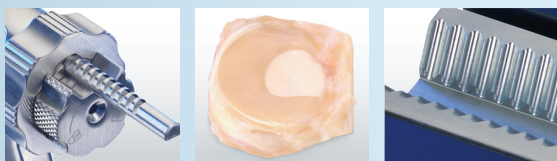




## Lateral Meniscus Transplant

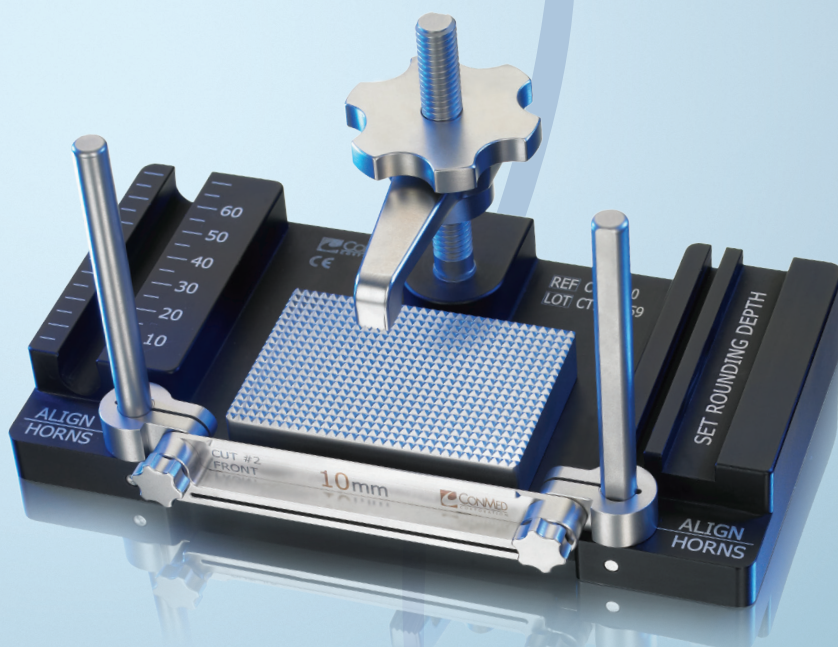
### Using the CONMED Meniscus Allograft Transplant (MAT) Instruments

A complete guide to Lateral Meniscus Transplant using the CONMED meniscus allograft transplant Instruments. As the newest addition to CONMED's Knee Preservation System, the instrumentation features an all-in-one graft preparation table and tibial drilling system. Easy to learn, use and reproduce, this instrumentation helps eliminate the complexity of meniscus allograft preparation and deliver reproducible implantation every time.



#### Technique featured by

Robert J. Meislin, MD  
NYU Langone Center for Musculoskeletal Care –  
New York, NY, USA



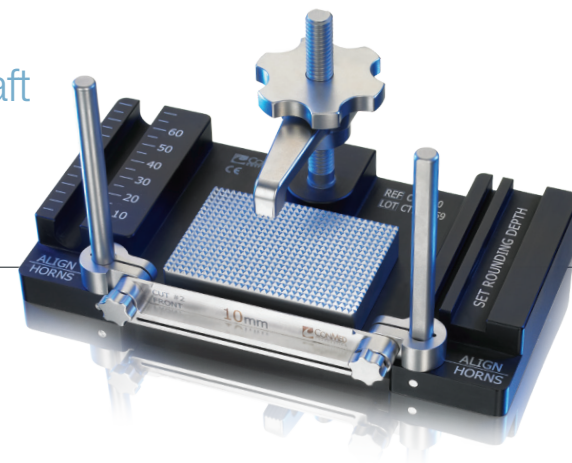
CONMED  
SURGICAL  
TECHNIQUE



# Lateral Meniscus Transplant

## Using the CONMED Meniscus Allograft Transplant (MAT) Instruments

Introduction by Robert J. Meislin, MD



*Meniscus Transplantation has been and continues to grow as a viable treatment option for patients with existing symptoms (localized pain, swelling, and limited range of motion) from previous partial or total meniscectomy. Meniscus transplantation has been shown to decrease pain and increase activity level in patients that have received meniscal transplants.*

The meniscus plays an important part in load transmission through the knee joint. Patients who have had previous meniscectomy experience accelerated degenerative changes due to increased contact stress placed on the articular cartilage within that compartment.

