



42° Screw Angulation



Larger Graft Window



One Step Locking Mechanism



Zero Profile Modular System

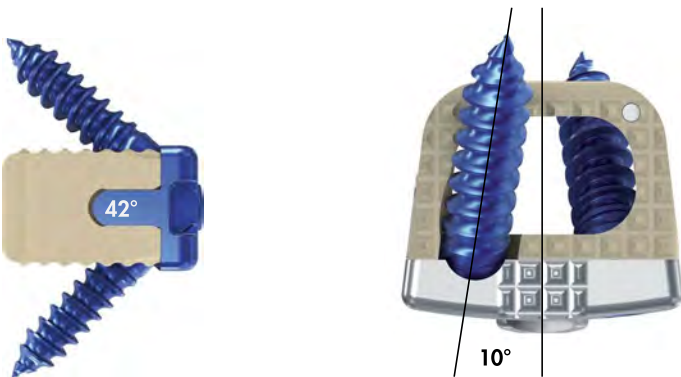
The Vault™ C Anterior Cervical Discectomy and Fusion System (ACDF) is a zero profile, modular system featuring a titanium anterior cervical plate with an integrated, one step locking mechanism and a snap fit PEEK-OPTIMA®* spacer. The system is designed to restore sagittal profile while providing anterior column support to enhance the fusion process. A maximum screw trajectory of 42° allows for greater bone purchase and stability, and the system has both self-drilling and blunt-tip self tapping screws. The Vault™ C offers a larger graft window with three available footprints and two lordotic options to easily accommodate varying anatomies. Custom ergonomic instrumentation complements implants for greater surgeon comfort and ease of use.

TAKE A CLOSER LOOK...

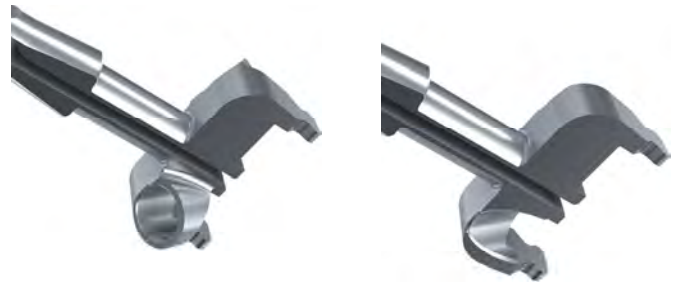


Three Footprints available to accommodate varying anatomy. **Available Heights** range from 6-12mm in one mm increments. **Larger Graft Capacity** with the modular plate design.

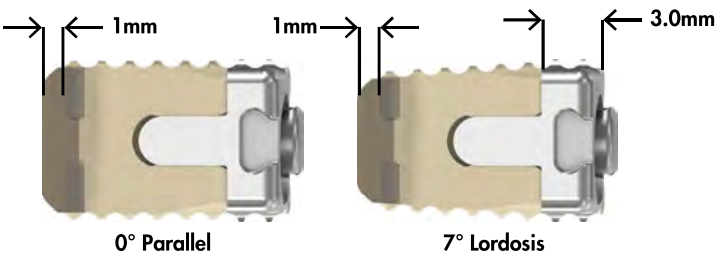
Vault™ C Footprint W x D x H	Bone Graft Vault C	Volume (cc) Competitor A**	% Greater
14 x 12 x 6mm	0.32	0.27	19.00%
14 x 12 x 7mm	0.37	0.32	17.39%
14 x 12 x 8mm	0.42	0.36	16.17%
14 x 12 x 9mm	0.47	0.41	14.93%
14 x 12 x 10mm	0.52	0.46	14.21%
14 x 12 x 11mm	0.57	0.50	13.61%
14 x 12 x 12mm	0.62	0.55	12.89%



Maximum 42° Screw Trajectory with a nominal angle of 35° cephalad/caudal and 10° medial for optimal bone purchase and stability. **One Step Integrated Locking Cap** provides easy, secure interlock.



Optional Open or Closed Drill Guides provide ideal visualization and control.

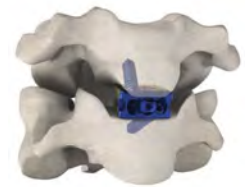


Two Lordotic Options 0° parallel or 7° lordosis. **Two Tantalum Markers** to easily identify landmarks on x-ray.

*PEEK-OPTIMA® polymer from INVIBIO®
**Data on file



Self-Tapping Screws In Two Options Self-Drilling and Blunt-Tip come in 3.5 or 4.0 diameter, and 12, 14, 15 and 17mm lengths.



Zero Profile Design

Precision Spine, Inc.
2050 Executive Drive, Pearl, MS 39208
Customer Service: 1-888.241.4773 • Fax: 601.420.5501
www.precisionspineinc.com

Caution: Federal (USA) law restricts these devices to sale by or on the order of a physician.
Precision Spine™ and Vault™ are trademarks of Precision Spine, Inc.
4089 xM Copyright © 2014 Precision Spine, Inc. All rights reserved.



P/N LBL-FB-022 Rev A 9/2014

Alamo C

Part Numbers	Description
1412I-005	14mm x 12mm x 5mm x 0° Alamo C
1412I-006	14mm x 12mm x 6mm x 0° Alamo C
1412I-007	14mm x 12mm x 7mm x 0° Alamo C
1412I-008	14mm x 12mm x 8mm x 0° Alamo C
1412I-009	14mm x 12mm x 9mm x 0° Alamo C
1412I-010	14mm x 12mm x 10mm x 0° Alamo C
1412I-011	14mm x 12mm x 11mm x 0° Alamo C
1412I-012	14mm x 12mm x 12mm x 0° Alamo C

Part Numbers	Description
1714I-705	17mm X 14mm X 5mm X 7° Alamo C
1714I-706	17mm X 14mm X 6mm X 7° Alamo C
1714I-707	17mm X 14mm X 7mm X 7° Alamo C
1714I-708	17mm X 14mm X 8mm X 7° Alamo C
1714I-709	17mm X 14mm X 9mm X 7° Alamo C
1714I-710	17mm X 14mm X 10mm X 7° Alamo C
1714I-711	17mm X 14mm X 11mm X 7° Alamo C
1714I-712	17mm X 14mm X 12mm X 7° Alamo C

