6														
<b>Cervical to Thoracic Transition Options</b>																	
	3601350	Domino Offset 3.2/3.5 to 3.2/3.5mm					3										
	3601475	Domino Offset 3.2/3.5 to 4.5/4.75mm					3										
	3601550	Domino Offset 3.2/3.5 to 5.5/6.0mm					3										
	3603350	Domino Offset O/O 3.2/3.5 to 3.2/3.5mm					3										
	3603475	Domino Offset O/O 3.2/3.5 to 4.5/4.75mm					3										
	3603635	Domino Offset O/O 3.2/3.5 - 5.5/6.0/6.35mm					3										
	G3602350	Domino Axial 3.2/3.5 to 3.2/3.5mm							3								
	G3602475	Domino Axial 3.2/3.5 to 4.5/4.75mm							3								
	G3602550	Domino Axial 3.2/3.5 to 5.5/6.0mm							3								
	G3606069	MAS Extension Connector 3.2/3.5mm							3								

49

# OCCIPITAL FIXATION IMPLANT FEATURES

## Occipitocervical Bone Screws

### Screw Design

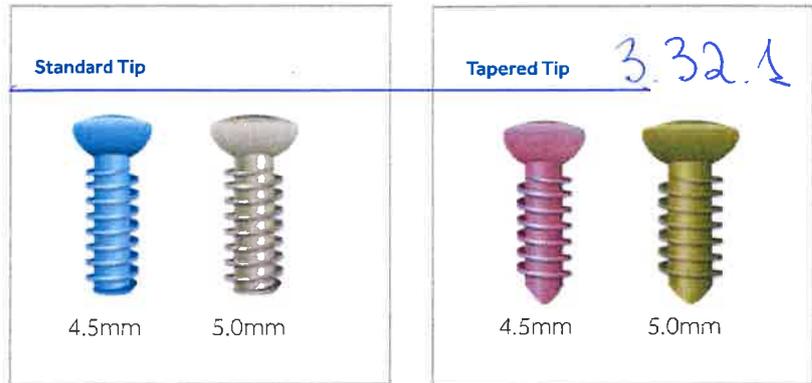
Two different designs of OC bone screws are available:

#### Standard Tip:

- 4.5mm × 6-14mm
- 5.0mm × 6-14mm
- Increased thread volume

#### Tapered Tip:

- 4.5mm × 6-14mm
- 5.0mm × 6-14mm



## Occipitocervical Screw Connectors

- Low-profile occipital fixation option
- Allow for six points of occipital midline fixation
- Flexibility in placement on the occiput in the cephalad/caudal directions
- Two lengths of screw connectors available for flexibility in the medial/lateral plane
- Dorsal height adjustment capabilities accommodate uneven bone surfaces



INFINITY™ OCCIPITOCERVICAL-UPPER THORACIC SYSTEM  
**PART NUMBERS & SET CONFIGURATIONS**



Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (NonSterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)
G3606071	MAS Extension Connector 4.5/4.75mm								3							
G3606072	MAS Extension Connector 5.5/6.0/6.35mm								3							
3603706	Rod Tapered 3.5/4.75mm x 420mm						3									
3603707	Rod Tapered 3.5/5.5mm x 420mm						3									
3603806	Rod Tapered 3.5/4.75 x 420mm CCM						3									
3603807	Rod Tapered 3.5/5.5 x 420mm CCM						3									
G3603709	Tapered Rod 3.5/6.0 x 420mm Ti															X
G3603809	Tapered Rod 3.5/6.0 x 420mm CCM+															X
G3603708	Tapered Rod 3.5/6.0 x 600mm Ti															X
G3603808	Tapered Rod 3.5/6.0 x 600mm CCM+															X
7753704	Tapered Rod 3.5mm/4.75mm 600mm															Vertex Shelf Item
7753705	Tapered Rod 3.5mm/5.5mm 600mm															Vertex Shelf Item
7753804	Tapered Rod 3.5mm/4.75mm CCM+ 600mm															Vertex Shelf Item
7753805	Tapered Rod 3.5mm/5.5mm CCM+ 600mm															Vertex Shelf Item
<b>Occipital Screw Connectors</b>																
3600300	Connector OC Eyelet Standard				4											
3600301	Connector OC Eyelet Offset				4											
<b>Occipital Adjustable Plate</b>																
3600600	OC Adjustable Plate, Small															
3600601	OC Adjustable Plate															
<b>Occipital Bone Screws</b>																
3600406	OC Screw 4.5 x 6mm				5											
3600408	OC Screw 4.5 x 8mm				5											
3600410	OC Screw 4.5 x 10mm				5											
3600412	OC Screw 4.5 x 12mm				5											