It is extremely important to recognize and follow patients that may be candidates for meniscal transplantation.

Patient selection is extremely important for successful meniscus allograft transplantation (MAT). Patient candidates for MAT will typically have undergone a partial, or complete lateral meniscectomy. The favorable candidate should have normal knee alignment, knee stability, and well surfaced articular cartilage. ■

### ROBERT J. MEISLIN, MD

Associate (Clinical) Professor of Orthopedic Surgery,  
NYU School of Medicine,  
NYU Langone Center for Musculoskeletal Care – New York, NY, USA

**Robert Meislin, MD** is an Associate (Clinical) Professor of Orthopedic Surgery at New York University and an orthopedic surgeon at NYU Langone Center for Musculoskeletal Care (CMC). He is fellowship trained in sports medicine, with a keen interest in sports related injuries and arthroscopic techniques as they pertain to the knee, shoulder, elbow, hip and ankle.

Dr. Meislin has pursued articular cartilage disorders of the knee and shoulder that involve biological resurfacing; he performs meniscal repair and meniscal transplant surgery.

In the past, he has served as a team physician/consultant for several professional sports teams. Dr. Meislin has many publications, reviews and chapters on orthopedic sports medicine topics involving both biomechanical and clinical research. He serves on the editorial board of the Journal of Arthroscopy and is an active member of the AAOS, AANA, and AOSSM.

**Dr. Meislin performs many of the latest cutting-edge procedures and techniques in Orthopaedic Sports Medicine.**



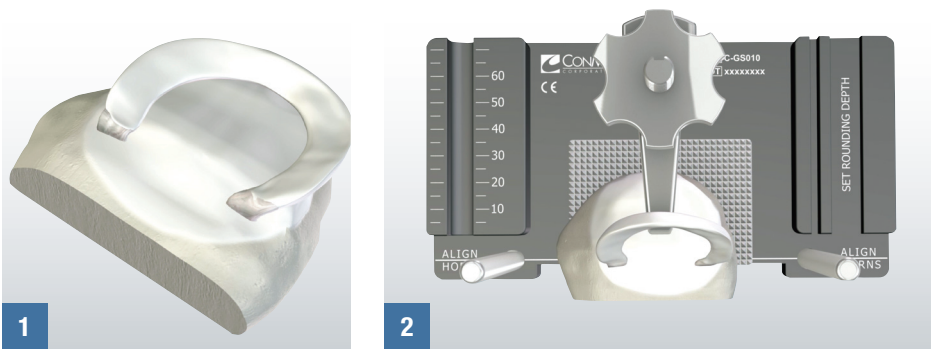
Dr. Robert J. Meislin is a paid consultant for CONMED Corporation.

# Lateral Meniscus Transplant

## Using the CONMED Meniscus Allograft Transplant (MAT) Instruments

Authored by Robert J. Meislin, MD

### PREPARING THE GRAFT



Detach the meniscus from the tibial plateau, except for the insertion points at the anterior and posterior horns.

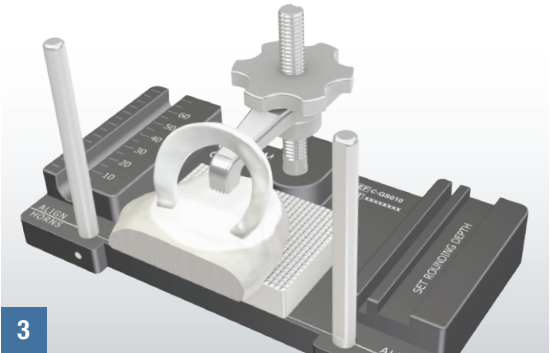
**Medial Cut**  
Place the meniscus in the Graft Station and align the meniscus horn centers with the lines on the bottom of the Graft Station.



