Quattro® Shoulder System
Innovative Rotator Cuff Solutions
Quattro Link Knotless Anchor – Inverted Mattress Stitch Technique
Quattro X Suture Anchor – Simple Stitch Technique
Quattro Link Knotless Anchor

Rotator Cuff Repair – Single Row/Inverted Mattress Stitch

The Quattro Link Knotless Anchors are intended for use for the reattachment of soft tissue to bone for various procedures throughout the body. It has a unique eyelet design that allows independent tensioning of each suture strand based on the characteristics of the rotator cuff tear. The eyelet cleat feature allows tension to be set, held, reversed (if necessary), and maintained during anchor deployment.

- Surgeon-controlled tensioning after insertion
- The only anchor cleared to accept 8 suture limbs
- Strong reliable repair with 519N pull out strength*
Step 1: Pass Suture
Using the Quattro suture passer, pass the desired stitches of #2 Force Fiber® (UHMWPE) high strength suture through the rotator cuff based on the tear location. Retrieve the suture limbs to be loaded into the anchor out of the same cannula (Figure 1).

Step 2: Create Pilot Hole
Create a pilot hole for the anchor by lightly malleting the strike plate on the awl. Advance the awl until the distal edge of the marker band is flush with the bone (Figure 2).

Step 3: Load Suture into Anchor
Place the suture limbs through the suture snare. Pull the snare handle to load the suture limbs through the eyelet of the anchor (Figure 3).

Note: Quattro Link is cleared to accept up to 8 suture limbs.

Step 4: Insert Anchor
Hold light tension on the suture strands outside of the joint space and advance the anchor through the cannula. Once the anchor is through the cannula, release the tension on the suture strands.

The suture strands coming from the tissue should feed directly into the anchor eyelet (not behind or twisted around the anchor). Place the tip of the anchor into the pilot hole (Figure 4).
Step 5: Mallet to First Laser Line
Mallet the inserter handle to advance the anchor to the distal edge of the 1st Marker Band on the anchor. DO NOT mallet past the 1st horizontal marker band. Proper anchor insertion depth will allow for proper suture tensioning (Figure 5).

Step 6: Tension Suture
While applying forward pressure against the anchor, individually tension each suture strand and release. The Quattro Link Knotless Anchor is uniquely designed to maintain tension without having to manually hold each suture limb (Figure 6).

Note: If the surgeon feels the suture is over tensioned, tension may be released by using an arthroscopic probe to loosen the suture tension and re-tension.

Step 7: Rotate Post-Tension Knob
Rotate the purple Post Tension Knob clockwise on the inserter handle until it stops (Figure 7).

Step 8: Mallet to Second Laser Line
Mallet the inserter handle until the distal edge of the 2nd Marker Band on the inserter shaft is flush with the bone (Figure 8).

Figure 5

Figure 7

Figure 6

Figure 8
Step 9: Release Inserter
Push and hold down the Anchor Release Slide and rotate the Post Tension Knob clockwise until the inserter releases from the anchor (Figure 9).

Step 10: Cut Suture
Cut the suture strands with the Quattro Suture Cutter (Figure 10).
Quattro Shoulder System Surgical Technique

Rotator Cuff Repair – Single Row/Simple Stitch

The Quattro X Suture Anchors are intended for use for the reattachment of soft tissue to bone in Rotator Cuff Repairs. The anchor is pre-loaded with two strands of #2 Force Fiber (UHMWPE) high strength suture (colors: solid blue/blue co-braid). A progressive tapered dual thread allows for increased engagement with the cortex.

- Unique drop-in anchor tip allowing for effortless insertion
- Bio-Inert, radiolucent PEEK-OPTIMA® material
- Tapered thread design delivers optimal purchase to bone - 447N pull out strength*

*Data on file
Step 1: Create Pilot Hole

Place the Quattro X awl through a lateral accessory portal at a 45° “deadman” angle. This angle is recommended for proper anchor insertion and fixation. Mallet until the distal edge of the 1st Marker Band is flush with the bone for a 5.5 mm anchor and the 2nd marker band for a 6.5 mm anchor (Figure 10).

Note: Taps for the 5.5 mm & 6.5 mm anchor are available and recommended to be used in hard bone.

Step 2: Insert Anchor

Insert the Quattro X Anchor through the same portal as the awl at the same 45° angle. Screw in the anchor until the horizontal marker band is flush with the bone. Make sure that the vertical marker band is facing or adjacent to the tissue edge. The vertical marker band indicates the suture orientation (Figure 11).
Step 3: Release Suture from Inserter
Pull the suture limbs completely out of the driver handle and release from cleat. Pull the driver handle axially to disengage the inserter shaft from the anchor.

