

MatrixMIDFACE Threaded Reduction Tools and T-Handle

Surgical Technique

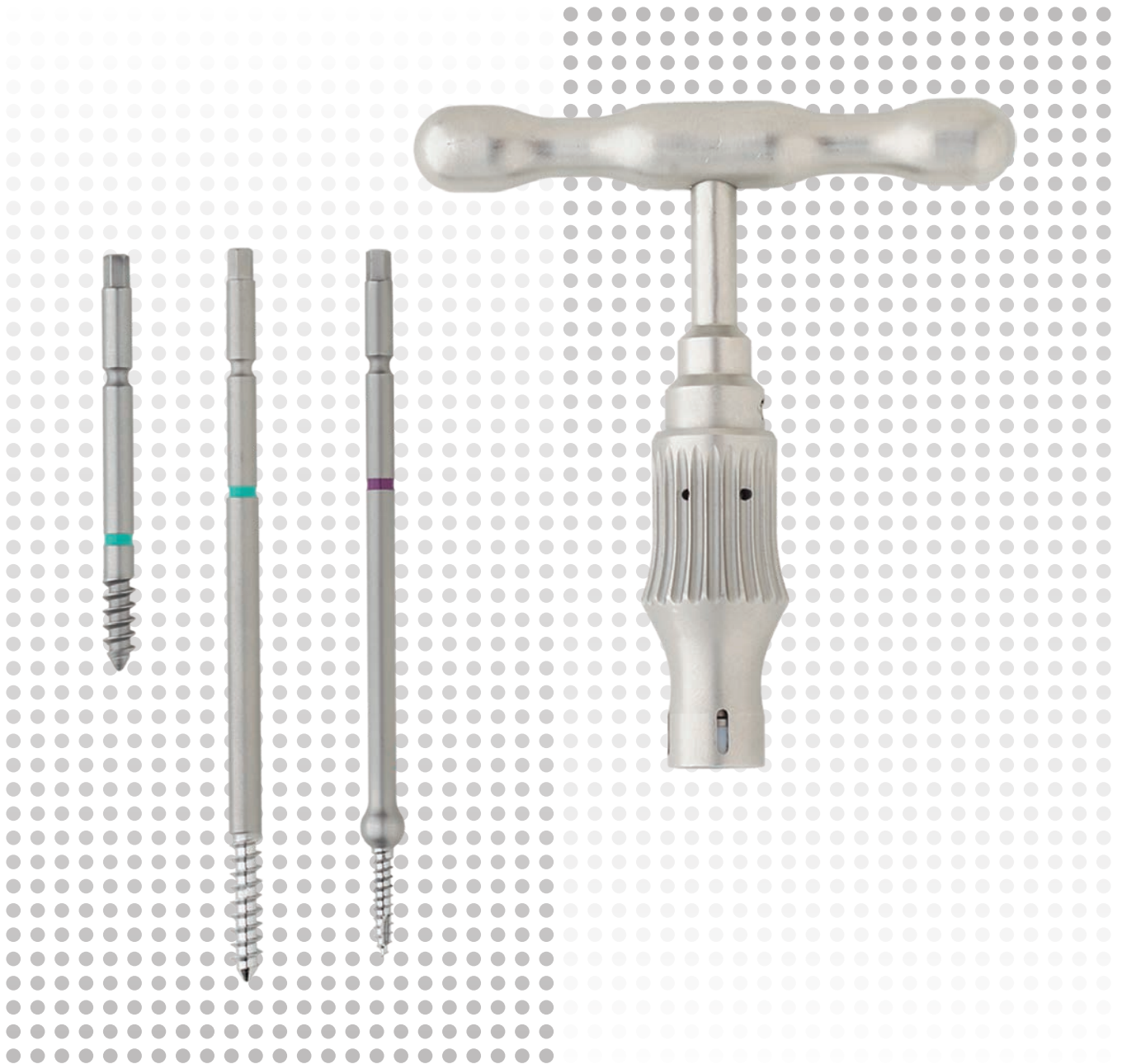


 Image intensifier control

This description alone does not provide sufficient background for direct use of DePuy Synthes products. Instruction by a surgeon experienced in handling these products is highly recommended.

Processing, Reprocessing, Care and Maintenance

For general guidelines, function control and dismantling of multi-part instruments, as well as processing guidelines for implants, please contact your local sales representative or refer to:

<http://emea.depuysynthes.com/hcp/reprocessing-care-maintenance>

For general information about reprocessing, care and maintenance of DePuy Synthes reusable devices, instrument trays and cases, as well as processing of DePuy Synthes non-sterile implants, please consult the Important Information leaflet (SE_023827) or refer to:

<http://emea.depuysynthes.com/hcp/reprocessing-care-maintenance>

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MatrixMIDFACE Threaded Reduction Tools and T-Handle

Overview

The MatrixMIDFACE Threaded Reduction Tools consist of 2.4 mm (self-drilling), 3.5 mm (self-tapping) reduction tool and T-handle used in anatomic reduction. Hex coupling allows for insertion and removal of Threaded Reduction tools. T-Handle helps facilitate manipulation of bone fragments (reduction).

Intended Use, Adverse Events can be found in the corresponding system Instructions for Use.

The AO Principles of Fracture Management

Mission

The AO's mission is promoting excellence in patient care and outcomes in trauma and musculoskeletal disorders.

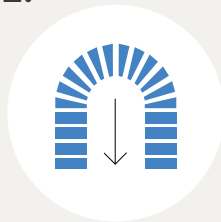
AO Principles^{1,2}

1.