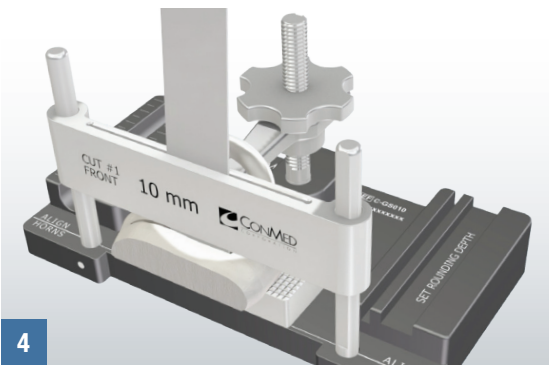
LATERAL MENISCUS ALLOGRAFT



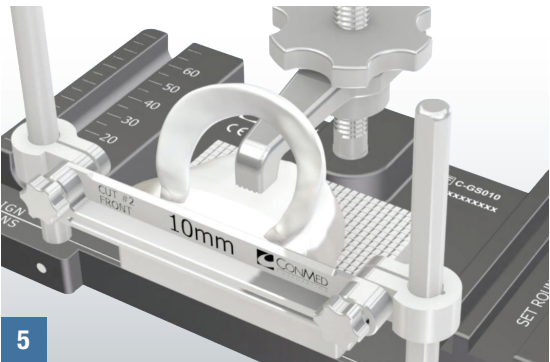
### PREPARING THE GRAFT



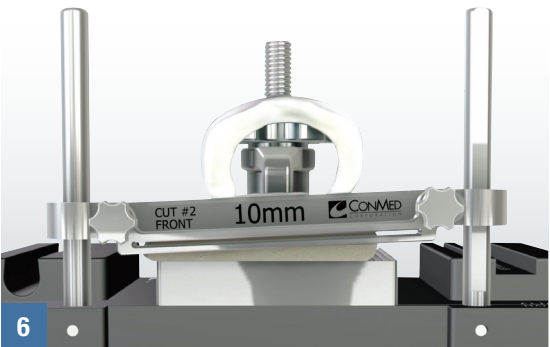
Elevate the meniscus above the Graft Station’s clamp and tighten the clamp onto the tibial plateau.



Place the Vertical Fence over the guideposts so that the “Cut 1” etching faces the front of the Graft Prep Station.  
Make cut and remove the Vertical Fence.



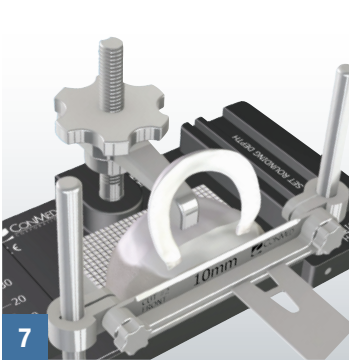
**Horizontal Cut**  
Place the Horizontal Fence over the guide posts.



Adjust the top surface of the fence to align with the top of the tibial plateau.  
Lock in position by tightening the Horizontal Fence knobs. ■

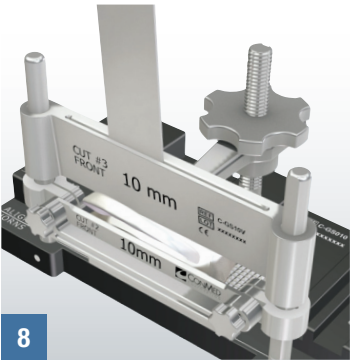
PREPARING THE GRAFT

Lateral Meniscus Transplant  
Using the CONMED Meniscus Allograft Transplant (MAT) Instruments



Make cut to a depth of 15mm.

**NOTE:**  
Leave Horizontal Fence attached.



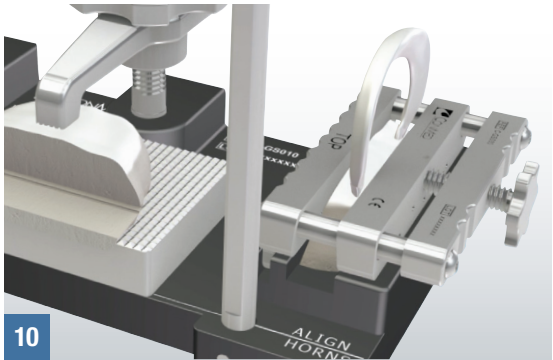
**Lateral Cut**  
Place the Vertical Fence over the guide post so that the "Cut #3" etching faces the front of the Graft Prep station.

