

Polaris™ System

Translation™ Screw

Game Changing
Technology



HIGHRIDGE

Game Changing Technology

Highridge Medical's Translation Screw incorporates technology that allows the screw head to translate up to 3 mm medial-lateral relative to the screw shaft to ease rod introduction and encourage optimal screw placement.

3 mm of Medial-Lateral Screw Translation

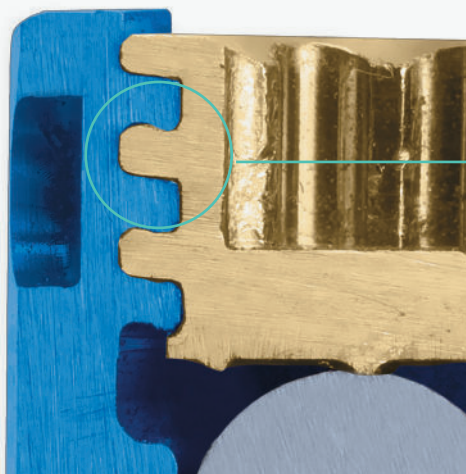


Left translation

Center

Right translation

Multi-axial Angulation



Reliable Locking Technology

Helical Flange® Technology

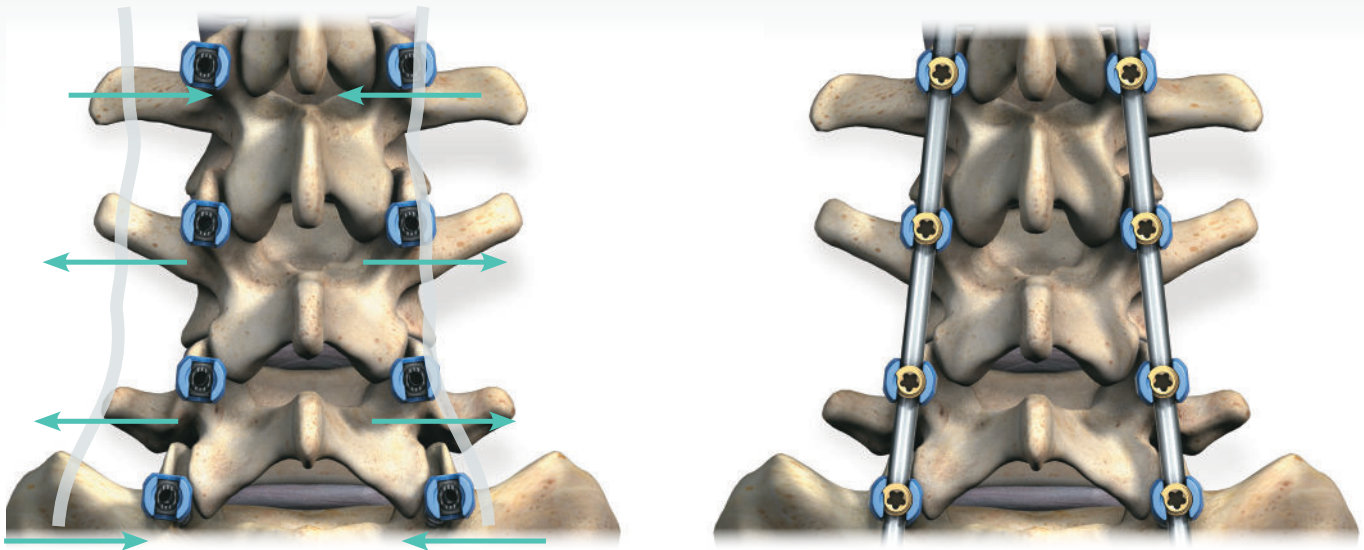
Minimizes cross threading and seat splay, while enhancing the strength of the locking mechanism.

More Than 250,000 Times

Since 2004, spine surgeons have implanted more than 250,000 screws with Helical Flange Technology.

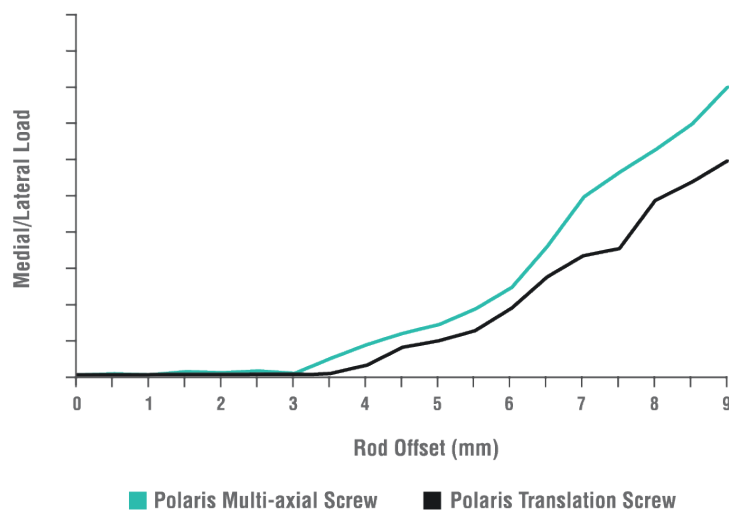
Less Rod Manipulation, Easier Rod Introduction

Medial-lateral screw translation allows for less rod manipulation and simplified rod introduction. Consequently, the load placed on the screw-to-rod interface may be minimized.