332.2

332.3

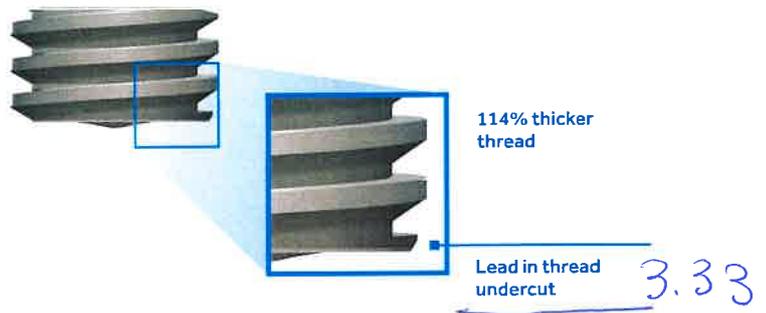
INFINITY™ OCCIPITOCERVICAL-UPPER THORACIC SYSTEM  
**PART NUMBERS & SET CONFIGURATIONS**



Part Number	Description	C3-C7 Implant Module (Nonsterile)	C3-C7 Instrument Module (Nonsterile)	2.4mm Drill Bit Module (Sterile)	OC-C2 Implant & Instrument Module (Nonsterile)	OC Drill Bit Module (Sterile)	Cervical Thoracic Transition Implant Module (Nonsterile)	Complex Instrument Module (Nonsterile)	Outlier Implant Module (Sterile)	3.0mm X-Small MAS Module (Sterile)	5.5mm Transition MAS Module (Sterile)	Laminar Hook Module (Sterile)	Laminar Hook Instrument Module (Nonsterile)	OC Tapered Bone Screw and Drill Bit Module (Sterile)	OC Tapered Bone Screw Instrument Module (Nonsterile)	Loose Good (Sterile)	
3600414	OC Screw 4.5 × 14mm				4												
3600506	OC Screw 5.0 × 6mm				4												
3600508	OC Screw 5.0 × 8mm				4												
3600510	OC Screw 5.0 × 10mm				4												
3600512	OC Screw 5.0 × 12mm				4												
3600514	OC Screw 5.0 × 14mm				2												
G360T0406	OC Bone Screw Tapered 4.5 × 6mm													5			
G360T0408	OC Bone Screw Tapered 4.5 × 8mm													5			
G360T0410	OC Bone Screw Tapered 4.5 × 10mm													5			
G360T0412	OC Bone Screw Tapered 4.5 × 12mm													5			
G360T0414	OC Bone Screw Tapered 4.5 × 14mm													4			
G360T0506	OC Bone Screw Tapered 5.0 × 6mm													4			
G360T0508	OC Bone Screw Tapered 5.0 × 8mm													4			
G360T0510	OC Bone Screw Tapered 5.0 × 10mm													4			
G360T0512	OC Bone Screw Tapered 5.0 × 12mm													4			
G360T0514	OC Bone Screw Tapered 5.0 × 14mm													2			
<b>Occipital Rods</b>																	
G3600100	OC Adjustable Rod Ti 3.5 × 100mm																x
G3600110	OC Adjustable Rod 3.5 × 100 CCM																x
3600200	OC Adjustable Rod Ti 3.5 × 200					3											
3600210	OC Adjustable Rod 3.5 × 200 CCM					3											
3600201	OC Precurved Rod 3.5 × 200mm					3											
3600211	OC Precurved Rod 3.5 × 200mm CCM					3											
<b>Instruments</b>																	
G850000	Universal Handle																2
G852402	Ratcheting Handle																3
3606005	Adjustable Drill Guide																1
3606012	Fixed Drill Guide, 12mm																1