Step 4: Pass Suture
Pass the suture through the tissue.

Step 5: Tie Knots
Tie knots with an arthroscopic knot pusher and cut suture.
### Quattro Link Knotless Anchors

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>CM-9129</td>
<td>Quattro Link Knotless Anchor 2.9 mm</td>
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<tr>
<td>CM-9145</td>
<td>Quattro Link Knotless Anchor 4.5 mm</td>
</tr>
<tr>
<td>CM-9145SP</td>
<td>Quattro Link SP Knotless Anchor 4.5 mm, Metal Tip</td>
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<tr>
<td>CM-9155</td>
<td>Quattro Link Knotless Anchor 5.5 mm</td>
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### Quattro X Suture Anchors

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>CM-9255</td>
<td>Quattro X Suture Anchor, 5.5 mm pre-loaded with (2) Size 2 Force Fiber® Sutures</td>
</tr>
<tr>
<td>CM-9255X3</td>
<td>Quattro X3 Suture Anchor, 5.5 mm pre-loaded with (3) Size 2 Force Fiber Sutures</td>
</tr>
<tr>
<td>CM-9265</td>
<td>Quattro X Suture Anchor, 6.5 mm pre-loaded with (2) Size 2 Force Fiber Sutures</td>
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### Quattro Instruments

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>CM-9010GT</td>
<td>Quattro GT Suture Passer with grasping top jaw</td>
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<tr>
<td>CM-9010</td>
<td>Quattro Suture Passer</td>
</tr>
<tr>
<td>CM-9010LS</td>
<td>Lock-Stitch® Suture Passer</td>
</tr>
<tr>
<td>CM-9100</td>
<td>Awl – for 4.5 mm &amp; 5.5 mm Quattro Link Knotless Anchor</td>
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<tr>
<td>CM-9200</td>
<td>Awl – for 5.5 mm &amp; 6.5 mm Quattro X Suture Anchor</td>
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<tr>
<td>CM-9201</td>
<td>Tap – for 5.5 mm Quattro X Suture Anchor</td>
</tr>
<tr>
<td>CM-9202</td>
<td>Tap – for 6.5 mm Quattro X Suture Anchor</td>
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<tr>
<td>CM-9203</td>
<td>Tap – for 5.5 mm Quattro X3 Suture Anchor</td>
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### Quattro Accessories

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>CM-0201</td>
<td>TRU-LINK blue braid (nonabsorbable) Size 2 suture</td>
</tr>
<tr>
<td>CM-0202</td>
<td>TRU-LINK white/blue co-braid (nonabsorbable) Size 2 suture</td>
</tr>
<tr>
<td>CM-9011</td>
<td>Suture Passer Needle</td>
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**Quattro X and X3 Suture Anchors**

**INDICATIONS FOR USE**
The Quattro X and X3 Suture Anchors are intended for use for the reattachment of soft tissue to bone for Rotator Cuff Repairs.

**CONTRAINDICATIONS**
1. Surgical procedures other than those listed in the INDICATIONS section.
2. Presence of infection.
3. Patient conditions including insufficient or immature bone.
4. Insufficient blood supply or previous infections which may hinder the healing process.
5. Foreign body sensitivity. If material sensitivity is suspected, testing should be completed prior to device implantation.
6. The physician should carefully assess the device within immature bone.
7. The placement of this device should not impact or disrupt the growth plate.
8. Conditions which may limit the patient’s ability or willingness to follow postoperative care instructions.

**Quattro Link Knotless Anchor**

**INDICATIONS FOR USE**
The Quattro Link Knotless Anchors are intended to be used for the reattachment of soft tissue to bone for the following indications:

**Shoulder**
- Capsular stabilization
  - Bankart repair
  - Anterior shoulder instability
  - SLAP lesion repairs
  - Capsular shift or capsulolabral reconstructions
- Acromioclavicular separation repairs
- Deltoid repairs
- Rotator cuff repairs
- Biceps tenodesis

**Elbow, Wrist, and Hand**
- Biceps tendon reattachment
- Ulnar or radial collateral ligament reconstruction
- Lateral epicondylitis repair

**Knee**
- Extra-capsular repairs
  - Medial collateral ligament
  - Lateral collateral ligament
  - Posterior oblique ligament
- Patellar realignment and tendon repairs
- Illiotibial band tenodesis

**Foot and Ankle**
- Hallux valgus repairs
- Medial or lateral instability repairs/reconstructions
- Achilles tendon repairs/reconstructions
- Midfoot reconstructions
- Metatarsal ligament/tendon repairs/reconstructions
- Bunionectomy