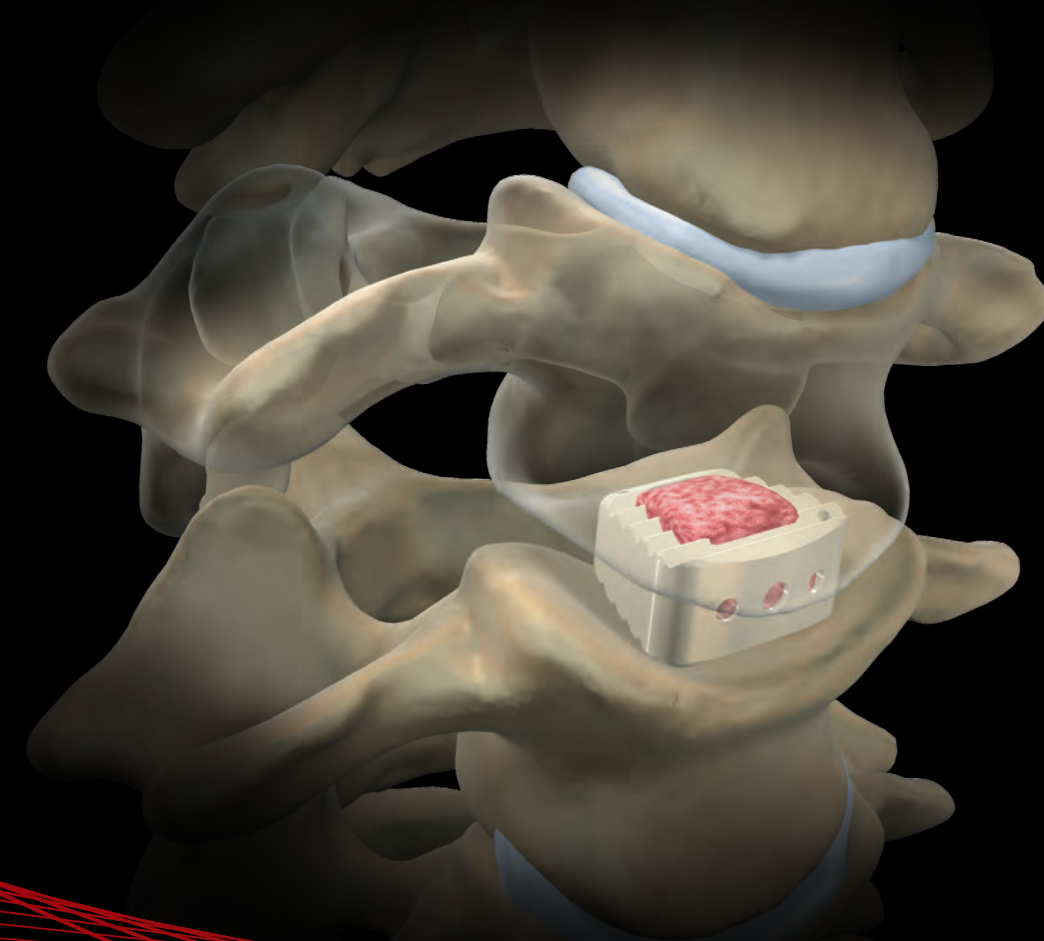
Part Numbers	Description
1412I-705	14mm x 12mm x 5mm x 7° Alamo C
1412I-706	14mm x 12mm x 6mm x 7° Alamo C
1412I-707	14mm x 12mm x 7mm x 7° Alamo C
1412I-708	14mm x 12mm x 8mm x 7° Alamo C
1412I-709	14mm x 12mm x 9mm x 7° Alamo C
1412I-710	14mm x 12mm x 10mm x 7° Alamo C
1412I-711	14mm x 12mm x 11mm x 7° Alamo C
1412I-712	14mm x 12mm x 12mm x 7° Alamo C

Part Numbers	Description
2016I-005	20mm X 16mm X 5mm X 0° Alamo C
2016I-006	20mm X 16mm X 6mm X 0° Alamo C
2016I-007	20mm X 16mm X 7mm X 0° Alamo C
2016I-008	20mm X 16mm X 8mm X 0° Alamo C
2016I-009	20mm X 16mm X 9mm X 0° Alamo C
2016I-010	20mm X 16mm X 10mm X 0° Alamo C
2016I-011	20mm X 16mm X 11mm X 0° Alamo C
2016I-012	20mm X 16mm X 12mm X 0° Alamo C

Part Numbers	Description
1714I-005	17mm X 14mm X 5mm X 0° Alamo C
1714I-006	17mm X 14mm X 6mm X 0° Alamo C
1714I-007	17mm X 14mm X 7mm X 0° Alamo C
1714I-008	17mm X 14mm X 8mm X 0° Alamo C
1714I-009	17mm X 14mm X 9mm X 0° Alamo C
1714I-010	17mm X 14mm X 10mm X 0° Alamo C
1714I-011	17mm X 14mm X 11mm X 0° Alamo C
1714I-012	17mm X 14mm X 12mm X 0° Alamo C

Part Numbers	Description
2016I-705	20mm X 16mm X 5mm X 7° Alamo C
2016I-706	20mm X 16mm X 6mm X 7° Alamo C
2016I-707	20mm X 16mm X 7mm X 7° Alamo C
2016I-708	20mm X 16mm X 8mm X 7° Alamo C
2016I-709	20mm X 16mm X 9mm X 7° Alamo C
2016I-710	20mm X 16mm X 10mm X 7° Alamo C
2016I-711	20mm X 16mm X 11mm X 7° Alamo C
2016I-712	20mm X 16mm X 12mm X 7° Alamo C

Alamo C



**Cervical Interbody System
Surgical Technique**

AllianceSpine™
Inspiring Solutions Through Innovation

14206 Northbrook Dr
San Antonio, TX 78232

P:(210) 314-2525 • F:(210) 314-2524
E: info@alliance-spine.com • www.alliance-spine.com
MKT-100 Rev. F

AllianceSpine™
Inspiring Solutions Through Innovation

Table of Contents

Indications for Use	1
Device Description	1
Alamo C Instruments	1
Alamo C Implant Key Features	2
Surgical Technique	3
Precautions, Contraindications, Potential Adverse Effects	6

Indications for Use:

The Alamo C is indicated for anterior cervical interbody fusion procedures in skeletally mature patients with degenerative disc disease (DDD) of the cervical spine with accompanying radicular symptoms at one level from C2-T1. DDD is defined as discogenic pain with the degeneration of the disc confirmed by history and radiographic studies. These patients should have had six weeks of non-operative treatment prior to treatment with an intervertebral cage. The device system must be used with supplemental fixation and autograft to facilitate fusion and is to be implanted via an open, anterior approach.