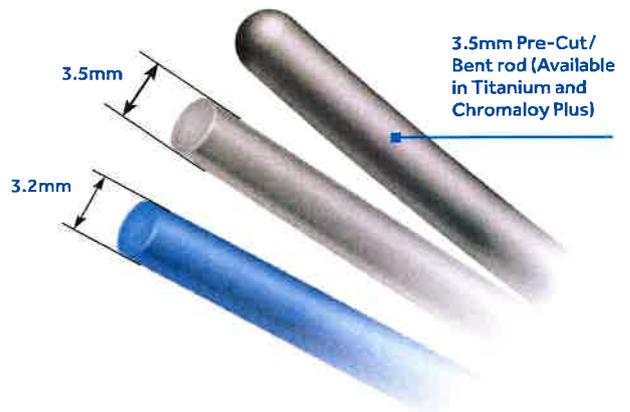
### Locking Set Screw

- Modified buttress thread and lead in thread undercut helps to minimize cross threading



### Rods

- Surgeon choice of 3.2mm and 3.5mm rod diameters (Titanium and Chromaloy Plus)
- Pre-Cut/Bent Rods in 3.5mm diameter (Titanium and Chromaloy Plus)
- Cervical-thoracic transition rods available in various diameters in Titanium and Chromaloy™ Plus (see Cervical/Thoracic section for additional information)
- Occipital Rods available in Titanium and Chromaloy™ Plus (see OccipitoCervical Section for additional information)



### Laminar Hooks/Offset Laminar Hooks

- Accepts 3.2mm and 3.5mm diameter rods
- Available in 4.5mm and 6.0mm openings
- Available in standard and offset designs