**NOTE:**  
Ensure meniscus body is positioned between the fences to prevent damage.  
Make cut and remove both fences.

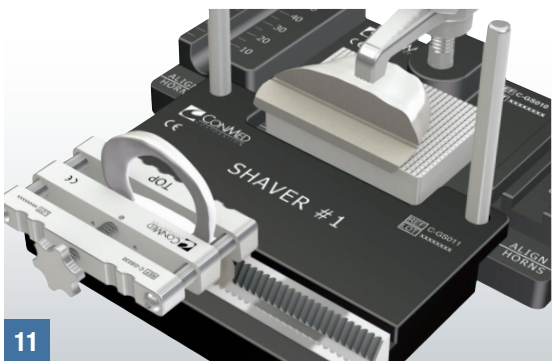


**Final Shaping of the Bone Block**  
Place the allograft snugly into the Depth Setting Guide.

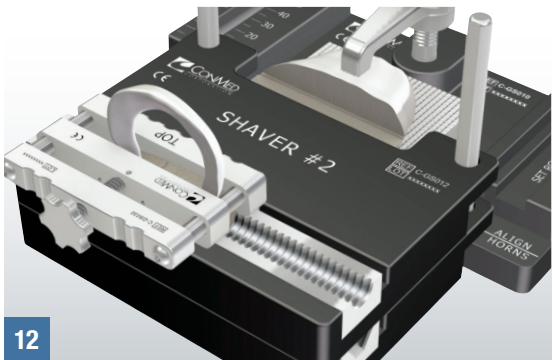
PREPARING THE GRAFT



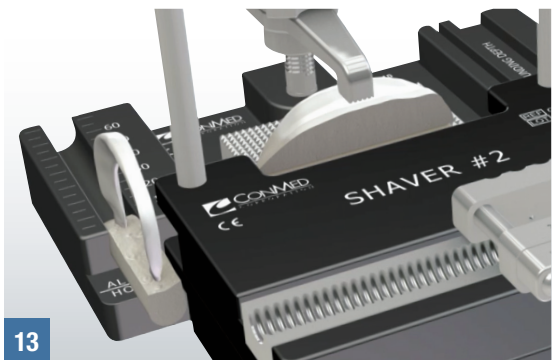
Seat the Shaver Clamp over the bone block and tighten.  
**NOTE:**  
Be careful not to overtighten the Shaver Clamp to avoid damage to the bone block.



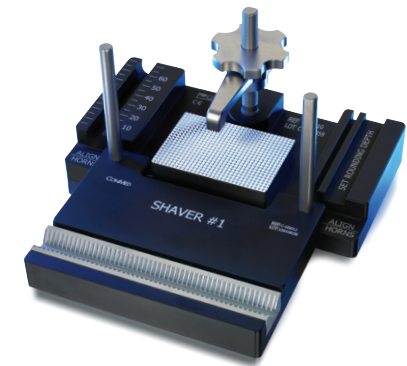
Using **Shaver #1**, shave bone block.



Using **Shaver #2**, shave bone block.



Confirm the allograft shape by placing the bone block into the Rounded Trial Slot.  
**NOTE:** A rongeur can be used to trim up to 5mm of bone posterior to the posterior horn attachment.