Fracture reduction and fixation to restore anatomical relationships.

2.



Fracture fixation providing absolute or relative stability, as required by the “personality” of the fracture, the patient, and the injury.

3.



Preservation of the blood supply to soft-tissues and bone by gentle reduction techniques and careful handling.

4.



Early and safe mobilization and rehabilitation of the injured part and the patient as a whole.

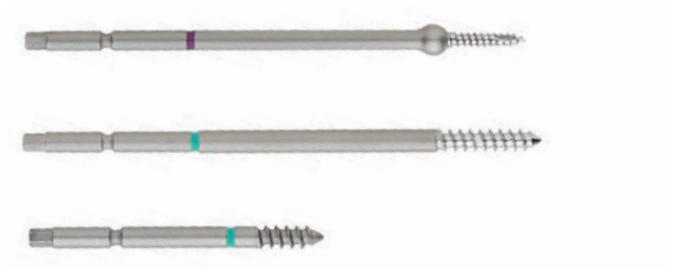
¹ Müller ME, Allgöwer M, Schneider R, Willenegger H. Manual of Internal Fixation. 3rd ed. Berlin, Heidelberg New York: Springer 1991.

² Buckley RE, Moran CG, Apivatthakakul T. AO Principles of Fracture Management: 3rd ed. Vol. 1: Principles, Vol. 2: Specific fractures. Thieme; 2017.

Surgical Technique

1. Select Threaded Reduction Tool

Select preferred Threaded Reduction Tool and secure into T-Handle.



2. Pre-drilling

For the 3.5 mm Threaded Reduction Tools

Drill a hole into the bone fragment using a 2.4 mm drill bit.

Instruments

310.441	Drill Bit Ø 2.4 mm, length 80 mm, 2-flute, for J-Latch Coupling
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03.507.005	Drill Guide 2.4
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▲ Precautions:

- Drill guides must be used to protect the soft tissue while drilling.
- Drill speed rate should never exceed 1,800 rpm, particularly in dense, hard bone.
Higher drill speed rates can result in:
 - thermal necrosis of the bone soft tissue burns
 - an oversized hole, which can lead to reduced pullout force
- Always irrigate during drilling to avoid thermal damage to the bone.
- Take care while drilling as to not damage, entrap, or tear a patient's soft tissue or damage critical structures.
- Be sure to keep drill clear of loose surgical materials.
- Handle devices with care and dispose worn bone cutting instruments in an approved sharps container.



For the 2.4 mm Threaded Reduction Tool

If pre-drilling is preferred, drill a hole into bone fragment using a 1.8 mm drill bit.

Instruments

310.565	Drill Bit Ø 1.8 mm, length 80 mm, 2-flute, for J-Latch Coupling
312.180	Double Drill Guide 2.4/1.8

▲ Precautions:

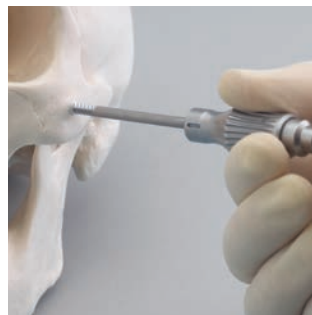
- Drill guides must be used to protect the soft tissue while drilling.
- Drill speed rate should never exceed 1,800 rpm, particularly in dense, hard bone.
Higher drill speed rates can result in:
 - thermal necrosis of the bone soft tissue burns
 - an oversized hole, which can lead to reduced pullout force
- Always irrigate during drilling to avoid thermal damage to the bone.
- Take care while drilling as to not damage, entrap, or tear a patient's soft tissue or damage critical structures.
- Be sure to keep drill clear of loose surgical materials.
- Handle devices with care and dispose worn bone cutting instruments in an approved sharps container.

3. Insert Threaded Reduction Tool and Reduce Fracture

Insert the Threaded Reduction Tool into the bone fragment. Manipulate the fragment into proper anatomic reduction.

▲ Precaution:

While manipulating the fragment, avoid excessive bending force on the instrument, as this may cause the tip of the Threaded Reduction Tool to break. If this occurs, the tip must be explanted using a burr to remove the bone surrounding the tip.



Product Information

Module

61.507.000	Instrument Tray for MatrixMIDFACE Threaded Reduction Tools and T-Handle, 1/3, with Lid, without Contents
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Instruments

03.507.000	T-Handle, small, with Hexagonal Coupling
03.507.002S	Threaded Reduction Tool Ø 2.4 mm, self-drilling, length 78 mm, with Hexagonal Coupling, sterile
03.507.003	Threaded Reduction Tool Ø 3.5 mm, self-tapping, length 78 mm, with Hexagonal Coupling
03.507.004	Threaded Reduction Tool Ø 3.5 mm, self-tapping, length 43 mm, with Hexagonal Coupling
03.507.005	Drill Guide 2.4
310.441	Drill Bit Ø 2.4 mm, length 80 mm, 2-flute, for J-Latch Coupling

Also Available

310.565	Drill Bit Ø 1.8 mm, length 80 mm, 2-flute, for J-Latch Coupling
312.180	Double Drill Guide 2.4/1.8

Not all products are currently available in all markets.
This publication is not intended for distribution in the USA.
Intended use, Indications and Contraindications can be found in the corresponding system Instructions for Use.
All Surgical Techniques are available as PDF files at www.depuysynthes.com/ifu



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