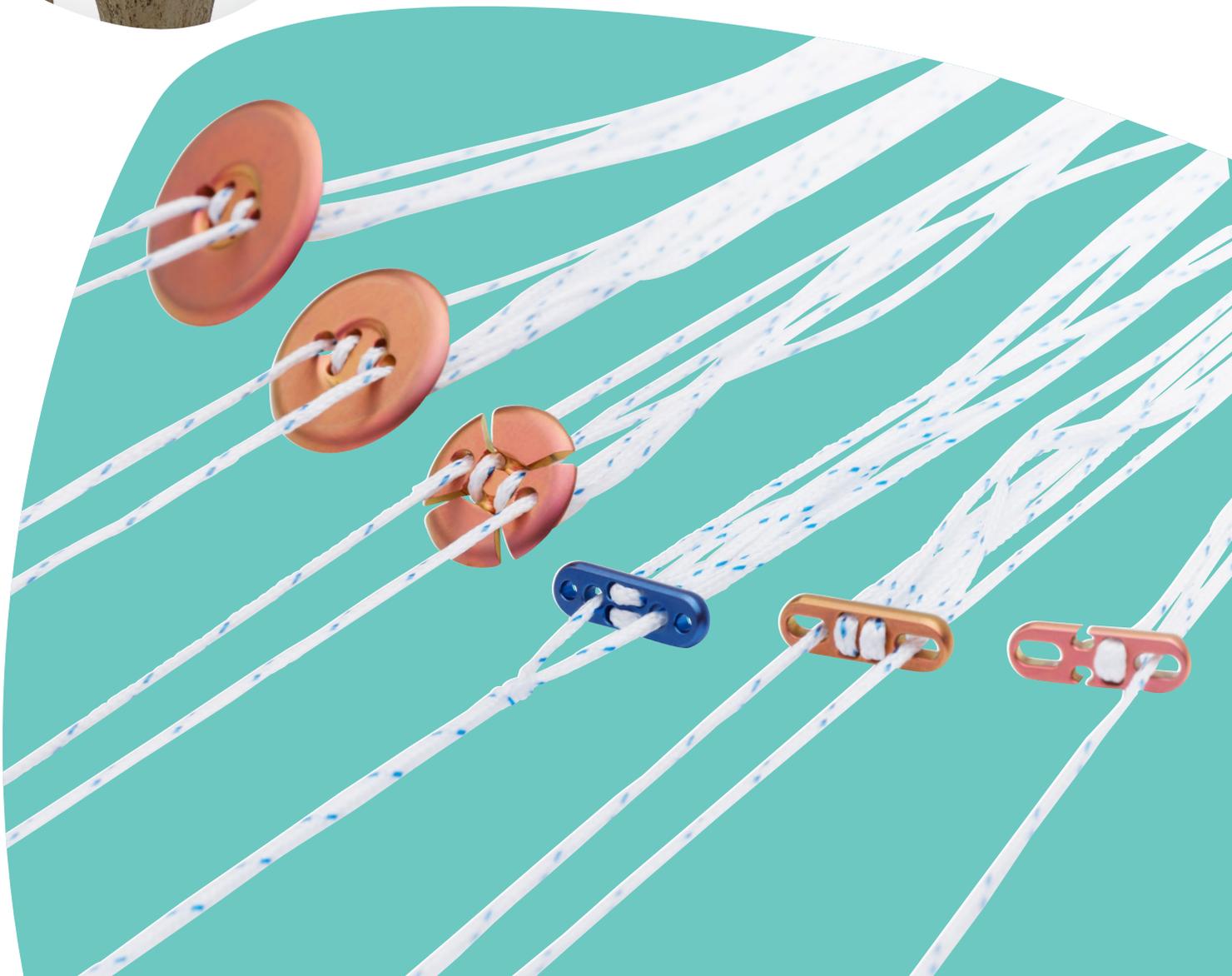


+ All grafts all adjustable all secure

Versatile cortical suspensory
knee ligament solutions

Smith+Nephew

ULTRABUTTON[◇]
Adjustable Fixation Device Family



The expanded ULTRABUTTON[®] Family offers dedicated adjustable fixation solutions for all graft types and ACL, PCL, MCL, and LCL repairs and reconstructions.



Quadriceps tendon
ULTRABUTTON QUAD Device



QT



Bone-tendon
ULTRABUTTON BB Device



BTB



QT-B



Hamstring
ULTRABUTTON Device



Semitendinosus



Semitendinosus and gracilis



Tibial fixation
ULTRABUTTON TIB Device



QT



QT-B



Semitendinosus

ULTRABUTTON TIB, QUAD and BB Adjustable Fixation Devices

ULTRABUTTON Adjustable Fixation Device

ENDOBUTTON[®] CL BTB Fixation Device

ENDOBUTTON CL ULTRA Fixation Device

ENDOBUTTON Fixation Device

The ULTRABUTTON is indicated for soft tissue to bone fixation and the ULTRABUTTON QUAD, BB, and TIB are indicated for soft tissue to bone or bone-tendon to bone fixation to repair or reconstruct torn:

- Anterior cruciate ligament (ACL)
- Posterior cruciate ligament (PCL)
- Extracapsular Repair
 - Medial collateral ligament (MCL)
 - Lateral collateral ligament (LCL)



ULTRABUTTON^o Family features

Low graft disruption

- ULTRABUTTON Family has low displacement during cyclic loading^{*5-10}
- Graft protection sleeve is designed to shield the graft during loop reduction by minimizing relative device motion to avoid sawing effect¹¹
- ULTRABUTTON QUAD does not require graft transection for attachment, minimizing quadriceps tendon graft disruption^{12,13}

Strong

- Ultra-strong fixation^{5,6,14,15}

One-handed

- The ULTRABUTTON Family provides one person graft reduction/one-handed adjustment¹¹

Low profile

- The titanium buttons are strong with a low profile^{5,6,16,17}



*as demonstrated in bench-top testing



+ ULTRABUTTON[◇] QUAD



Adjustable Fixation Device

The ULTRABUTTON QUAD device features a suturing technique that integrates the device into the graft in only 5 needle passes.¹³

Reduction Limbs

Finger loops can be attached to the provided reduction bar 'J' slots to facilitate one person graft reduction¹²

Reduction Bar

- Enables easy graft reduction¹³
- Helps to minimize the physical pain of button reduction^{*13}