Device Description:

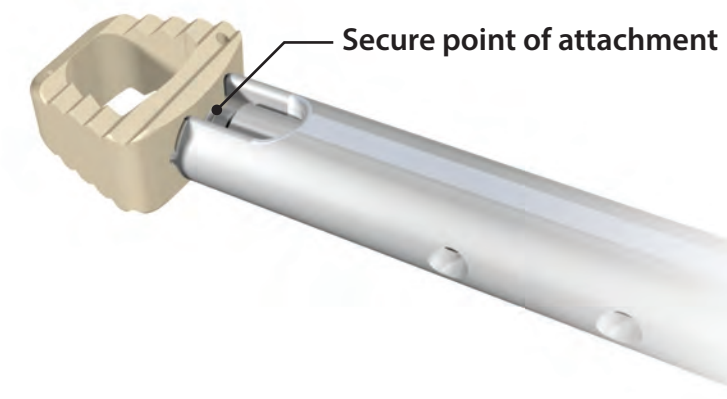
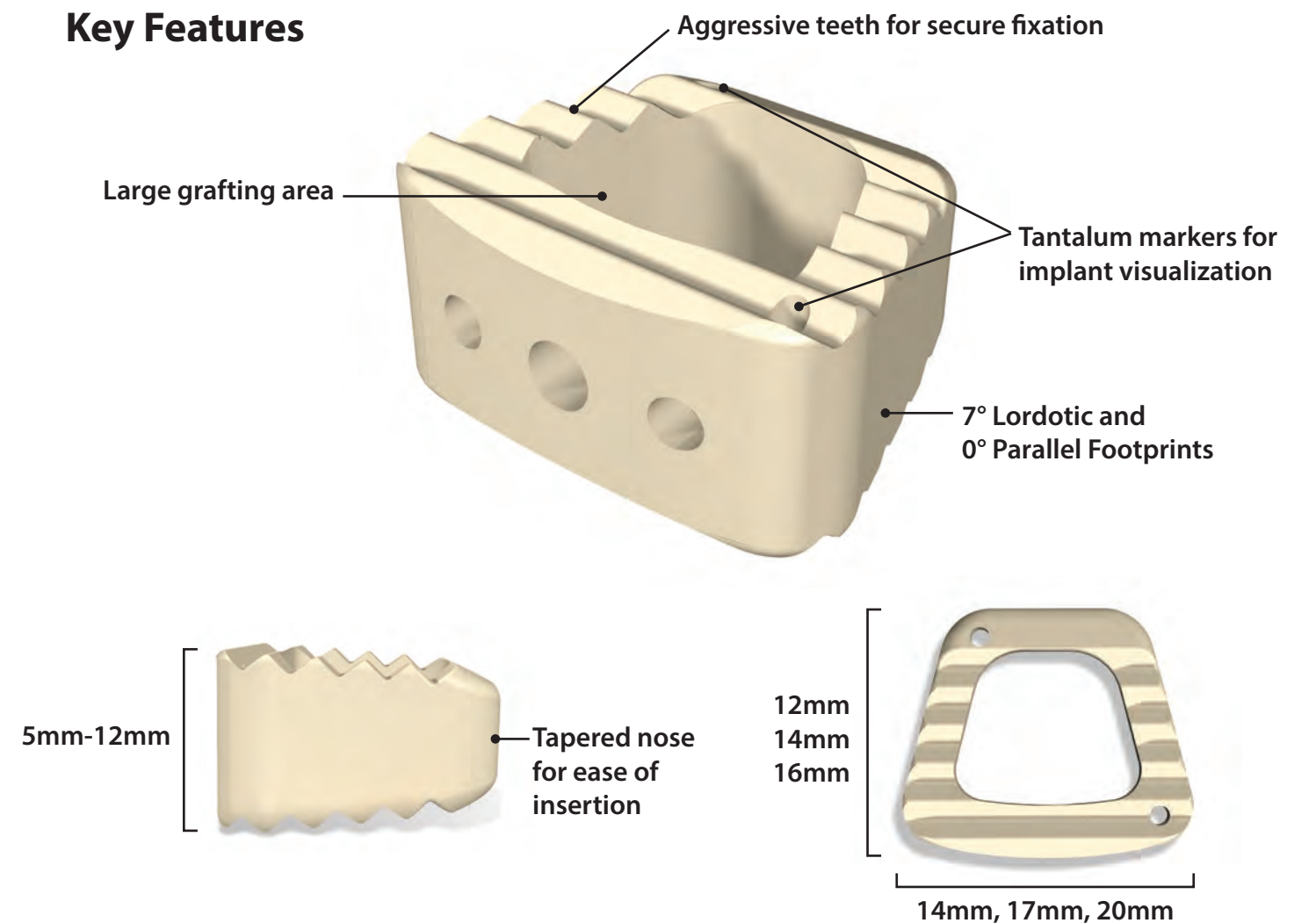
The Alamo C is designed for use as a cervical intervertebral body fusion device. The device is manufactured from PEEK Optima® LT1 per ASTM F2026 and includes tantalum markers per ASTM F560 for radiographic visualization.

The profile of the device is rectangular with a hollow core for bone graft to promote bone integration and fusion between the endplates. The device is available in various heights to accommodate variability among patients and the inferior and superior surfaces are designed with teeth to prevent back out and migration.

Instruments



Key Features



Alamo C Cervical Interbody System Surgical Technique

Step 1: Preoperative Planning

The appropriate Alamo C height should be estimated prior to surgery. In order to achieve maximal segment stability, it is essential to choose the largest possible implant that can be safely inserted without disturbing the surrounding neural elements.

