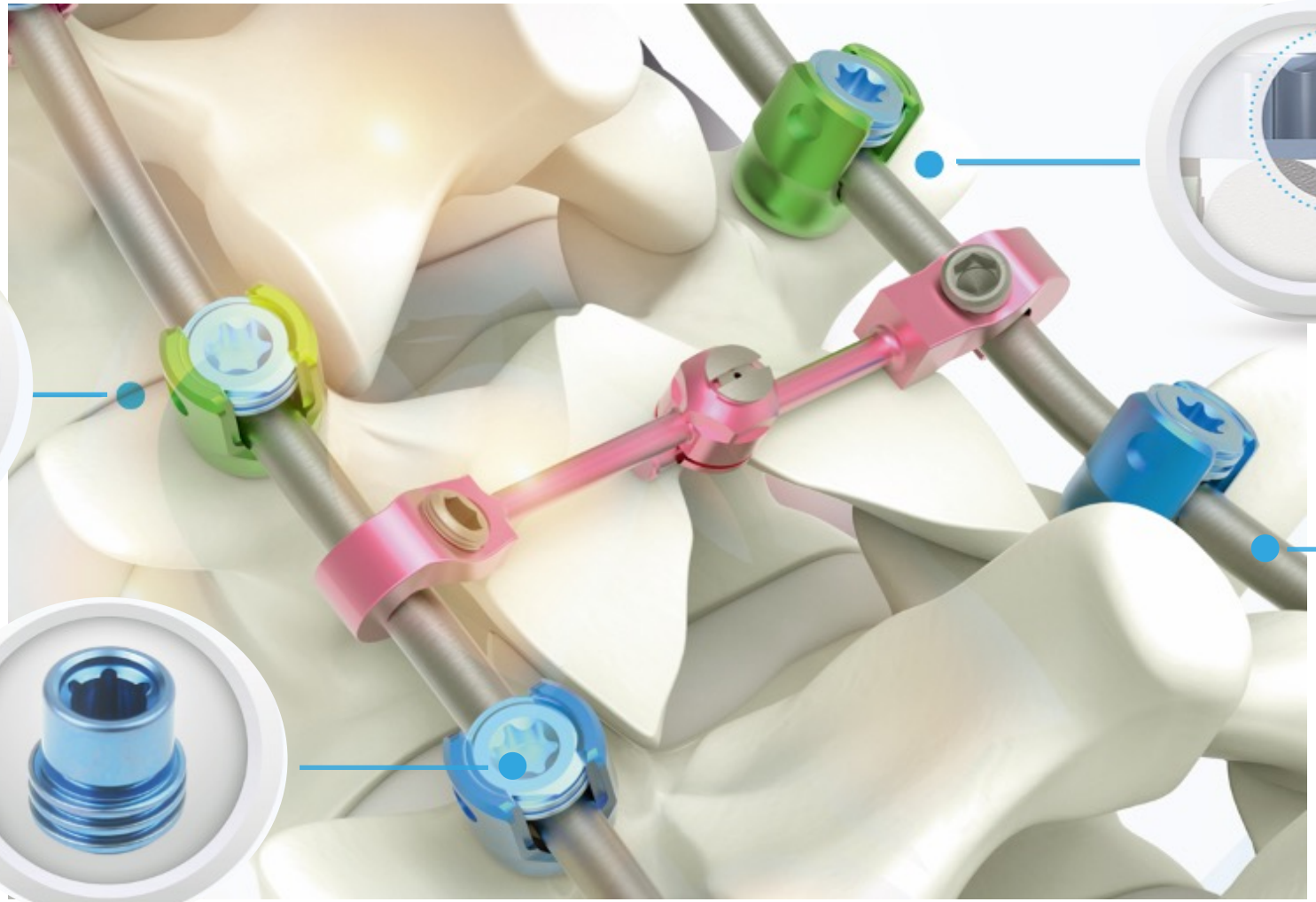
Premier 5.5 - Thoracolumbar Posterior Fixation System - Key Features

EQUINOX

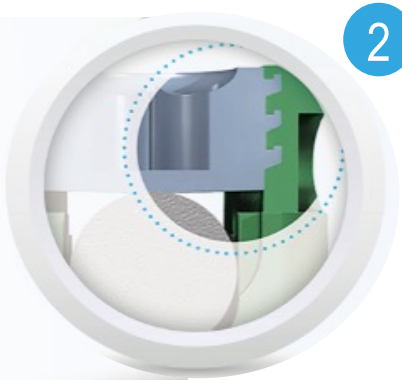
1

Screw Shaft: Three-stop double-thread design on the screw improves implant fixation, facilitates implantation, and reduces screw breakage risk.