Suture Management Card

Organizes sutures during graft preparation

Passing & Flipping Sutures

Easy to remove #5 green passing and #5 white flipping sutures facilitate button fixation¹¹

Titanium Button

Strong with low profile^{5,6,16,17}

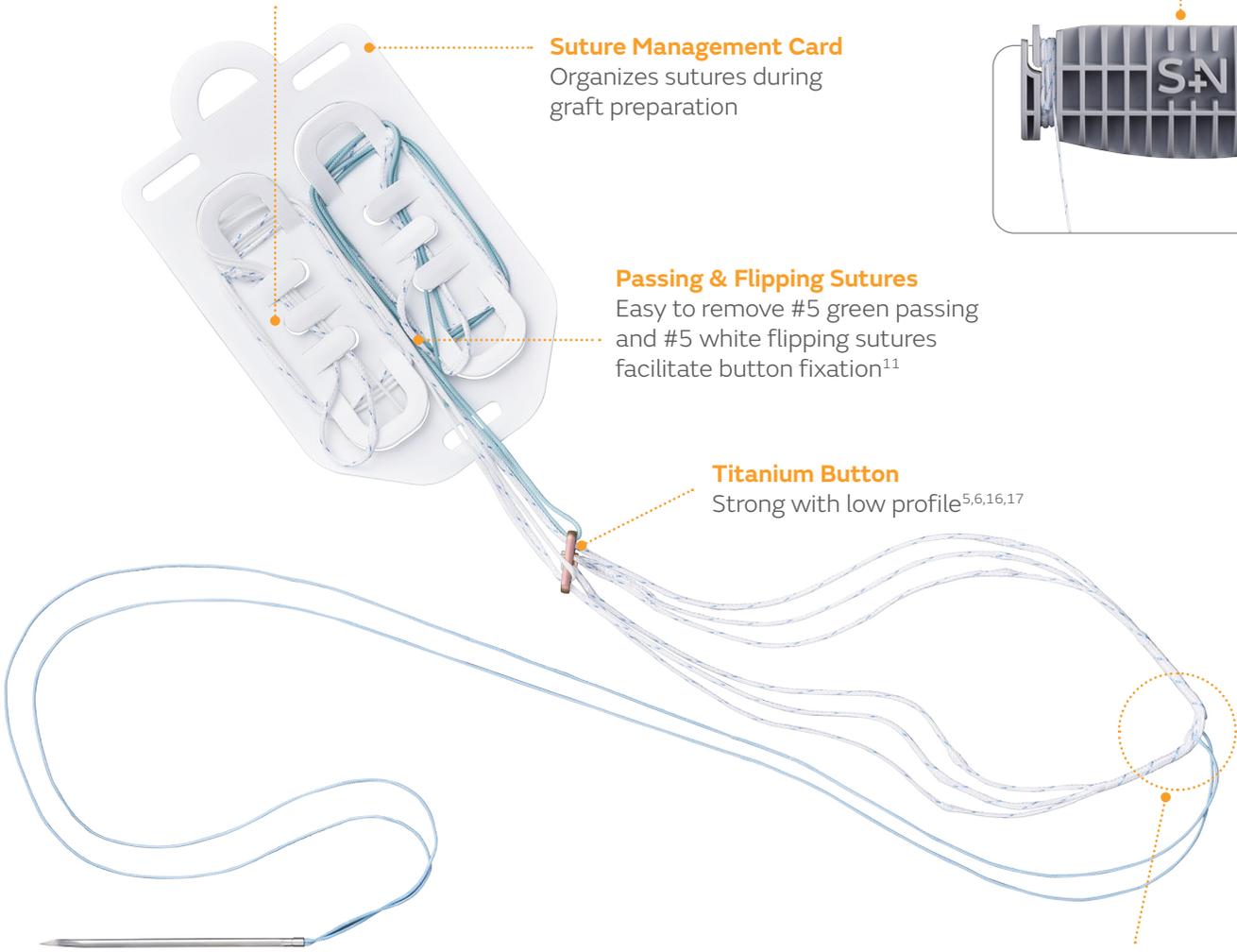


Graft Protection Sleeve

- Designed to protect the graft during reduction by minimizing relative motion between the sutures and graft¹¹
- Split sleeve design aids in graft preparation¹¹

Integrated #2 Suture & Needle

Allows for ultra-strong integration of the button into the soft tissue quadriceps graft^{**15,16,18}



