

+ Step forward with adjustable tension

ULTRABRIDGE Adjustable Achilles
Reconstruction Technique

Smith+Nephew



HEALICOIL[◇] PK
with Needles
Suture Anchor



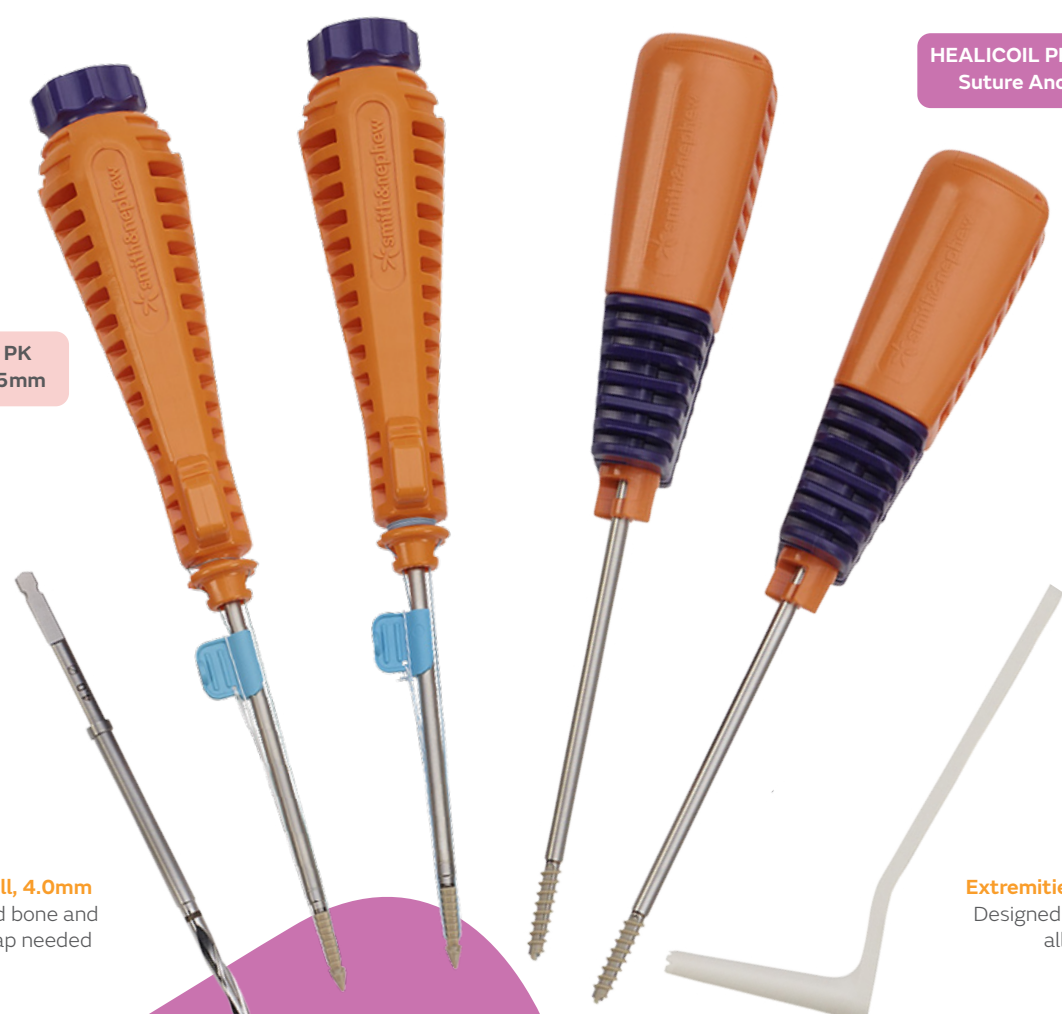
FOOTPRINT[◇] ULTRA
PK
Suture Anchor



+ ULTRABRIDGE[®] Adjustable Achilles Reconstruction Technique

Smith+Nephew's ULTRABRIDGE Adjustable Achilles Technique provides the ability to adjust and control suture tension after anchor implantation to meet your patients' unique anatomic requirements. The streamlined double-row repair technique requires fewer devices and steps.*¹

- Uniquely designed inner plug of the FOOTPRINT[®] ULTRA PK Anchor allows the **adjustment of suture tension after anchor implantation** and until removal of inserter
- ULTRATAPE[®] Suture provides a significantly lower and more evenly distributed level of pressure which **may reduce vascular restriction at the injury site****²⁻⁴
- The open architecture HEALICOIL[®] PK with Needles Suture Anchor is **designed for greater healing**