Step 2: Creating Disc Space Access

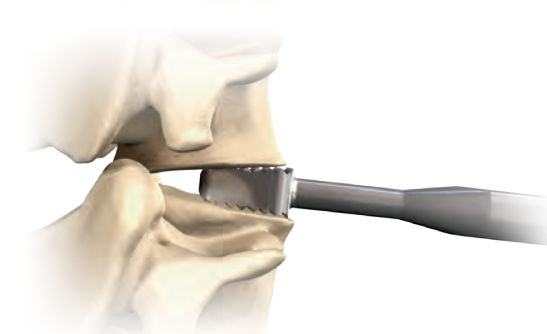
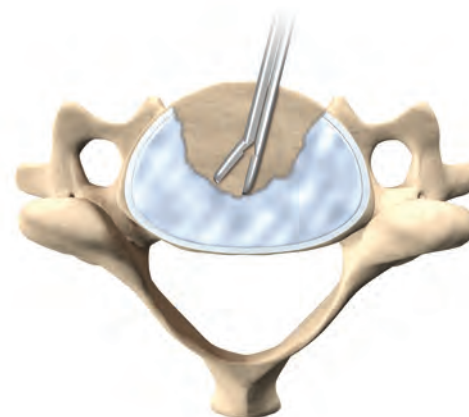
Patient is placed in the supine position. The anterior cervical spine is exposed via the standard surgical approach.

Step 3: Disc Space Preparation

Perform a standard discectomy using instrumentation for an anterior cervical discectomy and fusion procedure.

Using the Rasp end of the Double Ended Trial/Rasp for the estimated device height, scrape the cartilaginous layers from the surface of the adjacent vertebral end plates until bleeding bone is attained.

Sufficient cleaning of the end plates is important for vascular supply to the bone graft. However, excessive cleaning may result in the removal of bone underlying the cartilaginous layers and weaken the end plates.

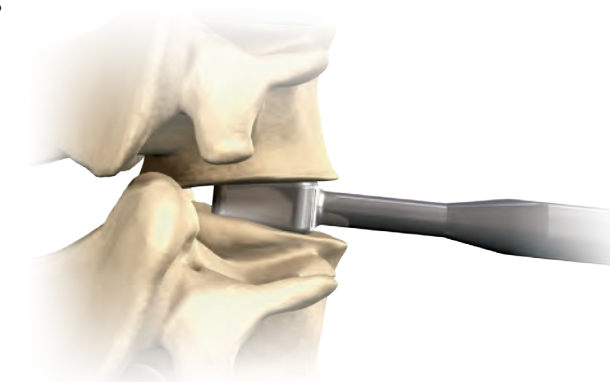


Step 4: Device Height Determination

Select the trial that corresponds to the preoperative estimated height and best matches the prepared end plates. Each trial has a height and lordotic or parallel indicator.

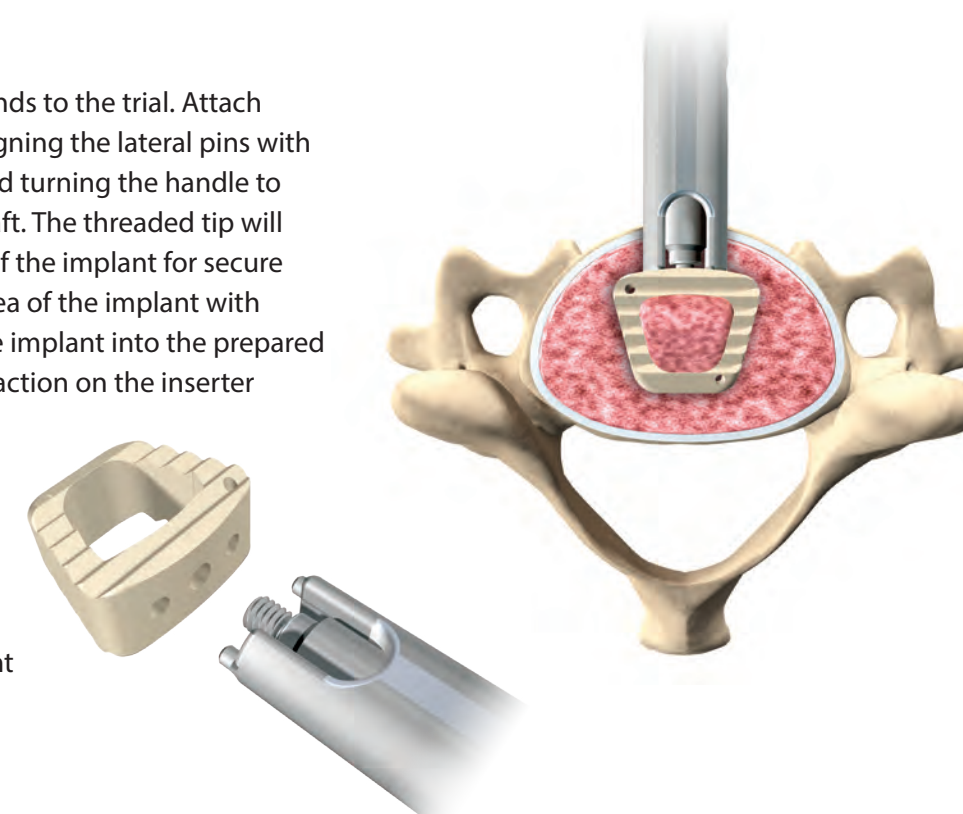
Insert the trial into the disc space. Apply gentle impaction and ensure that the trial fits tightly and accurately between the end plates.

Using the largest possible device maximizes segment stability through the tension in the longitudinal ligament and annulus fibrosus.



