



CE 0426



Silktoe[®]

**FIRST METATARSO-
PHALANGEAL (MTP1)
JOINT
ARTHROPLASTY**



SURGICAL TECHNIQUE

CLINICAL INDICATION

- Moderate or advanced stage hallux rigidus that has not responded adequately to conservative treatments





SURGICAL TECHNIQUE GUIDE

This document details the recommended surgical technique for the SILKTOE , specifically designed for the correction of bone deformities of the forefoot.

It serves as an educational resource to support qualified surgeons in ensuring the safe and effective application of the system. The following guidelines are provided for reference purposes only.

It remains the sole responsibility of the operating surgeon to determine the appropriateness of each procedure based on their professional clinical judgment and experience.

For comprehensive information regarding indications, contraindications, warnings, and precautions, please consult the official Instructions for Use (IFU) provided with the device.

INSTRUMENTATION



BRDNPTHANDLE-QK Silktoe Quick Handle



BRDNPTQK-TS Quick connection type-S

BRDNPTQK-TC Quick connection type-C



BRDNPTCG2030 20-30 Silktoe Cutting Guide

BRDNPTCG3535 35 Silktoe Cutting Guide

BRDNPTCG4050 40-50 Silktoe Cutting Guide

BRDNPTCGMASK Silktoe Cutting Guide holder



BRDNPTI2030P-QK 20-30 Silktoe Metatarsal Grommets Quick Impactor

BRDNPTI3535P-QK 35 Silktoe Metatarsal Grommets Quick Impactor

BRDNPTI4050P-QK 40-50 Silktoe Metatarsal Grommets Quick Impactor

BRDNPTI2030D-QK 20-30 Silktoe Phalangeal Grommets Quick Impactor

BRDNPTI3535D-QK 35 Silktoe Phalangeal Grommets Quick Impactor

BRDNPTI4050D-QK 40-50 Silktoe Phalangeal Grommets Quick Impactor



