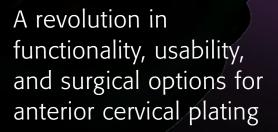




Revolutionizing Simplicity

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Revolutionizing Simplicity

NUVASIVE HELIX-REVOLUTION ACP System

The NuVasive Helix-Revolution ACP system was designed to elevate functionality, simplicity, and surgical options in anterior cervical plating. Expanded sizing, instrumentation, and usability combine to increase the surgeon's user experience.









MINIMAL MATERIAL OVERHANG AT ENDS OF PLATE

• Facilitates placement near the endplates of the vertebral body.



ZERO-STEP NUVASIVE HELIX-REVOLUTION ACP CANTED COIL LOCK (CCL)

- Eliminates the need for additional locking instrumentation or steps.
- Screws can be removed and repositioned while maintaining CCL integrity.
- CCL allows the plate to be securely lagged to the ventral surface of vertebral bodies for a tight, contoured fit.

GENEROUS SCREW ANGULATION FOR PRECISE CONSTRUCT POSITIONING

- 0°-25° cranial/caudal angulation (Variable Screws).
- 10° cranial/caudal angulation (Fixed Screws).



AGGRESSIVE SCREWS

- Multiple configurations offered in Self-Drilling, Self-Tapping, Fixed, and Variable options.
- Allow for fixed, variable, and hybrid constructs.



EXTENSIVE PLATE SIZE OFFERINGS

- Plates are available in 1- to 5-Level configurations.
- 16 crossover sizes are also included for small patients or challenging anatomies, designed to reduce the chance of adjacent-level ossification.



POSTERIOR ANTI-MIGRATION SURFACE

• Allows for secure contact with vertebral bodies and reduces slippage during plate positioning.





Implant Design

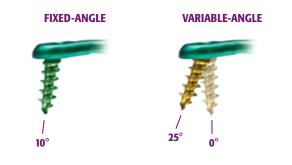
Plate Design

The NUVASIVE HELIX-REVOLUTION ACP implants are designed to be simple to implant, position, and size on vertebral bodies and to verify locking of screws. The system is also designed to consistently address differing patient anatomies, from very small patients to complex cases.



Screw Angulations

- NuVasive Helix-Revolution ACP Fixed Screws offer rigid fixation at a set trajectory: 10° (cranial/caudal) at the ends of the plate and 0° at intermediate levels.
- NuVasive Helix-Revolution ACP Variable Screws allow for a 25° cone of insertion angulation and a 10° preset angulation on Fixed Screws.
- Variable Screws offer surgeons 0°/25° at the ends of the plate and 12.5°/12.5° at intermediate levels.



Intraoperative Visualization

Innovative, anatomically designed graft windows allow for optimal graft/endplate visualization and implant placement. Graft windows also allow for Drill Tap Screw (DTS) Guide engagement with fixation pins in place. The apex shape of the graft windows is designed to allow surgeons to position their plate closer to the vertebral endplates to avoid adjacent-level ossification issues.





Locking Mechanism

NUVASIVE HELIX-REVOLUTION ACP Canted Coil Lock (CCL)

NuVasive Helix-Revolution ACP uses a proprietary Canted Coil locking mechanism that utilizes a unique Canted Coil design for even load distribution around the perimeter of the screw head. By "canting" open upon screw insertion, the CCL minimizes the potential for a misplaced or unlocked screw, while maximizing overall ease of use via a low-profile, yet robust, locking mechanism.

The NuVasive Helix-Revolution ACP Canted Coil Lock applies even, antibackout force around the ledge at the head of the screw. As the ledge passes the Canted Coil, the screw locks into place. This screw can also be removed easily with the Screw Extractor without compromising the locking mechanism. This can be especially beneficial when intraoperative repositioning of the screws is necessary.

How the NuVasive Helix-Revolution ACP CCL Works

By deflecting (illustrated on the right) instead of deforming or warping during screw insertion, the Canted Coil in the NuVasive Helix-Revolution ACP maintains its easy and reproducible insertion flexibility. The CCL was designed to absorb micro-motion over long periods of time to prevent locking failure by deformation.

Canted Coil Locking Mechanism Cut-Away

The Canted Coil Lock utilized by NuVasive Helix-Revolution ACP plates works by closing around the screw ledge as it is driven past the locking mechanism, wedging the ledge between the coil and plate.

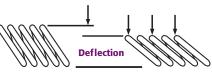
Benefits of the NuVasive Helix-Revolution ACP CCL Design

- · Creates a zero-step locking mechanism for outstanding ease of use.
- Designed to allow for multiple screw insertions and removals without compromising the coil's locking integrity.
- Allows an easy, reproducible way to visibly confirm secure locking of the screw.



