OPERATIVE TECHNIQUE

Flexible Reamer

System

Femur and Tibia



Flexible Reamer

Table of Contents

System

Sterilisation and Maintenance of Instrumentation

1	Features and Benefits
3	Cleaning, Disinfection

Equipment Required

Operative Technique

5

FEATURES AND BENEFITS

5.0mm Flexible Shaft (172200)

- 5.0mm diameter Flexible Shaft, made of Nitinol, • 470mm long Single Shaft for all Reamer sizes Smooth Shaft for easier cleaning 3mm cannulation
- .
- .
- •
- Quick connection to standard power tools •







Reamer Heads

Sizes from 9.0mm to 17.0mm, in 0.5mm increments

Ø	Part #
9.0	172090
9.5	172095
10.0	172100
10.5	172105
11.0	172110
11.5	172115
12.0	172120
12.5	172125
13.0	172130
13.5	172135
14.0	172140
14.5	172145
15.0	172150
15.5	172155
16.0	172160
16.5	172165
17.0	172170





Monobloc Flexible Reamers (172080 and 172085)

- Sizes 8.0mm and 8.5mm
- 5.0mm diameter Flexible Shaft, made of Nitinol, 470mm long with fixed instead of incorporated Reamer Head
- Smooth Shaft for easier cleaning
- 3mm cannulation
- Quick connection to standard power tools



Guide Wire With Olive, 3mm Diameter, 980mm Long, Sterile (99-173281)

- Olive diameter 4mm
- Secures connection between the Reamer Head and the flexible shaft
- Guides the flexible shaft through the fracture site
- Must be used with all flexible reamers



Universal Chuck With T-Handle (17955)

Used to insert the Guide Wire in the medullary canal.

Flexible Shaft Adapter (172210)

Quick connection to flexible shaft and fits to standard power tools.

Soft Tissue Protector (172220)

Protects the soft tissues during reaming.



CLEANING, DISINFECTION, STERILISATION AND MAINTENANCE OF INSTRUMENTATION

Orthofix supplies the Flexible Reamer System NON-STERILE and it therefore must be cleaned before use. The full cleaning, disinfection and sterilisation cycle must be followed before each use, as described in the instructions for use PQFRS and PQISP.

NB: Disassemble all instruments for thorough cleaning and disinfection prior to sterilization.

EQUIPMENT REQUIRED



Flexible Reamer System Box, empty (172991)

Part #	Description	Qty
172090	Modular Reamer Head Ø 9mm	1
172095	Modular Reamer Head Ø 9.5mm	1
172100	Modular Reamer Head Ø 10mm	1
172105	Modular Reamer Head Ø 10.5mm	1
172110	Modular Reamer Head Ø 11mm	1
172115	Modular Reamer Head Ø 11.5mm	1
172120	Modular Reamer Head Ø 12mm	1
172125	Modular Reamer Head Ø 12.5mm	1
172130	Modular Reamer Head Ø 13mm	1
172135	Modular Reamer Head Ø 13.5mm	1
172140	Modular Reamer Head Ø 14mm	1
172145	Modular Reamer Head Ø 14.5mm	1
172150	Modular Reamer Head Ø 15mm	1
172155	Modular Reamer Head Ø 15.5mm	1
172160	Modular Reamer Head Ø 16mm	1
172165	Modular Reamer Head Ø 16.5mm	1
172170	Modular Reamer Head Ø 17mm	1
172200	Nitinol Reamer Shafts With Ao Coupling	2
172080	Monobloc Reamer D. 8.0mm L. 475mm	1
172085	Monobloc Reamer D. 8.5mm L. 475mm	1
172210	Adapter	1
17955	Universal Chuck with T-Handle	1
172220	Soft Tissue Protector	1

OPERATIVE TECHNIQUE

Insert the 3.0mm Guide Wire with Olive (99-173281) down the medullary canal, using an image intensifier to cross the fracture site, and check that the position of the Guide Wire is correct when fully inserted. The Universal Chuck with T-Handle (17955) may be used to insert the Guide Wire manually. Check the position of the Guide Wire frequently to prevent unintended Guide Wire advancement and penetration into the surrounding tissues.



The width of the isthmus is determined by pre-operative X-ray examination. The Reamer Head with the smallest diameter is used for initial reaming of the intramedullary canal. Attach the Reamer Head to the Flexible Shaft (172200) and insert them over the Guide Wire.

NOTE: In the Flexible Reamers with diameter 8.0mm (172080) and 8.5mm (172085) the head is fixed to instead of incorporated into the shaft.



Insert the Flexible Shaft Adapter (172210) to the Flexible Shaft and attach a standard power tool for reaming. The Soft Tissue Protector (172220) may be used to protect the soft tissue during reaming. Direct connection is possible if the power tool has an AO connection.



Use the fluoroscope to monitor the advancement of the Reaming Head. Take care not to withdraw the Guide Wire when the Reamer is extracted, and whenever there is any doubt re-check the position with fluoroscopy before passing the next Reamer. The Reamer size should be increased in 0.5mm steps until the desired size is reached.

It is important to avoid exerting too much pressure during reaming to avoid the risk of fat embolism. Reaming should be performed with a light touch and gentle forward movement. If this is difficult, remove the Reamer Head and clean it, and if necessary pass the previous cutting head. Check that the Reaming Heads are being used in the correct order.

The instrument should not be forced when resistance is encountered, and should always be withdrawn when it is not advancing. If jammed, the Reamer can be freed by reversing the reamer driver direction and withdrawing from the canal. Excessive torque and/or stalling of the reamer may cause shaft fracture and fragmentation to occur.



NOTE: Do not use a cutting instrument that has dull edges.



Please refer to the "Instructions for Use" supplied with the product for specific information on indications for use, contraindications, warnings, precautions, adverse reactions and sterilization.

Instructions for Use: See actual package insert for Instructions for Use.

Caution: Federal law (USA) restricts this device to sale by or on the order of a physician. Proper surgical procedure is the responsibility of the medical professional. Operative techniques are furnished as an informative guideline. Each surgeon must evaluate the appropriateness of a technique based on his or her personal medical credentials and experience.



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