FOOTPRINT ULTRA PK
Suture Anchor, SL, 4.5mm

ULTRABRIDGE Drill, 4.0mm

A single drill for hard bone and general use – No tap needed

HEALICOIL PK with Needles
Suture Anchor, 4.5mm

Extremities Guide, Universal

Designed to assist in drilling all four holes

Watch

- ULTRABRIDGE Insertional Achilles Reconstruction Technique using HEALICOIL with Needles featuring Carroll Jones, MD

*as compared to Arthrex SpeedBridge™ Kit for hard bone and general use

**as compared to a traditional #2 suture and Arthrex FiberTape™, demonstrated in bench-top testing performed in 2013 (P<0.05)

HEALICOIL[®] PK with Needles Suture Anchor

The HEALICOIL PK with Needles Suture Anchor is designed with a shortened inserter for foot and ankle procedures.* The anchor has a needle attached to each of the two ULTRATAPE[®] suture limbs to allow the user to pass the ULTRATAPE Suture in multiple locations in the Achilles tendon and compress the ligament to the bone surface, if desired. The 4.5mm suture anchor is available as a standalone device.

Designed for
greater healing

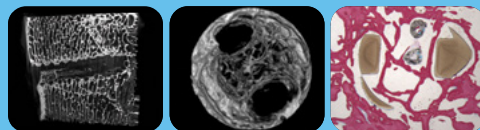
Open architecture anchor
design facilitates bone
in-growth**6-9

Handle

Safely stores ULTRATAPE
Suture with curved,
tapered needles



Bone-fill at 12 weeks in a pre-clinical ovine study



Micro-CT images at 12 weeks of a 5.5mm HEALICOIL PK Suture Anchor show a web of bone beginning to fill the center of the implant. Histology at the same point in time clearly demonstrates bone growing across the implant's open architecture.⁵

*as compared to HEALICOIL PK Suture Anchor, 4.5mm

** as demonstrated ex vivo and in rotator cuff



FOOTPRINT[®] ULTRA PK Suture Anchor

The FOOTPRINT ULTRA PK Suture Anchor inserter is sized for mini-open Achilles tendon procedures with adjustable suture tensioning to support a low-profile joint repair.¹⁰⁻¹³ The 4.5mm anchor is available as standalone device in 4.5 and 5.5mm.