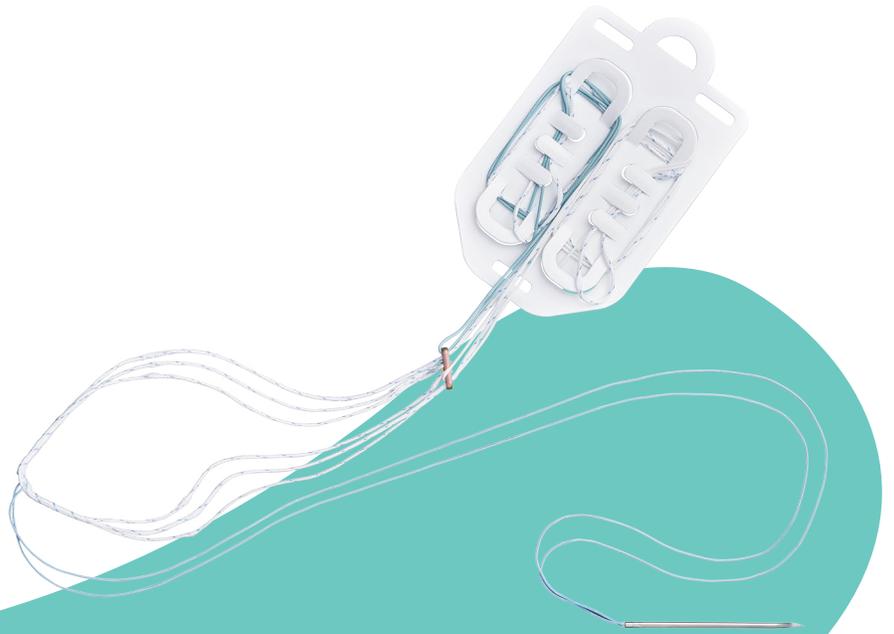
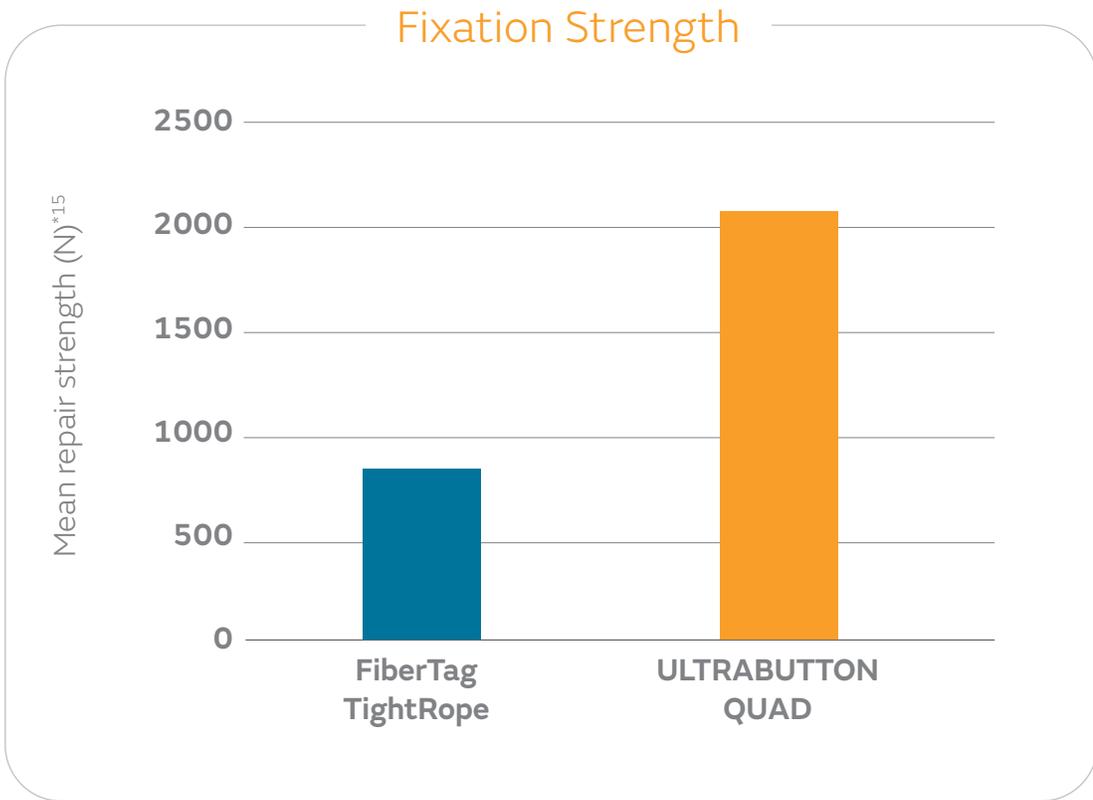
Average graft preparation time in under

4 minutes^{*13}

*n=5 cases

**as demonstrated in bench-top testing





*ULTRABUTTON QUAD Adjustable Fixation Device compared to Arthrex ACL FiberTag[®] TightRope[®] Implant in bench-top testing



+ ULTRABUTTON[◇] BB



Adjustable Fixation Device

The ULTRABUTTON BB device features an open loop design to facilitate attachment to BTB or QT-B grafts with an average preparation time of **under two minutes**^{*13}

Graft Protection Sleeve

Designed to protect the graft during reduction by minimizing relative motion between the sutures and graft¹¹

Titanium Button

Strong with low profile^{5,6,16,17}

Reduction Bar

- Facilitates easy assembly to your graft¹³
- Helps to minimize the physical pain of button reduction^{*13}