BRDNPTR2030P-QK 20-30 Silktoe Metatarsal Quick Rasp

BRDNPTR3535P-QK 35 Silktoe Metatarsal Quick Rasp

BRDNPTR4050P-QK 40-50 Silktoe Metatarsal Quick Rasp

BRDNPTR2030D-QK 20-30 Silktoe Phalangeal Quick Rasp

BRDNPTR3535D-QK 35 Silktoe Phalangeal Quick Rasp

BRDNPTR4050D-QK 40-50 Silktoe Phalangeal Quick Rasp

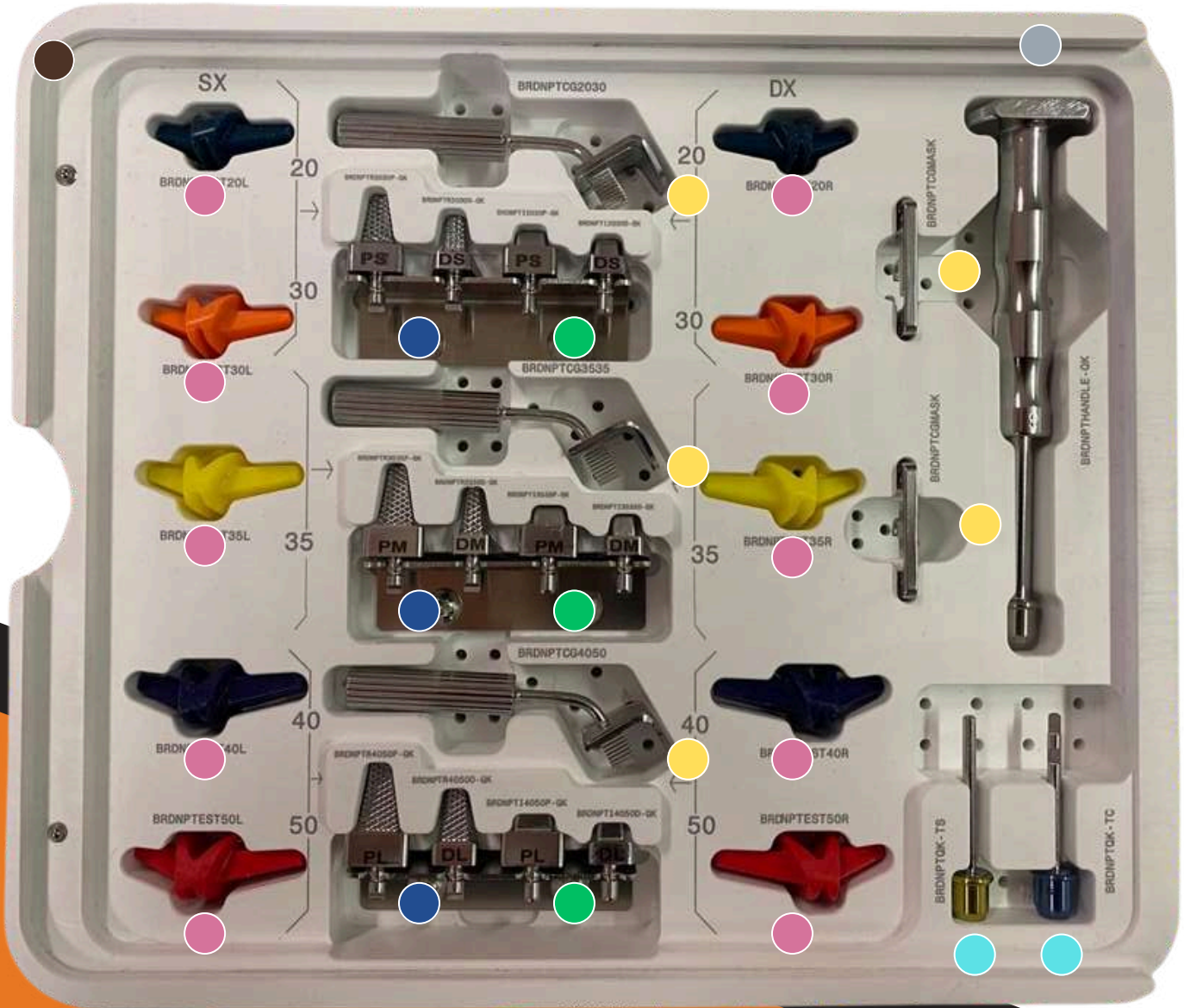


BRDNPTEST20L	20 Left Silktoe Trial Sizer (Green)
BRDNPTEST30L	30 Left Silktoe Trial Sizer (Orange)
BRDNPTEST35L	35 Left Silktoe Trial Sizer (Yellow)
BRDNPTEST40L	40 Left Silktoe Trial Sizer (Blue)
BRDNPTEST50L	50 Left Silktoe Trial Sizer (Red)
BRDNPTEST20R	20 Right Silktoe Trial Sizer (Green)
BRDNPTEST30R	30 Right Silktoe Trial Sizer (Orange)
BRDNPTEST35R	35 Right Silktoe Trial Sizer (Yellow)
BRDNPTEST40R	40 Right Silktoe Trial Sizer (Blue)
BRDNPTEST50R	50 Right Silktoe Trial Sizer (Red)



BRDNEWPTSBOX-QK	Silktoe Sterilization Quick Box (empty)
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KIT SILKTOE-QK





INCISION

Make a dorsal incision medial to the extensor Hallucis Longus tendon and perform a full-thickness capsulotomy. Remove the deformed and hyperostotic portions, now exposed, using a bone pick and saw.

ARTICULAR SURFACES RESECTION

Evaluate the size of the device to be implanted based on the patient's anatomy and select the corresponding cutting guide from the three available sizes: 20-30, 35, 40-50. Check the adequacy of the selected guide by positioning it on the joint and taking care to insert the tab located at the base of the guide between the two joint ends. If in doubt, proceed with the resection starting from the smallest size.