NUVASIVE

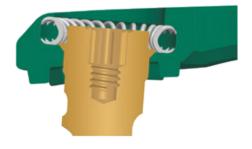
ACP Evolution



FREE POSITION

LOCKED POSITION

Illustration of the Canted Coil Lock <u>deflecting</u> instead of deforming





Screw Design and Plate Sizing

Screw Design

The NUVASIVE HELIX-REVOLUTION ACP Tactile Feedback Screws (TFS) feature a micro-textured surface that increases tactile feedback once the Canted Coil locking mechanism is passed and the screw contacts the plate. This texture greatly increases tactile feedback and is designed to minimize potential for stripping in softer or poor-quality bone.

Self-Drilling Screws have a self-tapping flute and feature a sharp tip for maximum efficiency in hard bone.

Self-Tapping Screws feature a blunt tip to allow bi-cortical purchase, if desired, for additional fixation.

All screw options offer the same aggressive thread pattern to maximize bone purchase and tactile feel. Screws are available in 11, 13, 15, 17, and 19mm lengths. Screw length is measured from the posterior surface of the plate (amount of screw in bone).



MICRO-TEXTURED SURFACES



Plate Sizing

NuVasive Helix-Revolution ACP is measured from end to end and is available in 1- to 5-Level plates. Shorter plate sizes are also included in the set to accommodate smaller patients and complex surgical situations.

1-LEVEL NUVASIVE HELIX-REVOLUTION ACP PLATE







FAQs

1. What are the smallest plates offered for each level in the system?

NUVASIVE HELIX-REVOLUTION ACP plates are measured end-to-end and are available down to the following sizes:

- 1-Level 20mm
- 2-Level 32mm
- 3-Level 50mm
- 4-Level 66mm
- 5-Level 90mm

2. How much angulation is the system capable of?

The system can achieve a cone of up to 25° in a cranial/caudal orientation. At the most cranial/caudal screw holes, a 0°-25° cone is achievable, and on the medial screw holes, a 12.5°/12.5° cone is achievable.

ACP Evolution

3. How do Tactile Feedback Screws (TFS) increase tactile feedback?

TFS screws utilize a micro-textured surface that engages with the same texturing on the plate once the Canted Coil Lock is passed. This feature is designed to improve feedback of the final screw purchase, as well as address poor-quality bone.

4. Why does the system feature an apex-style graft window?

The apex shape of the graft window was designed to allow the smallest possible plate to be positioned near the endplates. The apex allows visualization of the graft-to-endplate interface more accurately than a non-apex-shaped window.

5. What types of guides are offered with the system?

There are three types of guides provided in the system: Drill Tap Screw (DTS) Guides; Fixed- and Variable-Angle Drill Guides; and, Fixed- and Variable-Angle Adjustable-Depth Drill Guides.

6. What types of plate/screw constructs are available with the system?

TFS screws are available in Self-Drilling, Self-Tapping, Fixed, and Variable offerings that allow for fixed, variable, and hybrid plate/screw constructs.

7. Why are crossover-size plates important?

Crossover plates are important to accommodate patients with smaller vertebral bodies. An example of this would be a patient with extremely small vertebral bodies where a 1-Level plate length might be appropriate but the case is a 2-Level procedure. In this example, a 32mm plate could be used, since 32mm plates are provided in both 1- and 2-Level offerings.