Suture Passer

Stiffened suture passer facilitates suture passage through bone block holes

Shuttle Suture

- Designed for easy removal¹¹
- Additional white #5 suture included in package



Average graft preparation time in under

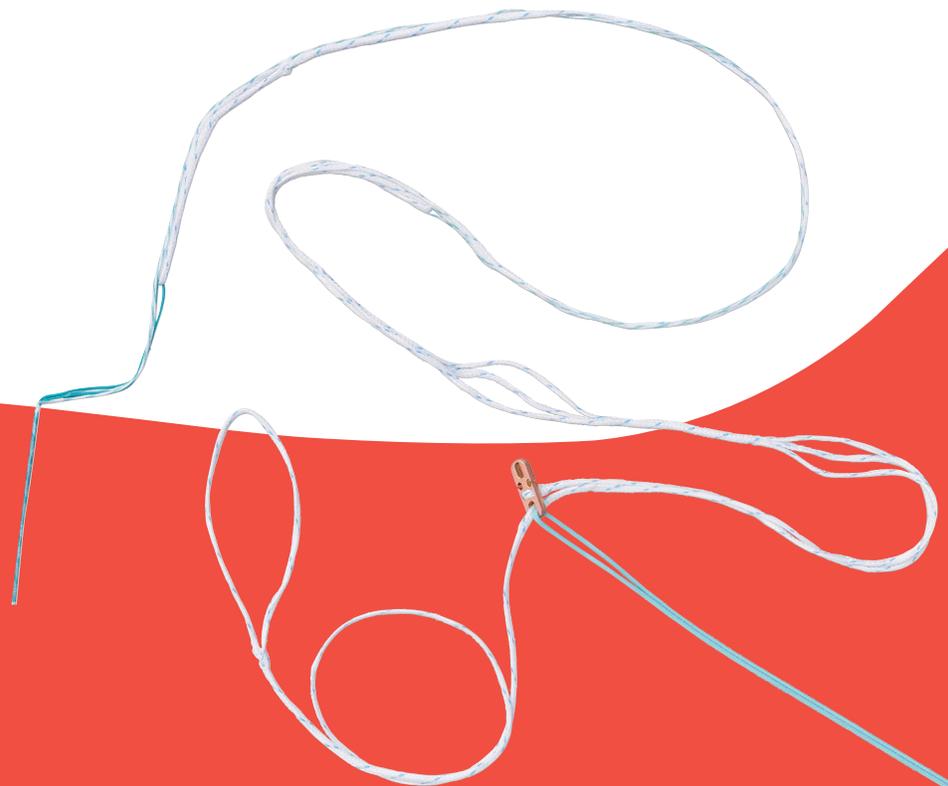
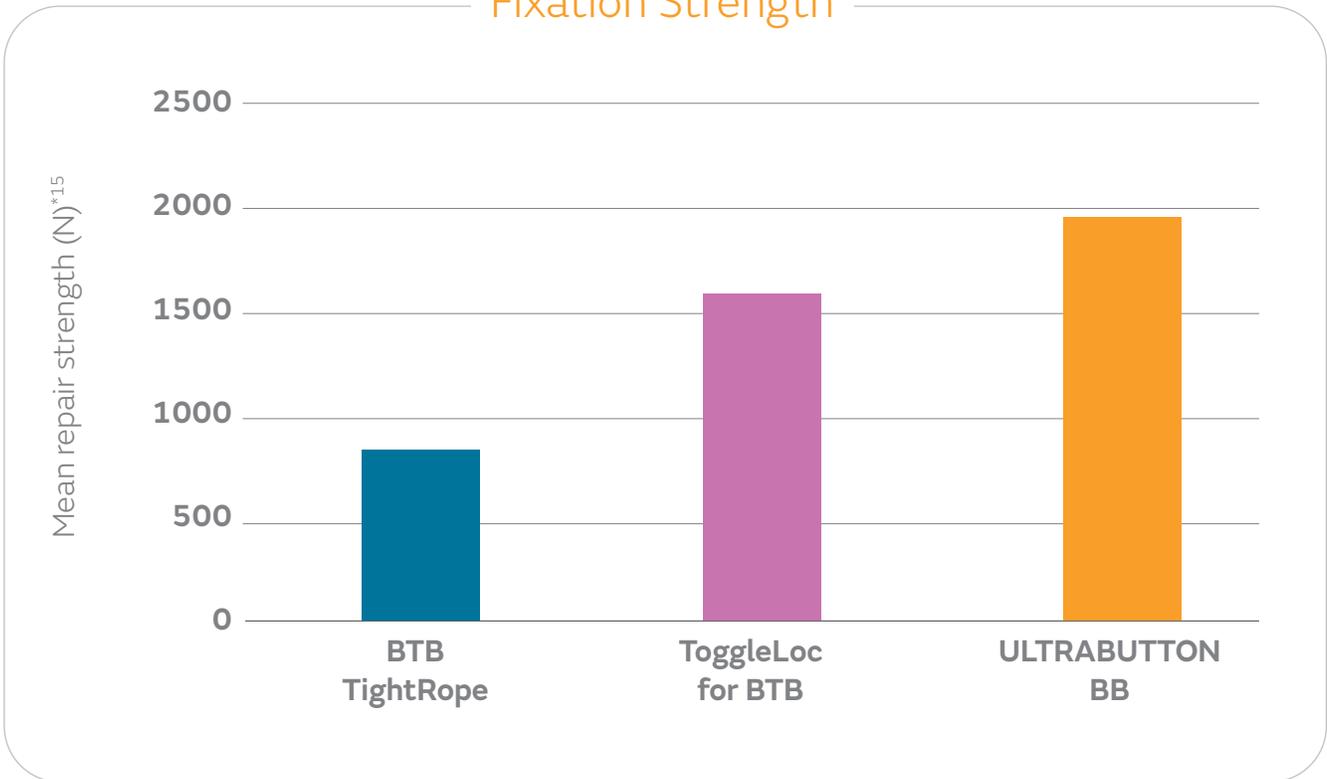
2 minutes^{*13}

*n=5 cases





Fixation Strength



*ULTRABUTTON BB Adjustable Fixation Device compared to Arthrex BTB TightRope[®] Implant and Zimmer Biomet ToggleLoc[™] Femoral Fixation Device with ZipLoop[®] Technology for BTB Grafts in bench-top testing





Graft Protection Sleeve

- Designed to protect graft with large contact area¹¹
- Designed to minimize relative motion and sawing effect between device and graft¹¹