Laminar Hook, Standard

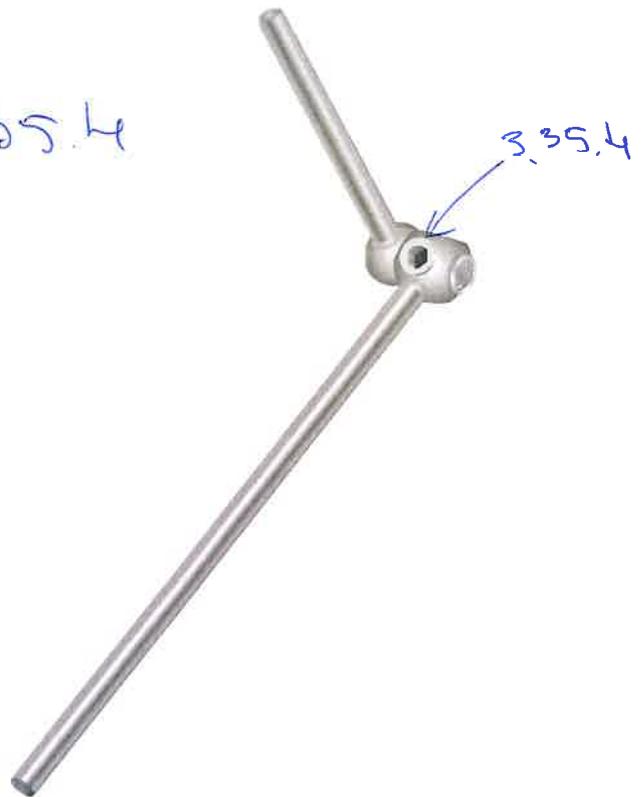


Laminar Hook, Offset

## Occipitocervical Adjustable Rods

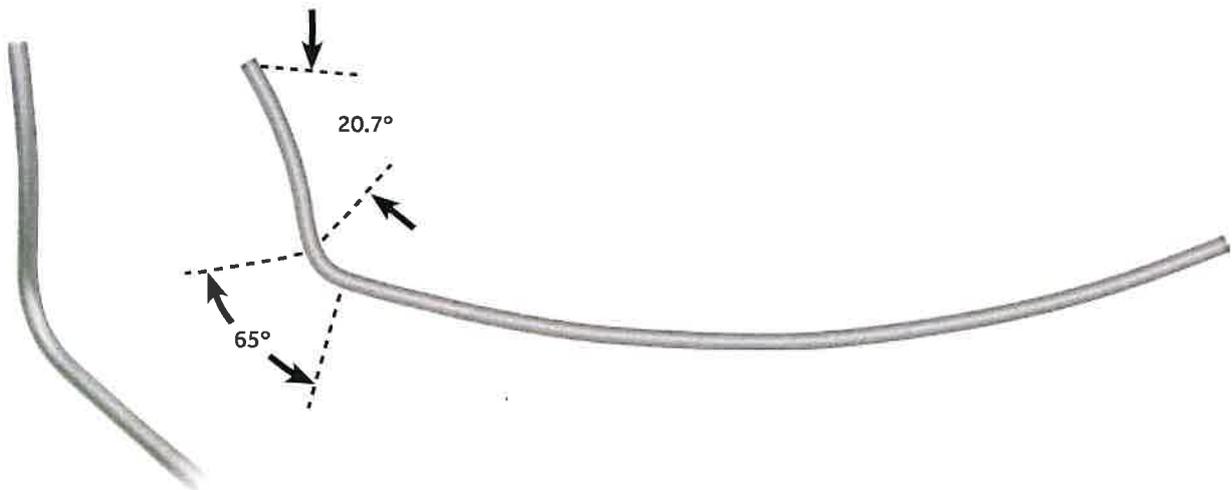
- Hinge portion of rod adjusts to accommodate various anatomical angles in the occipitocervical junction
- Reduced profile of hinge portion for improved fit at the OC junction
- Angulation can be adjusted intraoperatively
- Requires less rod bending to fit difficult anatomy
- 360° of rotation
- Available in 3.5mm/3.5mm diameter and 100mm and 200mm lengths
- Available in Titanium and Chromaloy Plus

3.35.4



## Occipitocervical Pre-curved Rods

- Pre-contoured to match anatomy of the occipitocervical junction
- Available in 3.5mm diameters and 200mm lengths
- Available in Titanium and Chromaloy Plus

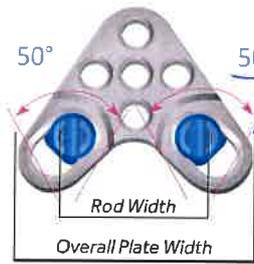


### Occipital Adjustable Plates

- Three hole midline fixation to the occiput to maximize bone purchase in the midline
- Rotating and translating saddles allow for flexibility in rod placement
- Space between saddles of the plate for bone grafting on the occiput

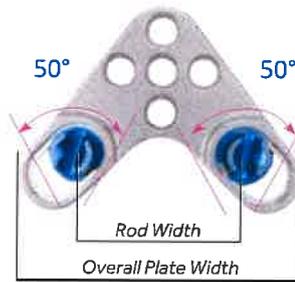
- Pre-machined radius of curvature for proper fit onto the occipital anatomy
- Lateral screw holes for torsional stability
- Contoured with the Occipital Plate Bender
- Multiple sizes available to match patient anatomy

#### Small OC Adjustable Plate Dimensions



Min Rod Width	Max Rod Width	Overall Plate Width
24mm	32mm	46.9mm

#### Standard OC Adjustable Plate Dimensions



Min Rod Width	Max Rod Width	Overall Plate Width
32mm	40mm	54.75mm



50° of Rotation

4mm of Cephalad Caudal Translation

4mm of Medial Lateral Translation