NUVASIVE HELIX-REVOLUTION ACP IMPLANTS

DESCRIPTION	CATALOG #
1-Level NuVasive Helix-Revolution Plates	
1-Level Helix-Revolution Plate, 20mm	7800120
1-Level Helix-Revolution Plate, 22mm	7800122
1-Level Helix-Revolution Plate, 24mm	7800124
1-Level Helix-Revolution Plate, 26mm	7800126
1-Level Helix-Revolution Plate, 28mm	7800128
1-Level Helix-Revolution Plate, 30mm	7800130
1-Level Helix-Revolution Plate, 32mm*	7800132
1-Level Helix-Revolution Plate, 34mm*	7800134
2-Level NuVasive Helix-Revolution Plates	
2-Level Helix-Revolution Plate, 32mm*	7800232
2-Level Helix-Revolution Plate, 34mm*	7800234
2-Level Helix-Revolution Plate, 36mm	7800236
2-Level Helix-Revolution Plate, 38mm	7800238
2-Level Helix-Revolution Plate, 40mm	7800240
2-Level Helix-Revolution Plate, 42mm	7800242
2-Level Helix-Revolution Plate, 44mm	7800244
2-Level Helix-Revolution Plate, 46mm	7800246
2-Level Helix-Revolution Plate, 48mm	7800248
2-Level Helix-Revolution Plate, 50mm*	7800250
2-Level Helix-Revolution Plate, 52mm*	7800252
2-Level Helix-Revolution Plate, 54mm*	7800254
3-Level NuVasive Helix-Revolution Plates	
3-Level Helix-Revolution Plate, 50mm*	7800350
3-Level Helix-Revolution Plate, 52mm*	7800352
3-Level Helix-Revolution Plate, 54mm*	7800354
3-Level Helix-Revolution Plate, 56mm	7800356
3-Level Helix-Revolution Plate, 58mm	7800358
3-Level Helix-Revolution Plate, 60mm	7800360
3-Level Helix-Revolution Plate, 62mm	7800362
3-Level Helix-Revolution Plate, 64mm	7800364
3-Level Helix-Revolution Plate, 66mm*	7800366
3-Level Helix-Revolution Plate, 68mm*	7800368
4-Level NuVasive Helix-Revolution Plates	
4-Level Helix-Revolution Plate, 66mm*	7800466
4-Level Helix-Revolution Plate, 68mm*	7800468
4-Level Helix-Revolution Plate, 70mm	7800470
4-Level Helix-Revolution Plate, 74mm	7800474
4-Level Helix-Revolution Plate, 78mm	7800478
4-Level Helix-Revolution Plate, 82mm	7800482
4-Level Helix-Revolution Plate, 86mm	7800486
4-Level Helix-Revolution Plate, 90mm*	7800490

NUVASIVE HELIX-REVOLUTION ACP IMPLANTS

DESCRIPTION	CATALOG #
5-Level NuVasive Helix-R	evolution Plates
5-Level Helix-Revolution Plate, 90mm*	7800590
5-Level Helix-Revolution Plate, 95mm	7800595
5-Level Helix-Revolution Plate, 100mm	7800500
5-Level Helix-Revolution Plate, 105mm	7800505
5-Level Helix-Revolution Plate, 110mm	7800510
Self-Drilling Screws (I	Fixed, 4mm)
4 x 11mm Self-Drilling Fixed Screw	7802211
4 x 13mm Self-Drilling Fixed Screw	7802213
4 x 15mm Self-Drilling Fixed Screw	7802215
Self-Drilling Screws (Va	riable, 4mm)
4 x 11mm Self-Drilling Variable Screw	7801111
4 x 13mm Self-Drilling Variable Screw	7801113
4 x 15mm Self-Drilling Variable Screw	7801115
Self-Tapping Screws (Fixed, 4mm)
4 x 11mm Self-Tapping Fixed Screw	7804211
4 x 13mm Self-Tapping Fixed Screw	7804213
4 x 15mm Self-Tapping Fixed Screw	7804215
4 x 17mm Self-Tapping Fixed Screw	7804217
4 x 19mm Self-Tapping Fixed Screw	7804219
Self-Tapping Screws (Va	nriable, 4mm)
4 x 11mm Self-Tapping Variable Screw	7803111
4 x 13mm Self-Tapping Variable Screw	7803113
4 x 15mm Self-Tapping Variable Screw	7803115
4 x 17mm Self-Tapping Variable Screw	7803117
4 x 19mm Self-Tapping Variable Screw	7803119
Self-Tapping Rescue Screw	s (Fixed, 4.5mm)
4.5 x 11mm Self-Tapping Fixed Screw	7806211
4.5 x 13mm Self-Tapping Fixed Screw	7806213
4.5 x 15mm Self-Tapping Fixed Screw	7806215
4.5 x 17mm Self-Tapping Fixed Screw	7806217
4.5 x 19mm Self-Tapping Fixed Screw	7806219
Self-Tapping Rescue Screws	(Variable, 4.5mm)
4.5 x 11mm Self-Tapping Variable Screw	7805111
4.5 x 13mm Self-Tapping Variable Screw	7805113
4.5 x 15mm Self-Tapping Variable Screw	7805115
4.5 x 17mm Self-Tapping Variable Screw	7805117
4.5 x 19mm Self-Tapping Variable Screw	7805119

*Indicates crossover sizes



To order, please contact your NuVasive Sales Consultant or Customer Service Representative today at: **NuVasive, Inc.** 7475 Lusk Blvd., San Diego, CA 92121 USA • phone: 800-475-9131 fax: 800-475-9134 **ECREP NuVasive Netherlands B.V.** Jachthavenweg 109A, 1081 KM Amsterdam, The Netherlands • phone: +31 20 72 33 000

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