Interlocking Adjustment

- Maximizes graft in tunnel
- Requires minimal force to reduce loop²³⁻²⁷

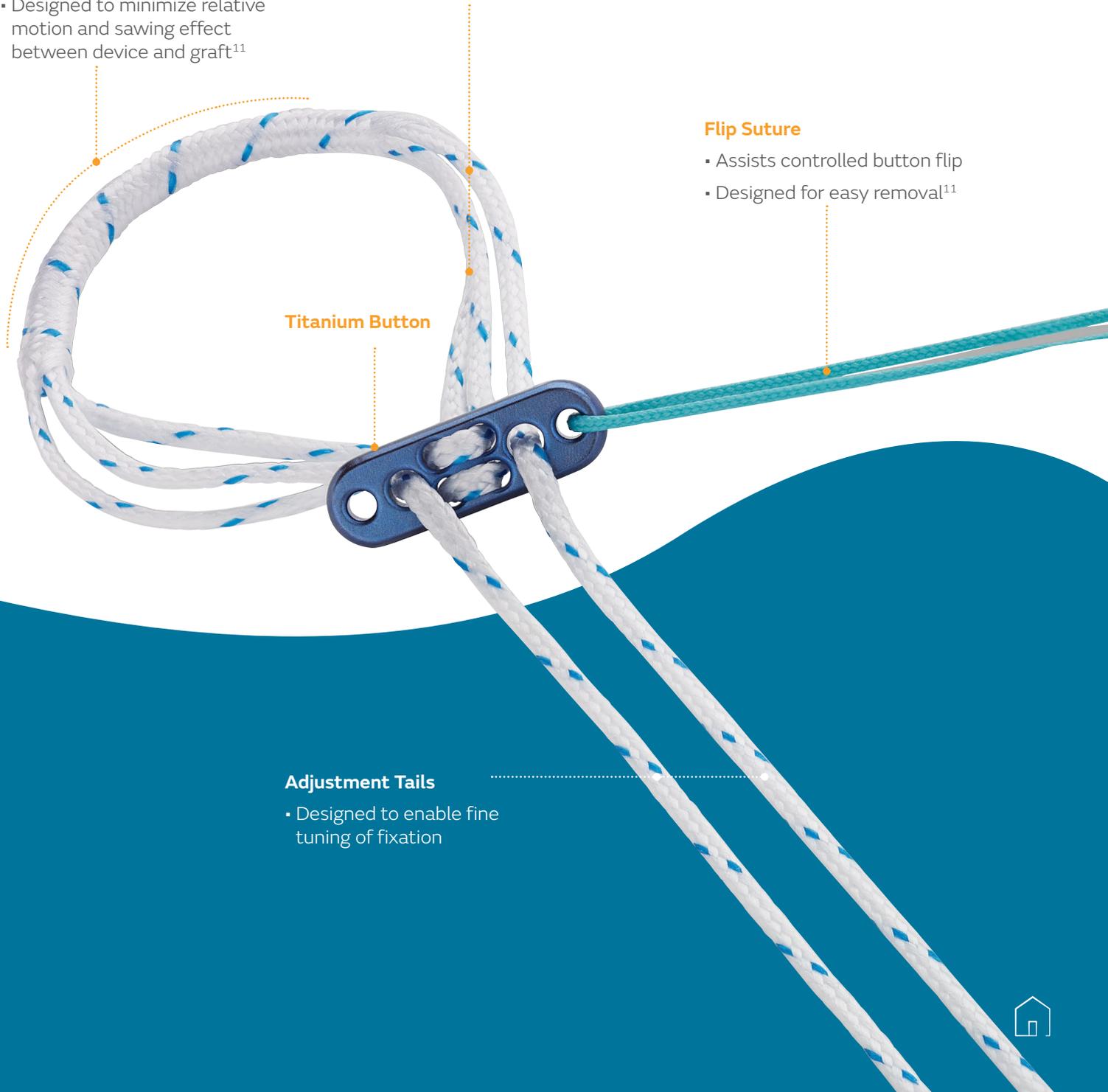
Flip Suture

- Assists controlled button flip
- Designed for easy removal¹¹

Titanium Button

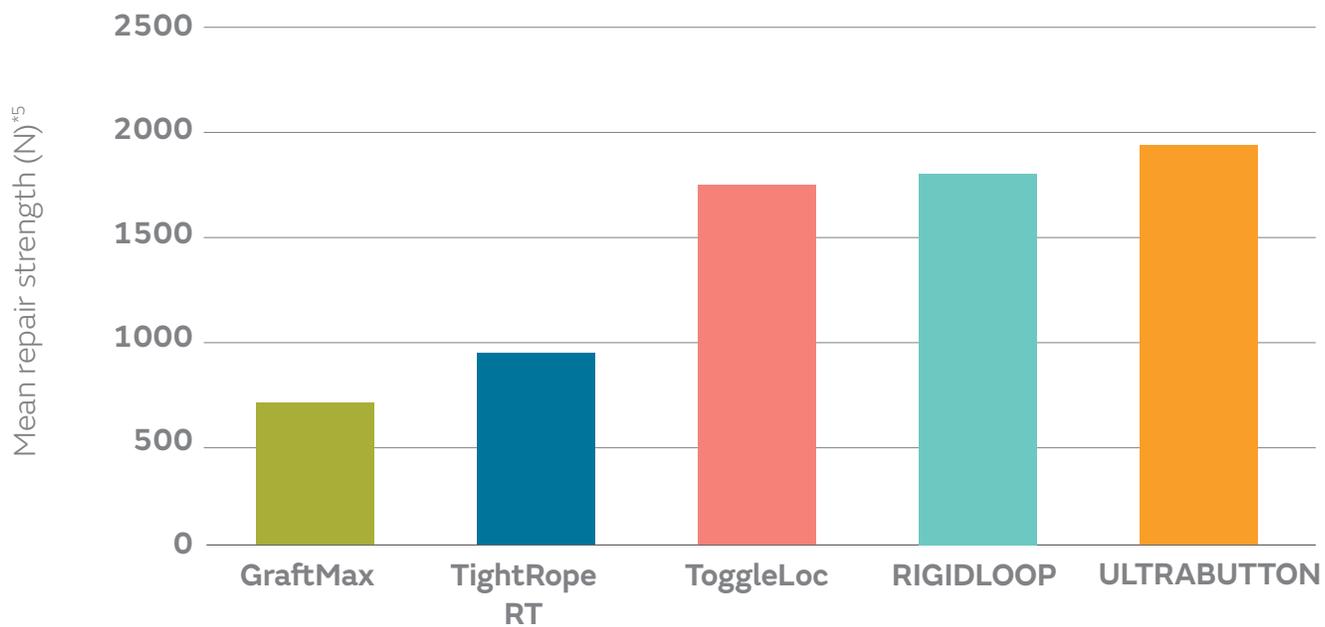
Adjustment Tails

- Designed to enable fine tuning of fixation





Fixation Strength



*ULTRABUTTON Adjustable Fixation Device compared to Conmed GraftMax™ Button Adjustable Cortical Fixation Device, Arthrex ACL TightRope® RT Graft Fixation Implant, Zimmer Biomet ToggleLoc™ Device with ZipLoop® Technology and Depuy Synthes RIGIDLOOP® Adjustable Cortical Fixation System in bench-top testing