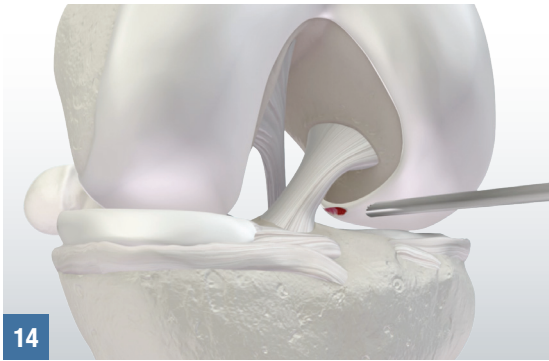
CONMED  
MAT GRAFT PREP STATION\*

\*Not Yet for Sales in the United States



PORTAL PLACEMENT AND VISUALIZATION

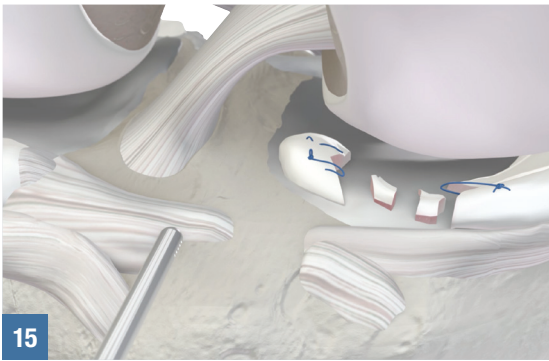
Lateral Meniscus Transplant  
Using the CONMED Meniscus Allograft Transplant (MAT) Instruments



Utilize anteromedial (AM) and anterolateral (AL) portals for visualization and debridement of meniscus.

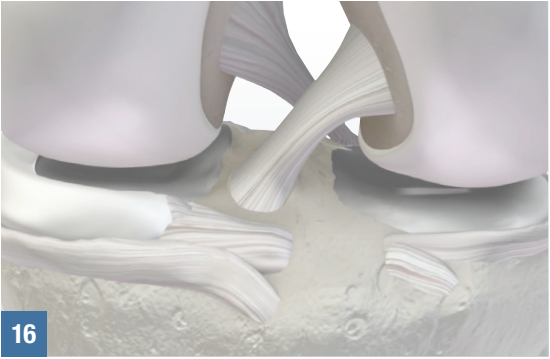
**NOTE:**  
For lateral MAT, an accessory AL portal should be placed at the lateral tibial eminence with a direct anterior-posterior trajectory, in-line with the meniscus horn, and medial to the lateral intercondylar notch.

Perform notchplasty to aid in approach.



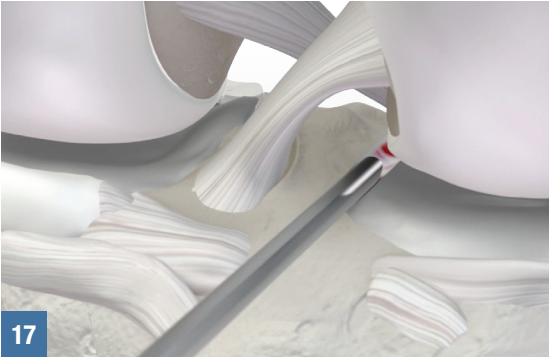
Remove the fat pad to aid in visualization.

JOINT PREPARATION



Remove the damaged meniscus.

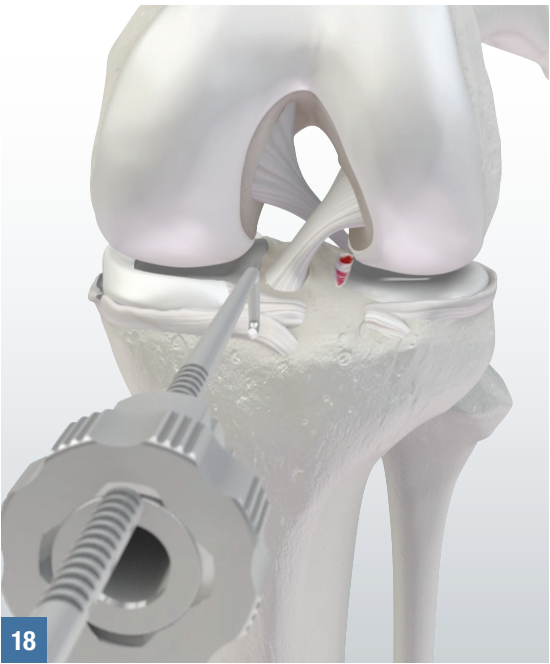
**NOTE:**  
Leave a remnant of the meniscus rim for fixation of the allograft.