2

Patented barbed trapezoidal recess design: Patented design improves individual implant strength, overall construct integrity, and reduces the risk of screw failure.



3

Set Screw: Optimized screw recess design, providing improved locking between set and pedicle screws. Set screw recess angle orientation has been optimized to further improve insertion and guidance, reducing risk of implant misplacement.

4

Rod material choice: Two options for the rod material (titanium alloy, CoCrMo alloy), provide the surgeon flexibility to achieve their desired level of friction stability at the construct locking interface.

Premier 5.5 - Screw Thread evolution and predicate comparison

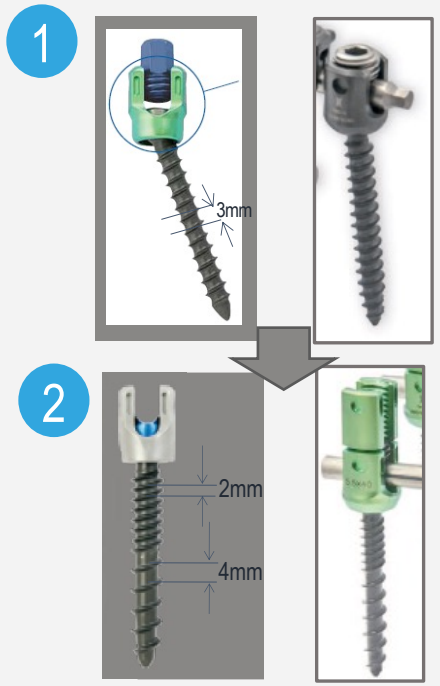
EQUINOX

1st Generation WEGO

- SINO brand (Medtronic Legacy)
- full single thread
- thread pitch 3mm, thread lead 3mm
- screw advances 3mm per turn

2nd Generation WEGO

- UPASS, (Medtronic Solera)
- Double thread
- Thread pitch 2mm, thread lead 4mm
- screw advances 4mm per turn



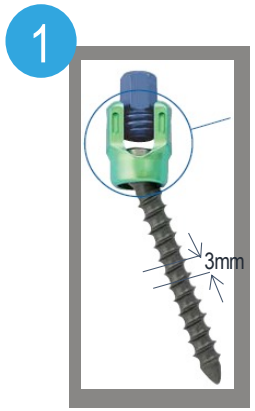
3rd Generation WEGO

WEGO Premier

- full dual thread
- thread pitch 2mm, thread lead 4mm
- screw advances 4mm per turn

Premier full-dual thread screws demonstrated superior pullout force when compared with **solera** screws due to the increased thread numbers on the vertebra

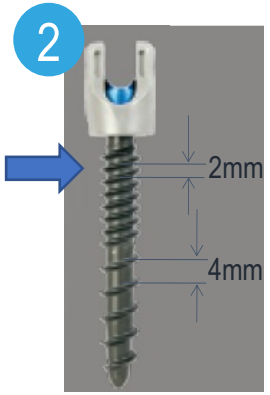
Torque required to cut the screw track and turns required for implantation were all equivalent between **Premier** and **solera**



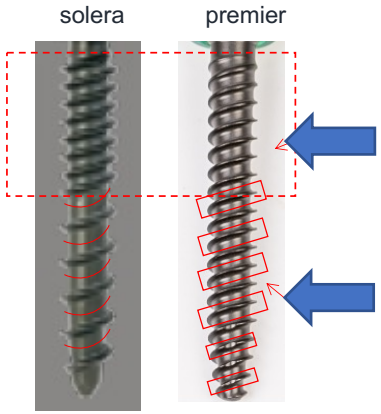
Full Single Thread

Double thread advantages

- 2mm pitch provides greater torque at construct interface
- 4mm pitch screw track conserves bone
- 4mm pitch requires fewer turns to get initial fixation
- pull-out force is the same for both full single



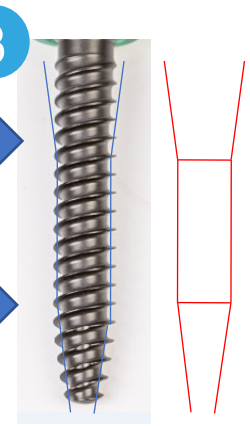
Double Thread



Full dual-thread, high-pitch

Premier 2mm thread pitch and 4mm thread lead are equivalent

Premier unique features : Double taper design of thread bottom diameter to strengthen pedicle control



Premier