In order to proceed with an adequate and safe bone resection it is important to make the guide adhere as best as possible to the bone portions. For this purpose, it may be necessary to work the bone surfaces of the dorsal and medial area of the joint with a saw, in order to make them flat and guarantee maximum stability between the guide and the bone. It is also possible to anchor the guide to the bone by adding a mask to be fixed with two Kirschner wires per side, bending them in order to obtain the desired stability (the maximum diameter of the wires that can be used is 1.0mm). Then proceed with the economical resection of the metatarsal and phalangeal articular surfaces, using a 0.8 mm thick blade and taking care not to injure the tendon of the flexor hallucis brevis in the plantar area. Remove the resected portions and check that the surfaces obtained are smooth and with a uniform inclination.

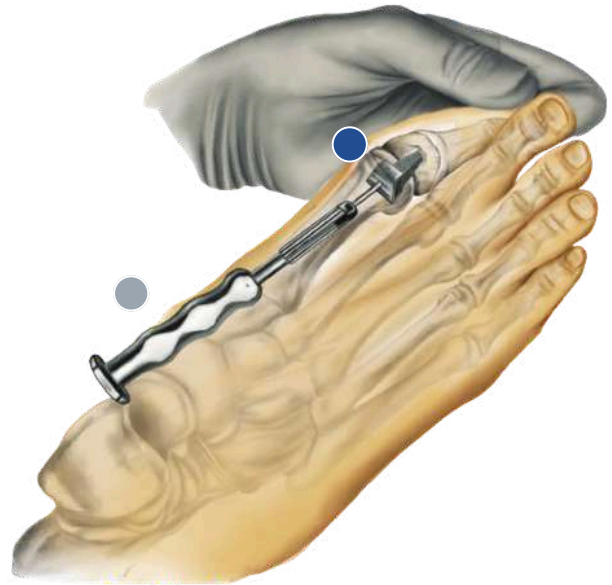


MEDULLARY CANALS PREPARATION

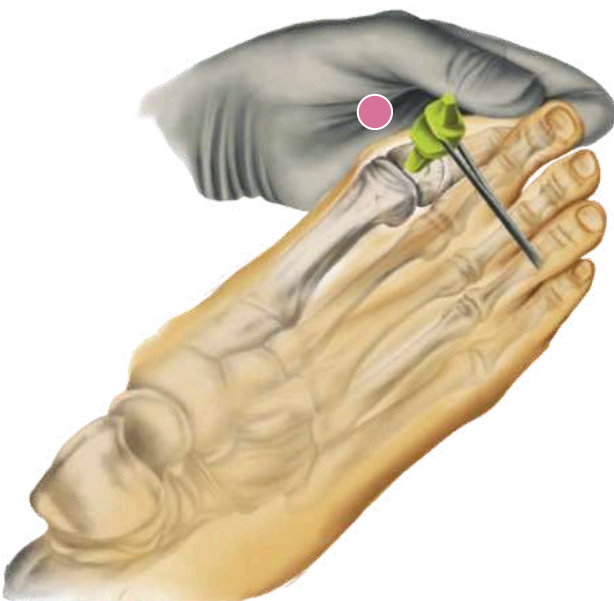
Use a tip to locate the metatarsal and phalangeal medullary canals. Complete the preparation of the canal using the appropriate rasps: the rectangular section rasp is used for the preparation of the metatarsal canal (Proximal), while the trapezoidal section is used for the preparation of the phalangeal canal (Distal). Mount the rasp of the identified size (identified by the acronyms PS, PM, PL, DS, DM or DL) directly on the handle, for manual use, or on the adapter (yellow Stryker, blue Conmed-universal) for motorized use.

Rasp the medullary canals, taking care to keep the upper, lateral and medial edges of the rasp parallel with the corresponding edges of the relevant metatarsal and phalangeal portions, following the direction of the medullary canal.

Rasp until the instrument comes into complete contact with the relevant metatarsal and phalangeal surfaces. It makes no difference to prepare the metatarsal or phalangeal canal first.