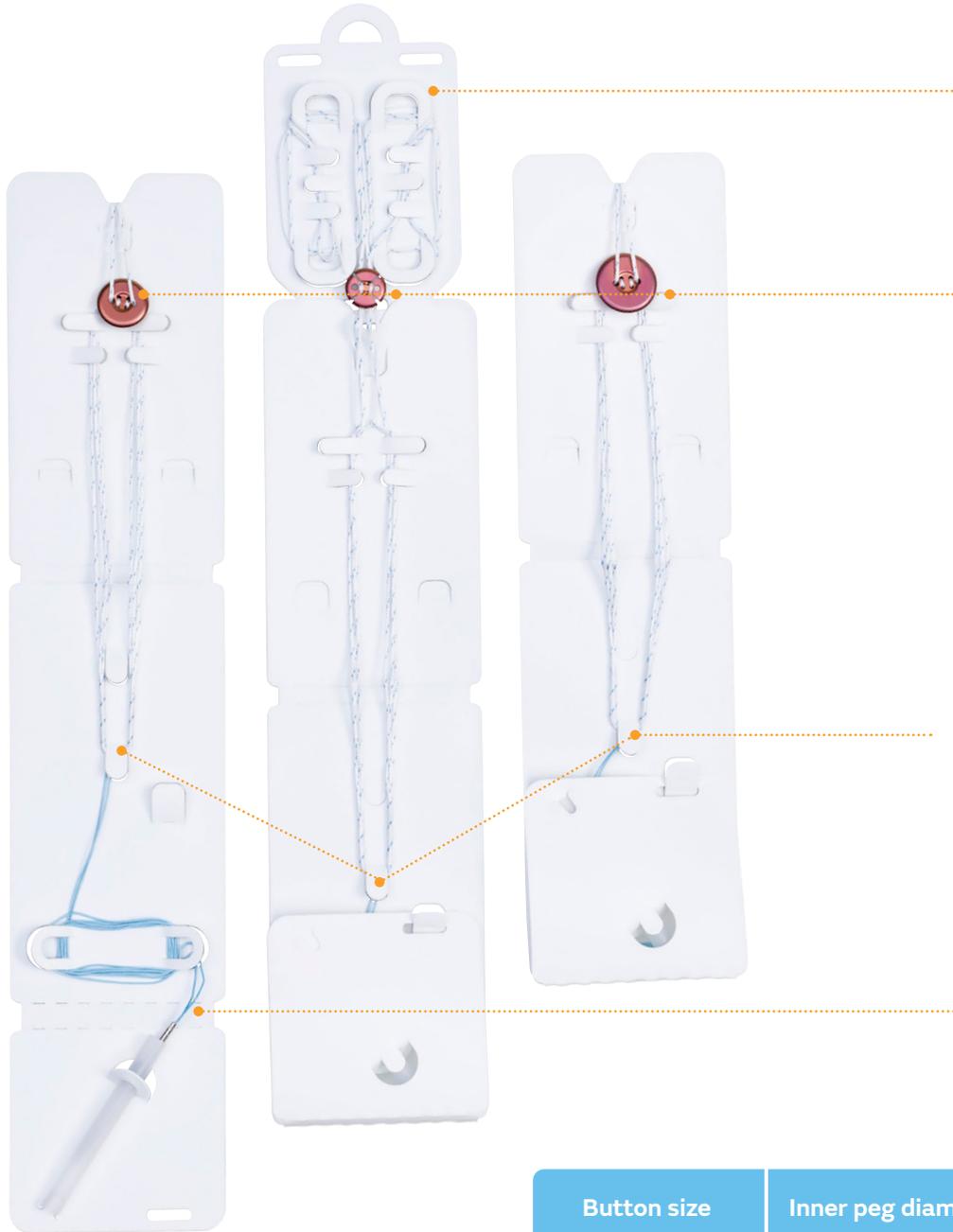


+ ULTRABUTTON[◊] TIB



Adjustable Fixation Device

ULTRABUTTON TIB devices, available in three sizes for common tunnel diameters, facilitates easy graft attachment to quad tendons in only **five needle passes**¹³ in an average of under 4 minutes^{**13} and can also be used for hamstring grafts. It features a lower mean profile height[†] which may minimize patient soft tissue irritation.¹⁹⁻²¹



Suture Management Card

Organizes sutures during graft preparation

Low Profile Titanium Button Design

- Available in three sizes for tunnels from 4.9mm to 13mm in diameter
- Medium and large sizes come preassembled for less surgical steps
- Small size facilitates **all-inside techniques**

Graft Protection Sleeve

- Designed to protect the graft during reduction by minimizing relative motion between the sutures and graft
- Split sleeve design aids in graft preparation¹¹

Integration #2 Suture & Needle

- Allows for ultra-strong integration of the button into the soft tissue quadriceps graft^{*15,16,18}
- Easily removed for use with hamstring graft

| Button size | Inner peg diameter | Tunnel diameter |
|---------------|--------------------|-----------------|
| small (12mm) | 4.4mm | 4.9mm – 7mm |
| medium (15mm) | 7mm | 7.5mm – 10mm |
| large (18mm) | 10mm | 10.5mm – 13mm |

*as demonstrated in bench-top testing

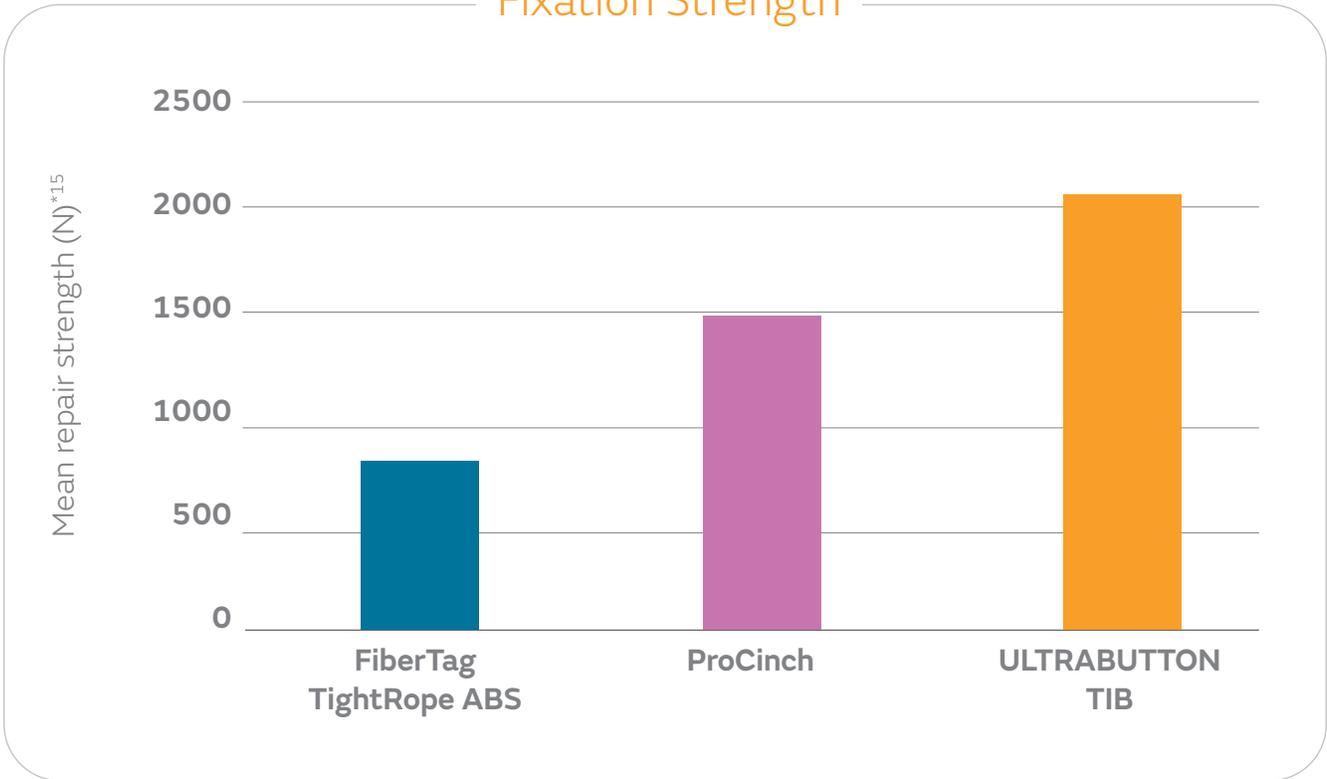
**n=5

†as compared to Arthrex TightRope™ ABS, Stryker ProCinch™ and XTENDOBUTTON[◊] Round Fixation Device