Starting at the anterior horn, burr towards the posterior horn to create a shallow trough.

**NOTE:**  
Do not bur deeper than the meniscus insertion points and the tibial plateau.  
Use the 2.4mm Pin to check the depth and orientation of the trough.

CREATION OF BONE TROUGH



Insert the Drill Guide into the incision vertically.

CREATION OF BONE TROUGH

Lateral Meniscus Transplant  
Using the CONMED Meniscus Allograft Transplant (MAT) Instruments



Once inside the joint, rotate the Guide horizontally to avoid damaging the articular cartilage.

Once the posterior aspect of the tibia is reached, return the Guide to the vertical position and secure the Guide's hook onto the posterior cortex of the tibia.



Once satisfied with the Guide's placement, rotate the tightening ring clockwise to secure the Guide to the tibia.

**NOTE:**  
Ensure that the Guide's arm is centered and fully seated within the tibial trough.



Insert the Sleeve into the Guide until it contacts the tibia. Lock Sleeve into place using the cam knob on the rear of the Sleeve.

Ensure the Sleeve is in contact with the anterior surface of the tibia. It should not extend above the tibial plateau.

**NOTE:**  
If the Sleeve is prominent above the tibial plateau, re-assess the depth of the trough and/or ensure the Guide is fully seated against the anterior tibia.

CREATION OF BONE TROUGH



Insert and drill the 2.4mm Drill until the depth stop is engaged.



Remove the 2.4mm Drill and insert the 2.4mm Pin.

Insert until the mark on the Pin aligns with the back of the Guide's alignment arm.



Remove the Sleeve.



Align the 10mm Drill over the Pin and drill until the depth stop is engaged.

Remove the guide.



CREATION OF BONE TROUGH

Lateral Meniscus Transplant  
Using the CONMED Meniscus Allograft Transplant (MAT) Instruments



Insert the Guide Rod into the drilled hole until it contacts the posterior tibial cortex.



Align the Chisel over the Guide Rod and tap with a mallet until the Chisel's depth stop engages the Guide Rod.

Remove the Chisel and Guide Rod. A mallet may be required.

**NOTE:**  
Chisel needs to be removed in an anterior to posterior motion and should not be tilted in any direction.

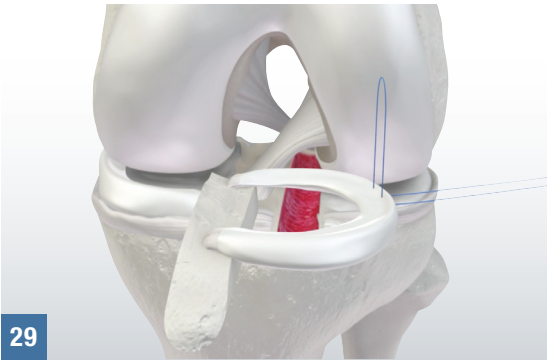


Place the Rasp into the trough and access the trough's width and height. The Rasp should fit flush within the native tibial plateau.

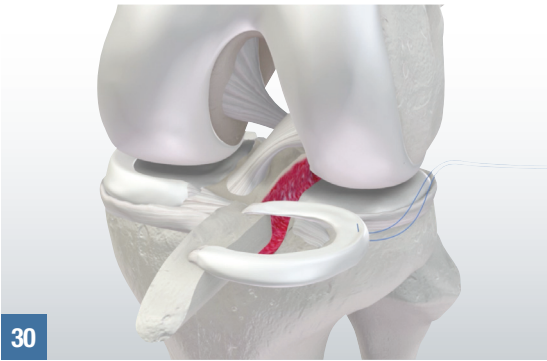
If the Rasp sits proud, repeated insertion/removal of the Rasp will remove bone so that it sits flush with the tibial plateau.

Remove residual articular cartilage from the trough if necessary.

INSERTING THE MENISCUS ALLOGRAFT



Place a 2-0 Hi-Fi suture through the meniscus at the junction of the posterior horn and body of the meniscus.