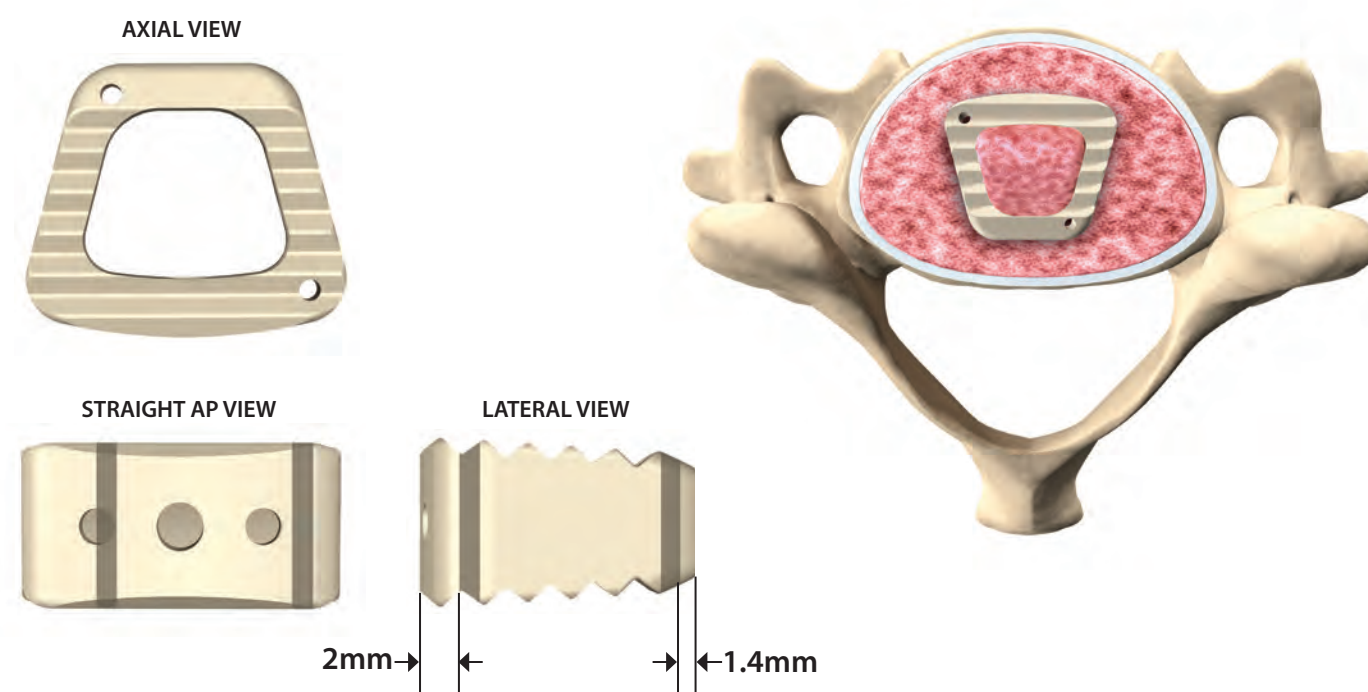
Step 5: Device Insertion

Select the implant that corresponds to the trial. Attach the implant to the inserter by aligning the lateral pins with the flat surface of the implant and turning the handle to expose the internal threaded shaft. The threaded tip will engage with the central thread of the implant for secure attachment. Pack the grafting area of the implant with autologous bone graft. Insert the implant into the prepared intervertebral space. Gentle impaction on the inserter will assist in correct positioning. Release the inserter by turning the handle counter-clockwise to disengage from the implant. If additional positioning is required, the Tamp may be used with a mallet to move the implant to the desired location.



Step 6: Verifying Implant Placement

Remove all instruments and verify the optimal position using fluoroscopy. The diagrams below demonstrate the location of the X-ray markers as the view is rotated from a lateral to anteroposterior (AP) view.



Step 7: Supplemental Fixation

Use of a FDA cleared anterior cervical plate is required for supplemental fixation with this device.

Step 8: Removal or Revision

The device can be removed by breaking the fused bone/device interface with a cutting tool such as an Osteotome or Chisel. Once the device is loose, attach the inserter and pull the device from the disc space. If additional force is required, a strong forceps instrument such as Kocher forceps or a hemostat can be used to retrieve the device.

Precautions:

Only patients that meet the criteria described in the indications should be selected and the implantation of the interbody fusion device should be performed only by experienced spinal surgeons with specific training in the use of this device because this is a technically demanding procedure presenting a risk of serious injury to the patient. Preoperative planning and patient anatomy should be considered when selecting implant size. Based on the fatigue testing results, the physician/surgeon should consider the levels of implantation, patient weight, patient activity level and other patient conditions which may impact the performance of the system.

Care should be taken in the handling and storage of the implant. The implants should not be scratched, notched or damaged during surgery. Alterations will produce defects in surface finish and internal stresses, which may become the focal point for eventual breakage of the implant.

The Alamo C has not been evaluated for safety and compatibility in the MR environment. The Alamo C has not been tested for heating or migration in the MR environment.

The use of dissimilar metals is prohibited as rapid corrosion can occur. Components of this system should not be used with components of any other system or manufacturer.

Contraindications:

Contraindications include, but are not limited to:

1. Any case where there is active systemic infection, infection localized to the site of the proposed implantation
2. A patient with rapid joint disease, bone absorption, osteopenia, and/or osteoporosis. Osteoporosis is a relative contraindication because it may limit the amount of fixation and thus preclude the use of this or any other spinal instrumentation system
3. A patient that does not meet the criteria described in the indications
4. Any other condition which would preclude the potential benefit of spinal implant surgery, such as the presence of tumors or congenital abnormalities, fracture local to the operating site, elevation of sedimentation rate unexplained by other diseases, elevation of white blood count (WBC), or a marked left shift in the WBC differential count
5. An overweight or obese patient as these patients can produce additional loads on the device that can cause failure of the device or subsidence
6. Any patient that is non-compliant with post-operative instructions
7. Patients who smoke have been observed to experience higher rates of pseudoarthrosis following surgical procedures where bone graft is used
8. Pregnancy
9. Signs of local inflammation
10. Fever or leukocytosis
11. Any case where the patient's occupation, activity level, or lifestyle can place undue stress on the implant that leads to failure. Specifically patients with mental illness, alcoholism, or drug abuse

Potential Adverse Effects:

Possible adverse events or complications include, but are not limited to:

1. Bone loss or decrease in bone density due to stress shielding
 2. Non-union (pseudoarthrosis), delayed union
 3. Bending and/or breakage of the implant
 4. Posterior or anterior implant migration and/or subsidence
 5. Allergy or foreign body sensitivity to any of the implant material
 6. Tissue or nerve damage, irritation, and/or pain caused by improper positioning and placement of the implant
- Infection
8. Pain, discomfort, or abnormal sensations due to the presence of the device
 9. Post-operative change in spinal curvature, loss of correction, height and/or reduction
 10. Loss of neurological function including complete or incomplete paralysis, dysesthesia, hyperesthesia, paraesthesia, appearance or radiculopathy
 11. Death
 12. Erosion of blood vessels due to the proximity of the device leading to hemorrhage and/or death

CAUTION: FEDERAL (USA) LAW RESTRICTS THIS DEVICE TO SALE BY OR ON THE ORDER OF A PHYSICIAN.