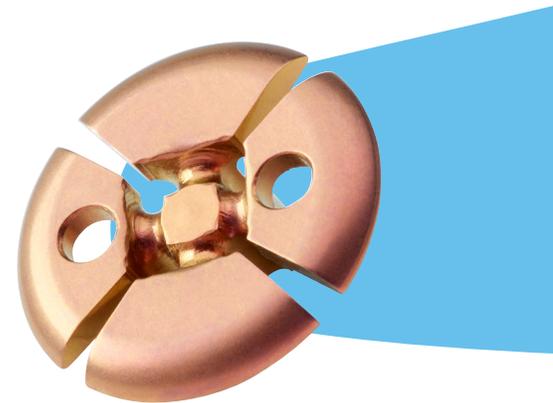
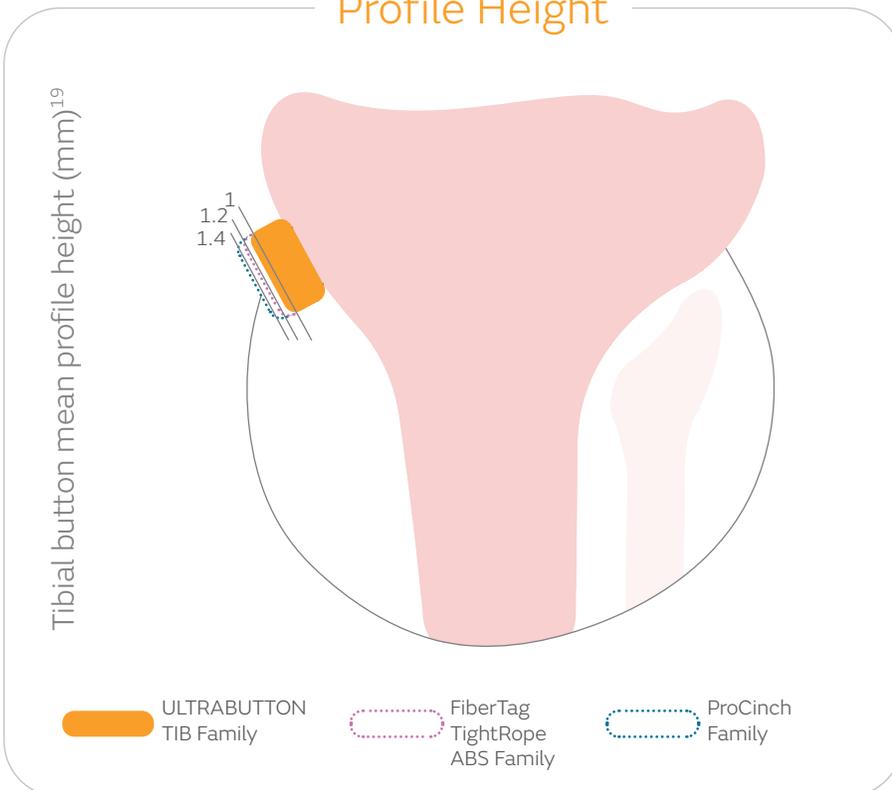




Fixation Strength



Profile Height



*ULTRABUTTON TIB Adjustable Fixation Device compared to Arthrex FiberTag™ TightRope™ ABS Implant with Concave TightRope ABS Button ø11mm, Round and Stryker ProCinch™ Open Loop no button with 11mm Round Concave Button in bench-top testing



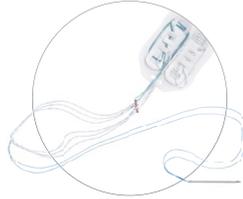
+ UltraTRAC[◇] QUAD

ACL Reconstruction Technique

- Hands free, direct tendon visualization during harvest^{28,29}
- Controlled, guided cutting to harvest only desired tissue²⁹
- Ultra-strong fixation^{*5,6,14,15}
- Faster average graft preparation time^{**13}



X-WING[◇]
Graft Preparation System



ULTRABUTTON[◇]
QUAD
Adjustable Fixation Device



QUADTRAC[◇]
Quadriceps Tendon
Harvest Guide System



ULTRABUTTON[◇] TIB
Adjustable Fixation Device



Watch

Graft Harvest & Preparation

- QUADTRAC graft harvest video featuring Dr. Cassandra Lee
- QUADTRAC graft harvest animation
- UltraTRAC QUAD graft preparation video featuring Dr. Lee
- UltraTRAC QUAD graft preparation animation

Surgical Techniques

- UltraTRAC QUAD ACL reconstruction video featuring Dr. Lee
- UltraTRAC QUAD ACL Reconstruction animation



Learn

QUADTRAC Quadriceps Tendon Harvest Guide System brochure

+ Reimagine reconstruction

Smith+Nephew offers a suite of ACL reconstruction & repair techniques, learn more below.

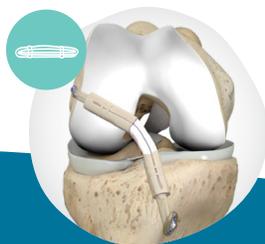


Watch

Click the images below to watch the technique animation



UltraSTAR
Quadrupled
semitendinosus



All-inside
Quadrupled
semitendinosus



UltraSURE
Semitendinosus
and gracilis



REGENESORB[®] BTB
Bone-tendon-bone



LIGABRACE[®]
ACL repair

*For an adjustable fixation device; as demonstrated in bench top testing **ULTRABUTTON QUAD as compared to Arthrex FiberTag[®] TightRope[®], n=5