Less Stress at Bone-to-Screw Interface**

The load at the screw to rod interface is minimized through medial or lateral translation. The intra-operative screw head adjustment capability minimizes the load at the bone-to-screw interface while maintaining a robust construct.

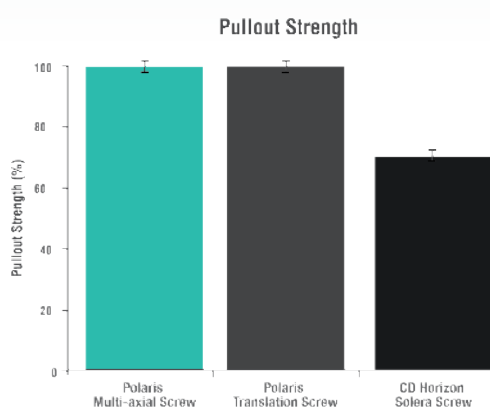


**Mechanical testing may not be indicative of human clinical outcomes.

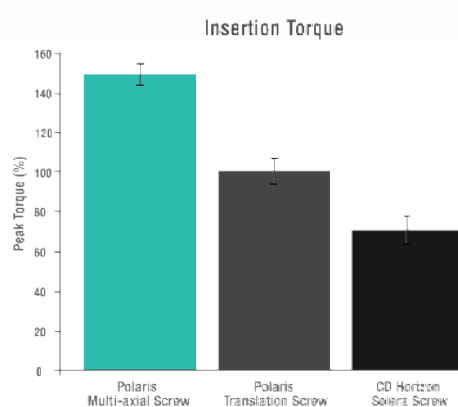
Mechanical Testing

Thread Profile Performance

In head-to-head pullout tests, the Polaris Translation Screw was equal to the Polaris™ 5.5 Multi-axial Screw and superior to the CD HORIZON† SOLERA† Screw. Further testing showed that the Polaris Translation Screw yielded higher insertion torque than the Polaris 5.5 Multi-axial Screw and CD HORIZON† SOLERA† Screw. The tests were performed in accordance with ASTM F543.



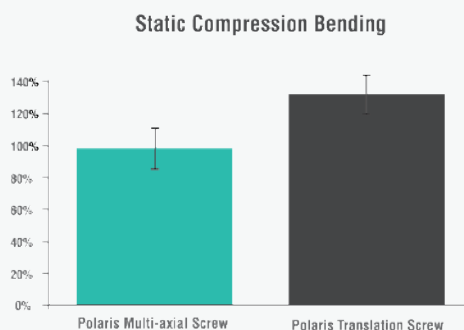
*Pullout strength is the maximal resistance of the implant to the applied tensile force. In pullout testing, an axial load is applied until the screw-to-block interface fails.**



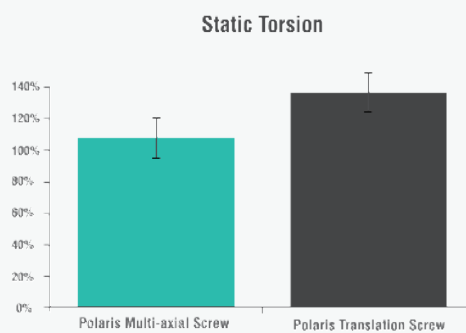
*The insertion torque of a screw is dependent on bone quality and the bone screw thread profile. In an insertion torque test, a screw is inserted and the peak insertion torque is obtained.**

Stronger by Design

In a head-to-head strength test utilizing Polaris™ Spinal System constructs, the Polaris Translation Screw was proven to be stronger than the Multi-axial Polaris 5.5 Screw. The tests were performed in accordance with ASTM 1717.



*In compression bending testing, a vertical load is applied to simulate flexion. In a static compression bending test, a load is applied until the construct fails.**



*In torsion testing, the construct is rotated in one direction from a neutral position to simulate rotation. In a static torsion test, a load is applied until the construct fails.**

*Data on File

Unparalleled Thread Performance*

The screw and thread profile are designed for improved performance and purchase in cortical and cancellous bone. The thread form provides tactile insertion and maximizes bone purchase.^{1,2}



Dual-Lead Screw Thread

- Faster screw placement



Thread Profile

- Maximizes the screw interaction in various bone densities
- Tactile insertion
- Thread form maximizes bone purchase



Balanced-start™ Tip Geometry

- Minimizes toggle during insertion
- Accurate placement and screw trajectory
- Immediate engagement

For more information, visit highridgemedical.com



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