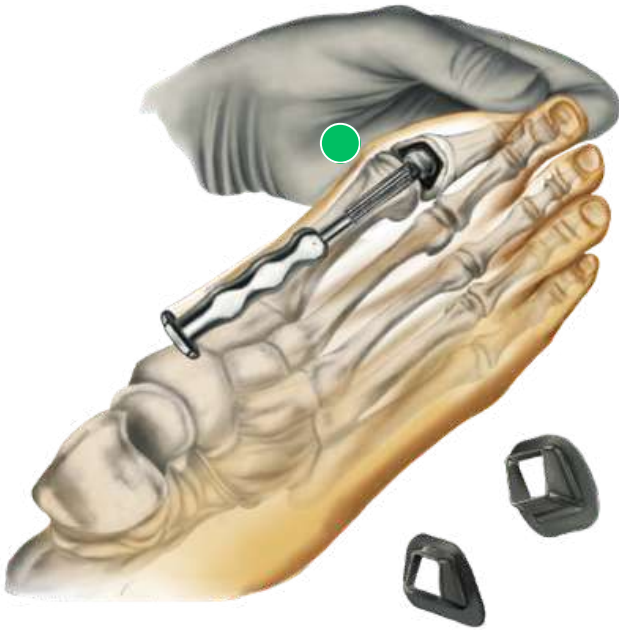


SIZE IDENTIFICATION



insert the trial spacer, corresponding to the size of the cutting guide used, first introducing the metatarsal stem (with a rectangular section) and then the phalangeal one (with a trapezoidal section). Check the perfect adherence of the spacer to the surface of the resected bone surfaces, check the mobility and stability of the implant.

GROMMETS POSITIONING

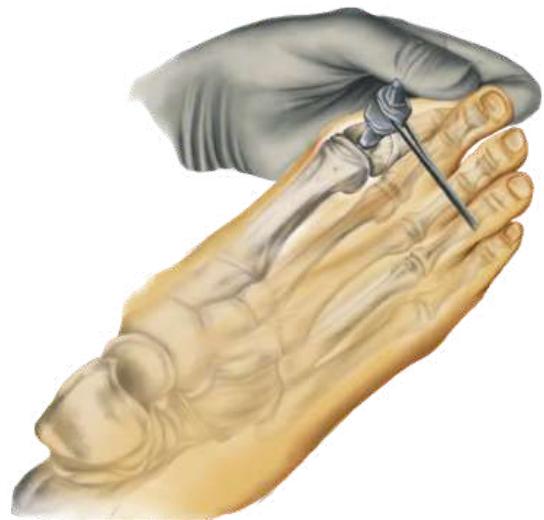


Once the definitive size has been established, open the package relating to the chosen implant and extract the titanium rings (grommet); instead leave the silicone spacer inside its envelope. Insert the "press fit" grommets using the appropriate impactors, taking care to position the rectangular section one (identified by the acronyms PS, PM, PL depending on the size) in the metatarsal portion and the trapezoidal one (identified by the acronyms DS, DM, DL depending on the size) in the phalangeal portion. It may be useful in this phase to test the grommets on the trial spacer to be sure of positioning them in the correct bone portions. Bring the grommets into contact with the relative resected bone surface.

If bone residue forms inside the canal that could interfere with the spacer taps, remove it with a Volkmann spoon.

FINAL IMPLANT

Open the silicone spacer bag and introduce the device into the designated area, taking care to insert the metatarsal stem (rectangular) first and then the phalangeal stem (trapezoidal). Test both its mobility and stability through flexion-extension movements of the big toe. It is advisable at this stage to perform an intraoperative fluoroscopic control to evaluate the positioning of the grommet and the implant itself.



FINAL SUTURING

Proceed with careful suturing of the capsule at subcutaneous and cutaneous levels, dressing and elastic-compressive bandage.



IMPLANT REMOVAL

Make an incision dorsal to the great toe (proceeding medial to the extensor longus tendon) and perform a full-thickness capsulotomy. First removes the silicone component, using a needle holder, and then the grommets, using surgical forceps. If you encounter resistance when extracting the metal component, use a small chisel. Perform a revision of the implant or an arthrodesis operation depending on the most appropriate clinical indication for the case and suture the patient's capsule and skin again.





D I S T R I B U T E D B Y :



SILKTOE
Brochure

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