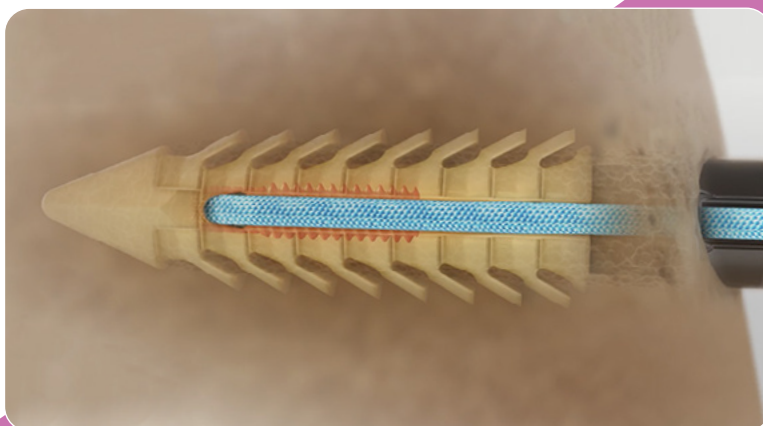
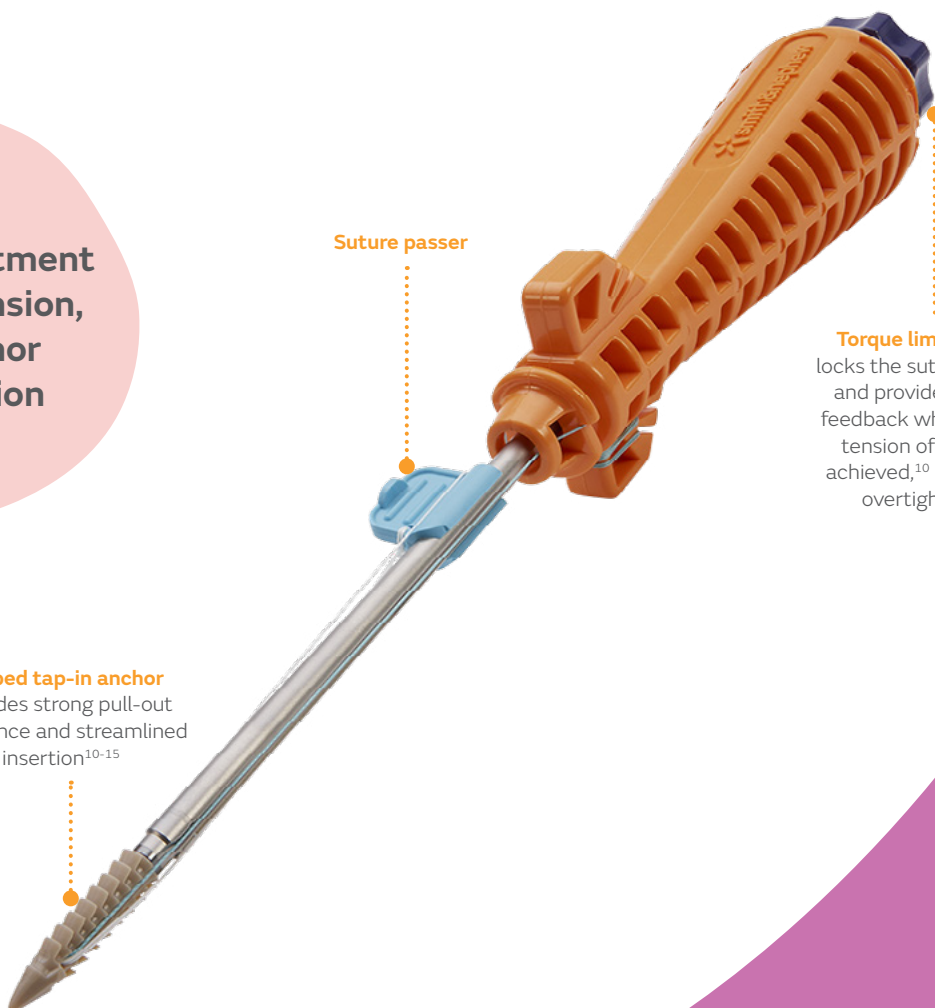
Allows adjustment
of suture tension,
after anchor
implantation

Suture passer

Torque limiter knob

locks the suture in place
and provides audible
feedback when desired
tension of suture is
achieved,¹⁰ preventing
overtightening

Barbed tap-in anchor
provides strong pull-out
resistance and streamlined
insertion¹⁰⁻¹⁵



Inner plug locks suture in place once desired tension is achieved



ULTRABRIDGE[◇] Adjustable Achilles Reconstruction Technique

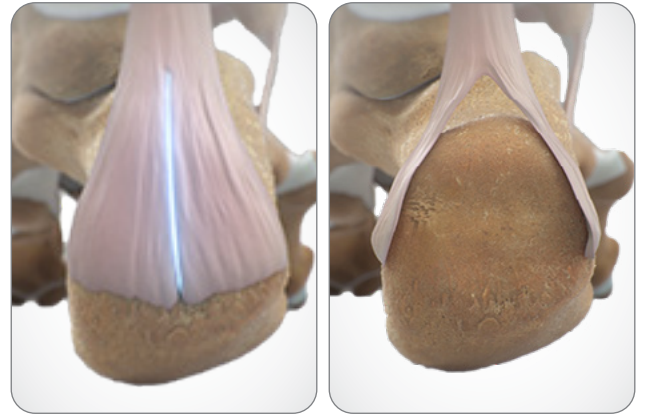
The surgical technique for
insertional Achilles repair
using ULTRABRIDGE
requires fewer steps
and devices*