Ordering information

| ULTRABUTTON® Adjustable Fixation Device Family | | |
|--|---|--|
| Reference # | Description | |
| 72290003 | ULTRABUTTON Adjustable Fixation Device | |
| 72205443 | ULTRABUTTON QUAD Adjustable Fixation Device | |
| 72205444 | ULTRABUTTON BB Adjustable Fixation Device | |
| Reference # | Tunnel diameter | Description |
| 72205600 | 4.9–7mm | ULTRABUTTON TIB Small, 12mm ø, 4.4mm peg |
| 72205601 | 7.5–10mm | ULTRABUTTON TIB Medium, 15mm ø, 7mm peg |
| 72205602 | 10.5–13mm | ULTRABUTTON TIB Large, 18mm ø, 10mm peg |
| Accessories | | |
| 7207315 | 4.5mm Cannulated Drill | |

| QUADTRAC® Quadriceps Tendon Harvest Guide System | |
|--|--|
| 72205580 | QUADTRAC Quadriceps Tendon Harvest Guide System Disposable Kit |
| 72205764* | QUADTRAC Quadriceps Tendon Harvest Guide System |
| Includes one of each | |
| 72205581 | GUIDE-TRAC |
| 72205583 | TRAC-CUTTER, 8mm x 6mm |
| 72205584 | TRAC-CUTTER, 10mm x 6mm |
| 72205585 | TRAC-CUTTER, 12mm x 6mm |
| 72205610 | QUAD-CUTTER |
| 72205564 | Sterilization Tray |

*Placing an order with this code will order individual units of all QUADTRAC components referenced within. Devices are not provided kitted or part of a system and all devices are individually packaged with their own instructions for use, as applicable.

Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your Smith+Nephew representative or distributor if you have questions about the availability of Smith+Nephew products in your area.

Learn more at smith-nephew.com/reimagine

Smith & Nephew, Inc.
150 Minuteman Road
Andover, MA 01810
USA

www.smith-nephew.com
T +978 749 1000
US Customer Service:
+1 800 343 5717

®Trademark of Smith+Nephew.
All trademarks acknowledged.
©2023 Smith+Nephew. All rights reserved. 05224 V3 03/23

X-WING® Graft Preparation System is manufactured by Enztec™
3/17 Print Place Middleton
Christchurch, 8024 New Zealand

ULTRABUTTON® is manufactured by ArthroCare Corporation
7000 West William Cannon Drive
Austin, TX 78735 USA

All other products are manufactured by or for Smith+Nephew

References

- Ranjan R, Gaba S, Goel L, et al. In vivo comparison of a fixed loop (EndoButton CL) with an adjustable loop (TightRope RT) device for femoral fixation of the graft in ACL reconstruction: A prospective randomized study and a literature review. *J Orthop Surg (Hong Kong)*. 2018;26(3):2309499018799787.
- Uzun E, Misir A, Kizkapan TB, et al. Evaluation of Midterm Clinical and Radiographic Outcomes of Arthroscopically Repaired Vertical Longitudinal and Bucket-Handle Lateral Meniscal Tears. *Orthop J Sports Med*. 2019;7(5):2325967119843203.
- Ochi M, Adachi N, Uchio Y, et al. A Minimum 2-Year Follow-up After Selective Anteromedial or Posterolateral Bundle Anterior Cruciate Ligament Reconstruction. *Arthroscopy*. 2009;25(2):117-122.
- Plaweski S, Rossi J, Merloz P. Anterior cruciate ligament reconstruction: Assessment of the hamstring autograft femoral fixation using the EndoButton CL. *Orthop Traumatol Surg Res*. 2009;95(8):606-613.
- Arthrocare Corporation 2016. Test Report: Comparative Testing of ULTRABUTTON Adjustable Fixation Device to Competitive Devices P/N 69889-01 C 2. Ahmad SS, Hirschmann MT, Voumard B, et al. Adjustable loop ACL suspension devices demonstrate less reliability in terms of reproducibility and irreversible displacement. *Knee Surg Sports Traumatol Arthrosc*. 2018;26(5):1392-1398.
- Arthrocare Corporation 2018. Test Report: Comparative Testing of ULTRABUTTON Adjustable Fixation Device to Competitive Devices. P/N 69889-01 F.
- Arthrocare Corporation 2018. Test Report: Comparative Testing of ULTRABUTTON Adjustable Fixation Device to Competitive Devices P/N 69889-01 D.
- Smith+Nephew 2022. Verification: UBX TIB Cyclic & Repair Strength Test 15011545 Rev A.
- Smith+Nephew 2022. Verification: UBX Button Cyclic & Repair Strength Test 15011463 Rev A.
- Smith+Nephew 2022. ULTRABUTTON EXTENSION Marketing Claims Memo.
- Smith+Nephew 2022. Validation, ULTRABUTTON Extension (UBX) 15011969 Rev A.
- Smith+Nephew 2022. User Evaluation, UBX Competitive Device Comparison 15012018 Rev A.
- Shelburne KB, Pandy MG, Anderson FC, Torry MR. Pattern of anterior cruciate ligament force in normal walking. *J Biomech*. 2004;37(6):797-805.
- Smith+Nephew 2022. Comp, UBX Cyclic and Repair Strength Testing 15012185 Rev A.
- Smith+Nephew 2022. UBX & UB Cyclic and Repair Strength 15012076.
- Smith+Nephew 2022. UBX Feature & Dimensional Analysis 15011883 Rev A.
- Smith+Nephew 2022. ULTRABUTTON Soft tissue Attachment Strength 15011394 Rev A.
- Smith+Nephew 2022. Comp, UBX Dimensional Analysis 15012083 Rev A.
- MacLean IS, Frank RM, Trenhaile SW. Arthroscopically Assisted Acute Acromioclavicular Joint Reconstruction Using the Infinity-Lock Button System. *Arthrosc Tech*. 2020;9(12):e2047-e2050.
- Dittrich M, Wirth B, Freislederer F, Bellmann F, Scheibel M. Arthroscopically assisted stabilization of chronic bidirectional acromioclavicular joint instability using a low-profile implant and a free tendon graft. *Obere Extremität*. 2020;15(2):118-121.
- Smith+Nephew 2022. ULTRABUTTON Marketing Claims Memo.
- Smith+Nephew 2016. Tier 1 Customer Preference Evaluation Report: ULTRABUTTON Adjustable Fixation Device P/N 68688-01 B.
- Arthrocare Corporation 2015. Adjustable Loop Button (P/N 65203) Design Verification and T=0 Packaging Validation P/N 65492-01 B.
- Smith+Nephew 2022. UBX TIB Reduction Force Testing 15011670 Rev A.
- Smith+Nephew 2022. ULTRABUTTON BONE BLOCK Reduction Force 1501147 Rev A.
- Smith+Nephew 2022. ULTRABUTTON SOFT TISSUE Reduction Force 15011448 Rev A.
- Smith+Nephew 2022. Validation, QUADTRAC. Internal Report. 15011575 Rev A.
- Smith+Nephew 2022. QUADTRAC Marketing Claims. Internal Report. 15011572 Rev A.