Please refer to the Instructions For Use included with the product for complete instructions, indications, contraindications, and warnings.

Transom[™]

ANTERIOR CERVICAL PLATING SYSTEM



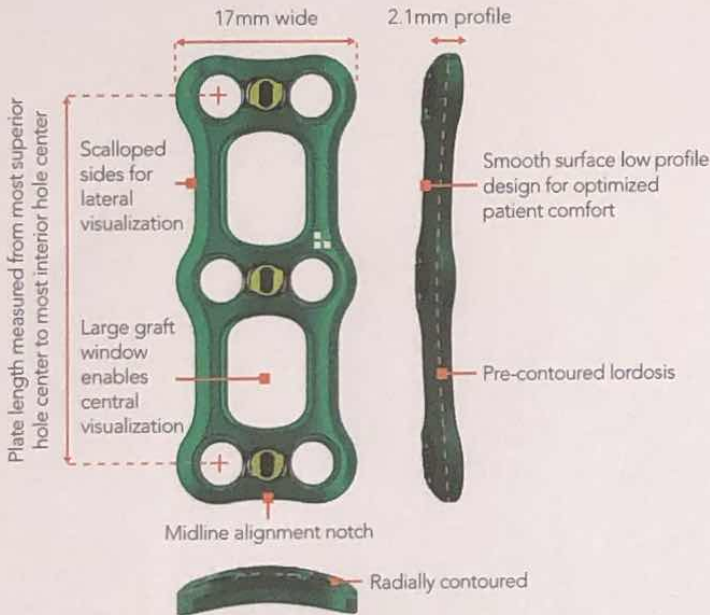
System Features

- Simple, One-Step Active Locking Mechanism at Each Level with Visual Lock Verification
- Large Graft Window Enables Graft & Anatomical Landmark Visualization
- Scalloped Sides for Lateral Visualization
- Low Profile Design to Optimize Patient Comfort
- Pre-Contoured Plates in a Large Assortment of Lengths to Simplify Surgical Procedure
- Self-Drilling, Self-Tapping, Fixed & Variable Angle Screws for Hybrid Constructs



Crafted for Perfection Transom™

Plates



Screws



Plate Size

Plates	Length (mm)											
Level	1	10	12	14	16	18	20	22	24	26		
	2	24	26	28	30	32	34	37	40	43	46	
	3	39	42	45	48	51	54	57	60	63	66	69
	4	60	64	68	72	76	80	84				
	5	85	90	95	100							

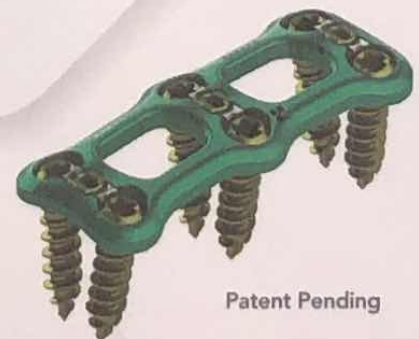
■ Standard Sizes

■ Non-Standard Sizes

Fixed & Variable Screw Size

	Length (mm)						
Self-Tapping	4.0	10	12	14	16	18	
	4.5	10	12	14	16	18	
Self-Drilling	4.0	10	12	14	16	18	