*as compared to Arthrex Speedbridge Kit for hard bone and general use

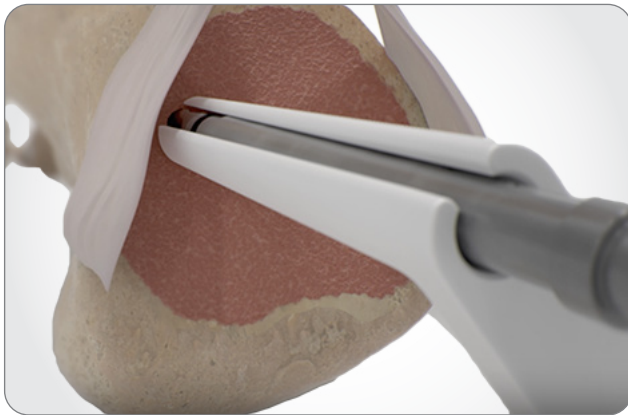


+ ULTRABRIDGE[®] Adjustable Achilles Reconstruction Technique



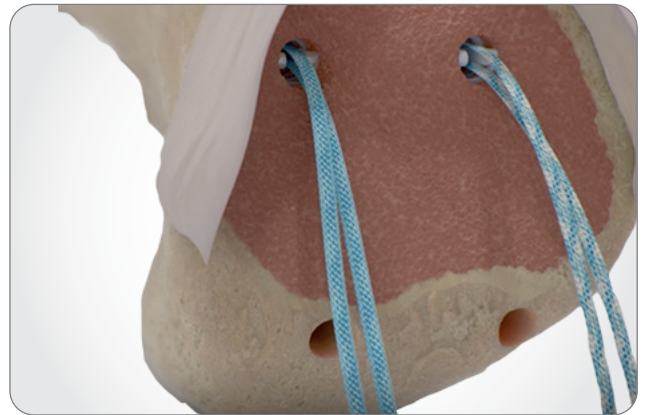
Step 1

Expose and remove the Haglunds.



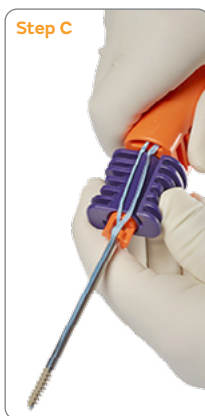
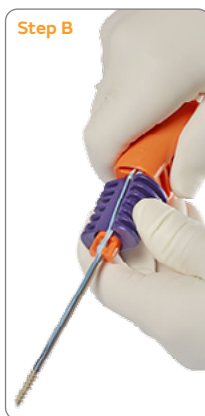
Step 2

Using the Extremities Guide, Universal and the ULTRABRIDGE Drill, 4mm, prepare the calcaneus for insertion of HEALICOIL[®] PK with Needles Suture Anchors.



Step 3

Insert two 4.5mm HEALICOIL PK With Needles suture anchors into the calcaneus.



Step 4

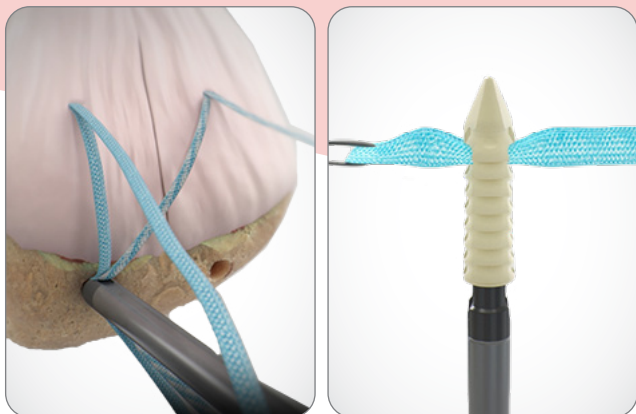
Deploy the ULTRATAPE[®] Suture with needles by rotating the distal handle.



Step 5

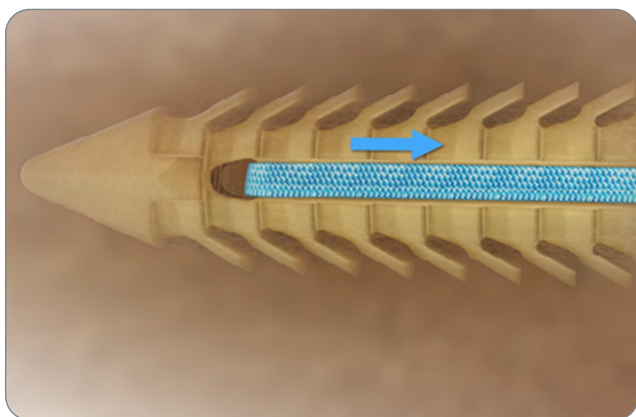
Pass the ULTRATAPE Suture through the Achilles tendon utilising the attached needles.