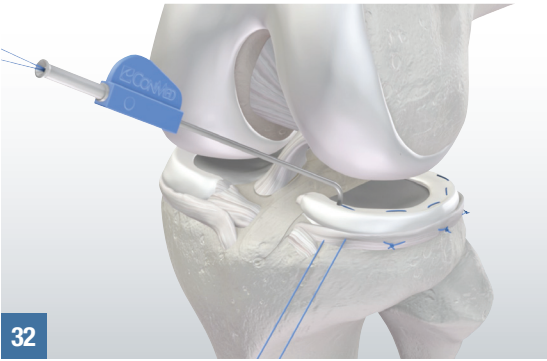


Pass suture through the posterolateral portion of the joint capsule.

**NOTE:**  
The posterolateral aspect of the knee is exposed to allow suture retrieval for the "inside-out" meniscus repair approach while avoiding damage to the peroneal nerve.



Tension the suture through the posterolateral aspect of the knee to seat the MAT within the tibial trough.



Once reduced, fix the meniscus with 4-6 peripheral repair sutures utilizing Zone Specific II cannulas and Hi-Fi Double Arm Needles.

The Sequent Meniscal Repair device may also work well for securing the meniscus peripherally.

ORDERING INFORMATION

To order any of our CONMED Meniscus Allograft Transplant (MAT) Instrumentation products and other accessories please call CONMED Customer Service at: (US) **800-237-0619** or, (Global) **727-392-6464**.

MAT REUSABLE PRODUCTS

Graft Station .....	C-GS010
Beveling Shaver #1, 10mm .....	C-GS011
Rounding Shaver #2, 10mm .....	C-GS012
Drill Guide .....	C-GS020
Sleeve, Drill Guide, 2.4mm .....	C-GS021
Shaver Clamp .....	C-GS030
Chisel, 10mm .....	C-GS10C
Guide Rod, Chisel, 10mm .....	C-GS10G
Rasp, 10mm .....	C-GS10R
Horizontal Fence, 10mm .....	C-GS10H
Vertical Fence, 10mm .....	C-GS10V
Meniscus Transplant Instrument .....	C-GS02T
Insert Tray	

MAT SINGLE-USE PRODUCTS

Drill, Cannulated, 10mm .....	C-GS10D
Drill, 2.4mm .....	C-GS24D
Pin, Blunt, 2.4mm .....	C-GS24P
Intrex Large Bone Oscillating Saw Blade .....	5071-327
(Bone Saw) 25.0 x 90.0 x 1.0mm	

MAT RECOMMENDED PRODUCTS

#2-0 Hi-Fi Suture (12/Box), Single 36” Strand, White-Blue Co-Braid HRT20, .....	H5600
5” Diamond Point Needle	
Sequent Meniscal Repair Device, Curved Needle, 7 Implants.....	MR007C
Sequent Disposable Kit (Suture Cutter, Entry Cannula).....	SCEC047
Zone Specific II Cannulas, Right Anterior .....	8532
Zone Specific II Cannulas, Right Middle .....	8539
Zone Specific II Cannulas, Right Posterior .....	8530
Zone Specific II Cannulas, Left Anterior .....	8533
Zone Specific II Cannulas, Left Middle .....	8540
Zone Specific II Cannulas, Left Posterior .....	8531
Double-Arm Meniscal Repair Needles, ( Stainless Steel ) , .....	8536
Hi-Fi Suture, Sterile, (10/Box)	

To order Allograft Tissue please call MTF Customer Service at: (US) **800-433-6576** or, (Global) **732-661-0202**.

MENISCAL ALLOGRAFTS

	REFRIGERATED	FROZEN
Meniscus w/ Hemi Plateau, Medial, Left .....	–	..... 430401
Meniscus w/ Hemi Plateau, Lateral, Left .....	–	..... 430402
Meniscus w/ Hemi Plateau, Medial, Right .....	–	..... 430411
Meniscus w/ Hemi Plateau, Lateral, Right .....	–	..... 430412







# Knee Preservation System™

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