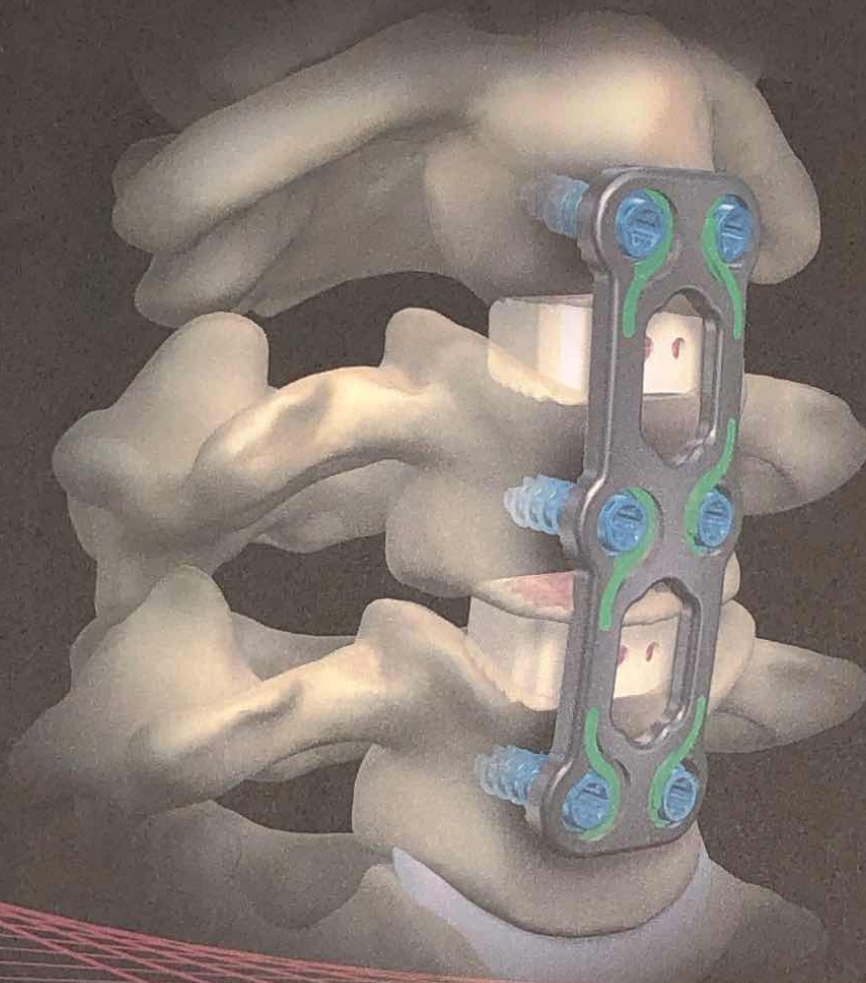
Angulation



16 Technology Drive, Suite 165
Irvine, CA 92618
Ph/Fax: 800.352.6103
neurostructures.com

NEURO[®]
STRUCTURES

Nakoma-SL



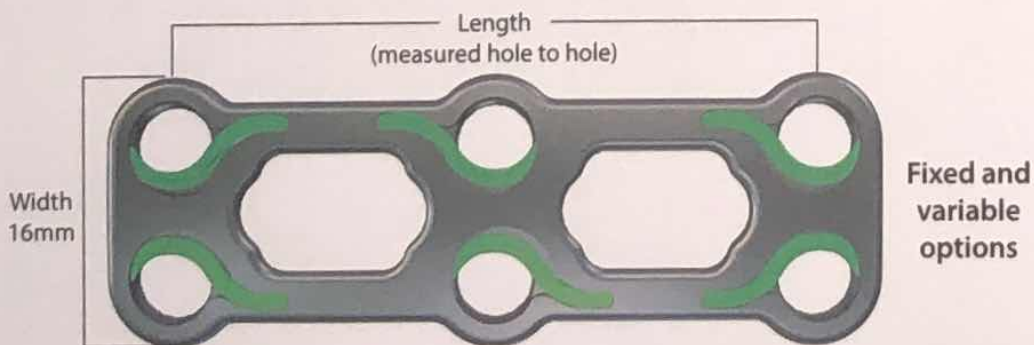
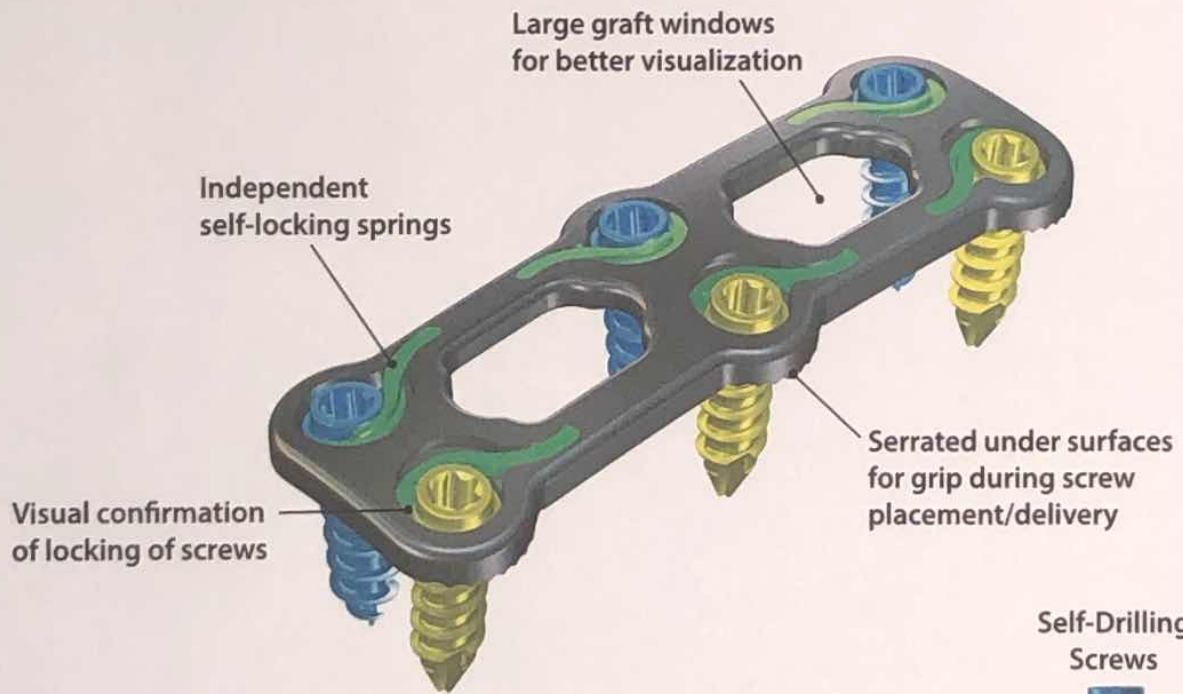
*Anterior Cervical Plating
System*



AllianceSpineTM

Inspiring Solutions Through Innovation

Key Features



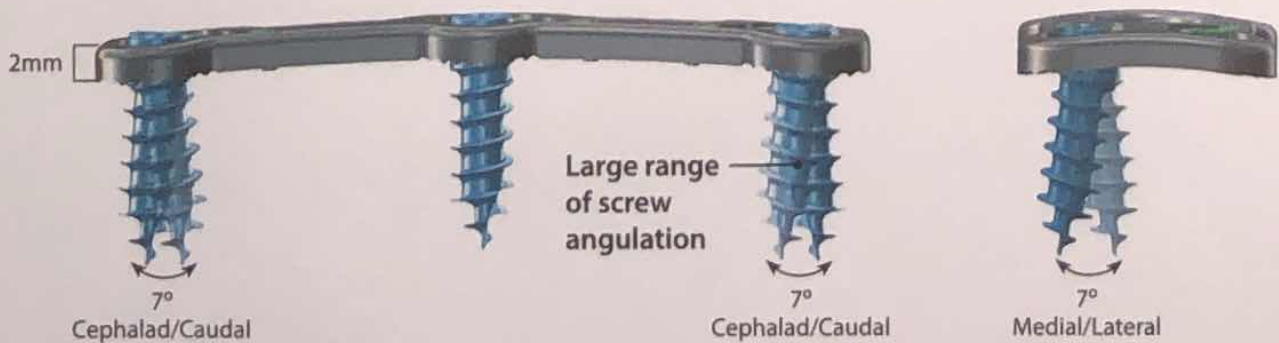
Self-Drilling Screws



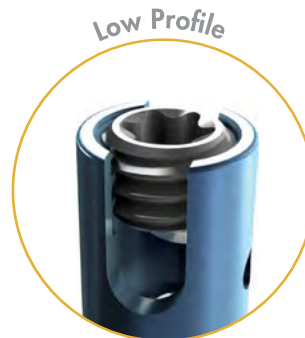
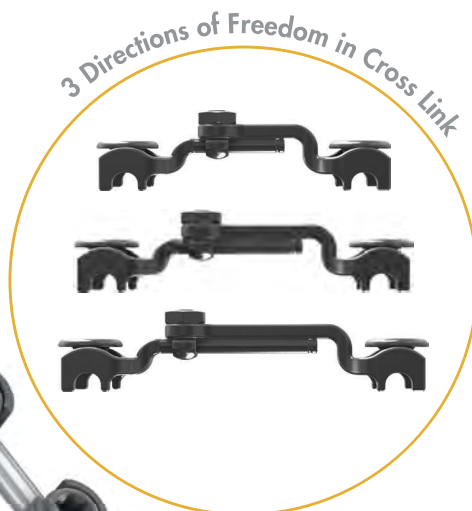
Self-Tapping Screws