Step 6

Pass one strand of ULTRATAPE® Suture from each proximal HEALICOIL® with Needles suture anchor through the distal eyelet of the 4.5mm FOOTPRINT® ULTRA PK suture anchor. Tap the suture anchor into the calcaneus with a mallet.



Step 8

After tension is customised for the repair, turn the purple knob clockwise until audible clicks are heard locking the ULTRATAPE Suture within the anchor body. Turn the knob 1/4 turn counterclockwise prior to removing inserter.



Step 7

Adjust the tension in the ULTRATAPE Suture by pulling each strand individually prior to locking the anchor as shown in Step 8.



Step 9

Cut remaining ULTRATAPE suture and stitch the Achilles to finish construct.

Watch



- Adjustable ULTRABRIDGE Insertional Achilles Reconstruction with Dr. Carroll Jones



Ordering information

ULTRABRIDGE [°] Adjustable Achilles Reconstruction	
Reference	Description
72205696	HEALICOIL [°] PK Suture Anchor with Needles, 4.5mm, ULTRATAPE [°] Suture (Blue)
72205697	HEALICOIL PK Suture Anchor with Needles, 4.5mm, ULTRATAPE Suture (Blue-Cobraid)
72203783	FOOTPRINT [°] ULTRA PK Suture Anchor, 4.5mm SL
72205698	ULTRABRIDGE Drill, 4.0mm
72205699	Extremities Guide, Universal

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References

1. Smith+Nephew 2023. Foot and Ankle Suture Anchor Kit and Technique Comparison - Smith and Nephew and Arthrex. Internal Memo. **2.** Smith+Nephew 2013. ULTRATAPE Pressure Film Testing. Internal Report. 15001847 Rev A. **3.** Maia Dias C, Gonçalves SB, Completo A, et al. Why are tapes better than wires in knotless rotator cuff repairs? An evaluation of force, pressure and contact area in a tendon bone unit 4. mechanical model. *J Exp Orthop.* 2021;8(1). **4.** Neyton L, Godeneche A, Nove-Josserand L, et al. Arthroscopic suture-bridge repair for small to medium size supraspinatus tear: healing rate and retear pattern. *Arthroscopy.* 2013;29(1):10-17. **5.** Van Kampen C, Arnoczky S, Parks P, et al. Tissue-engineered augmentation of a rotator cuff tendon using a reconstituted collagen scaffold: a histological evaluation in sheep. *Muscles Ligaments Tendons J.* 2013;3(3):229-235. **6.** Smith+Nephew 2012. Evaluation of a new suture anchor design in an ovine bone defect model: A pilot study. Internal Report. 15001193 Rev B. **7.** Kim JH, Kim YS, Park I, et al. A Comparison of Open-Construct PEEK Suture Anchor and Non-Vented Biocomposite Suture Anchor in Arthroscopic Rotator Cuff Repair: A Prospective Randomized Clinical Trial. *Arthroscopy.* 2020;36(2):389-396. **8.** Chahla J, Liu JN, Manderle B, et al. Bony Ingrowth of Coil-Type Open-Architecture Anchors Compared With Screw-Type PEEK Anchors for the Medial Row in Rotator Cuff Repair: A Randomized Controlled Trial. *Arthroscopy.* 2020;36(4):952-961. **9.** Smith+Nephew 2016. HEALICOIL REGENESORB Suture Anchor- a study to assess implant replacement by bone over a 2 year period. Internal Report. NCS248. **10.** Smith+Nephew 2010. FOOTPRINT Ultra PK Knotless Suture Anchor Design Validation Testing. Internal Report. ITR-4271. **11.** Smith+Nephew 2010. FOOTPRINT Ultra PK Knotless Suture Anchor Performance Testing. Internal Report. ITR-4680. **12.** Smith+Nephew 2010. FOOTPRINT Ultra PK Knotless Suture Anchor Disengagement Force. Internal Report. ITR-4329. **13.** Smith+Nephew 2013. Achilles Tendon Repair - Product Validation. Internal Report. 15001527. **14.** Barber FA, Herbert MA. Cyclic loading biomechanical analysis of the pullout strengths of rotator cuff and glenoid anchors: 2013 update. *Arthroscopy.* 2013;29(5):832-844. **15.** Smith+Nephew 2010. FOOTPRINT Ultra PK Knotless Suture Anchor Off-axis Insertion. Internal Report. ITR-4272.