Low Profile



PRODUCT SUMMARY



PRECISION SPINE
SURELOKTM PC
POSTERIOR CERVICAL SYSTEM

Screws

Sizes

- Available in 3.5mm and 4.0 mm diameters
- Accomodates 3.5 mm rod
- Self Drilling, Self Tapping
- Titanium Alloy

3.5mm Diameter

3.5 Lengths

- 8mm
- 10mm
- 12mm
- 14mm
- 16mm
- 18mm
- 20mm
- 25mm
- 30mm
- 35mm
- 40mm



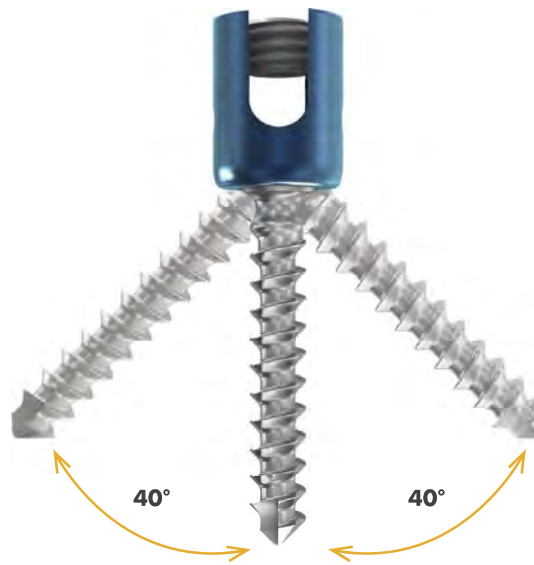
4.0mm Diameter

4.0 Lengths

- 8mm
- 10mm
- 12mm
- 14mm
- 16mm
- 18mm
- 20mm
- 25mm
- 30mm
- 35mm
- 40mm



- 11 mm Tulip Height
- 80 degree total angulation
- Square threaded locking cap
- Bone screw 2.5mm Hex
- Locking Cap T15



80° Total Angulation

Rods

Straight Rod

3.5mm

Lengths

- | | |
|------|-------|
| 20mm | 80mm |
| 30mm | 90mm |
| 40mm | 100mm |
| 50mm | 120mm |
| 60mm | 240mm |
| 70mm | |

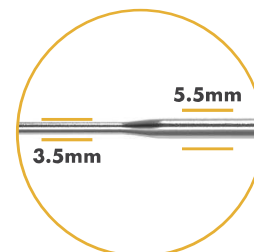


Transition Rod

3.5mm to 5.5mm

Lengths

500mm



Lateral Offsets/Hooks/Dominoes

Lateral Offsets:

Open & Closed

Lengths

14mm

25mm



Hooks:

Straight, Right Offset & Left Offset

Sizes

5mm

6mm



Dominoes:

3.5mm Straight & Parallel

Diameters

3.5mm

4.5mm

5.5mm

6.25mm

Domino Sizes

3.5mm x 3.5mm

3.5mm x 4.5mm

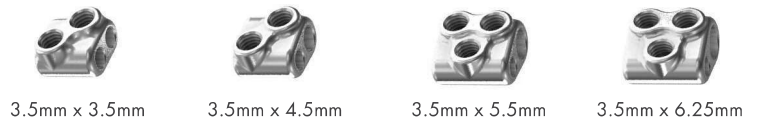
3.5mm x 5.5mm

3.5mm x 6.25mm

Straight



Parallel

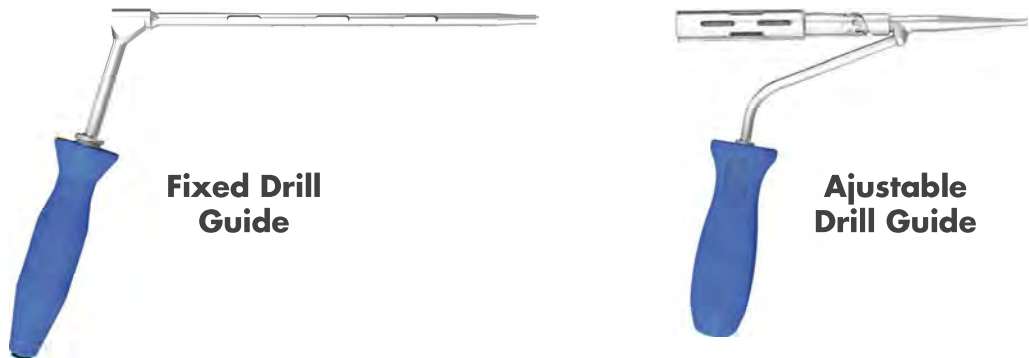


Drill Guides:

Diameters

3.5mm - 2.0mm Drill

4.0mm - 2.5mm Drill



Cap Screws

- Tulip, offset, hooks - T15
- Cross connector - T15
- Dominoes - T15



Crosslinks

Adjustable Tulip-to-Tulip Connection

- Titanium alloy
- Attaches to the tulip heads
- Male Hex 6mm

Lengths

30mm	30mm - 35mm Adjustable
35mm	35mm - 45mm Adjustable
45mm	45mm - 65mm Adjustable



1.180
[30mm]



1.393
[35mm]



1.386
[35mm]



1.785
[45mm]

Cross-Link Cap Screw
Torque Pressure: 18in-lbs



1.780
[45mm]



2.565
[65mm]

Bone Awl/Bone Punch

4mm Length
2mm Diameter

