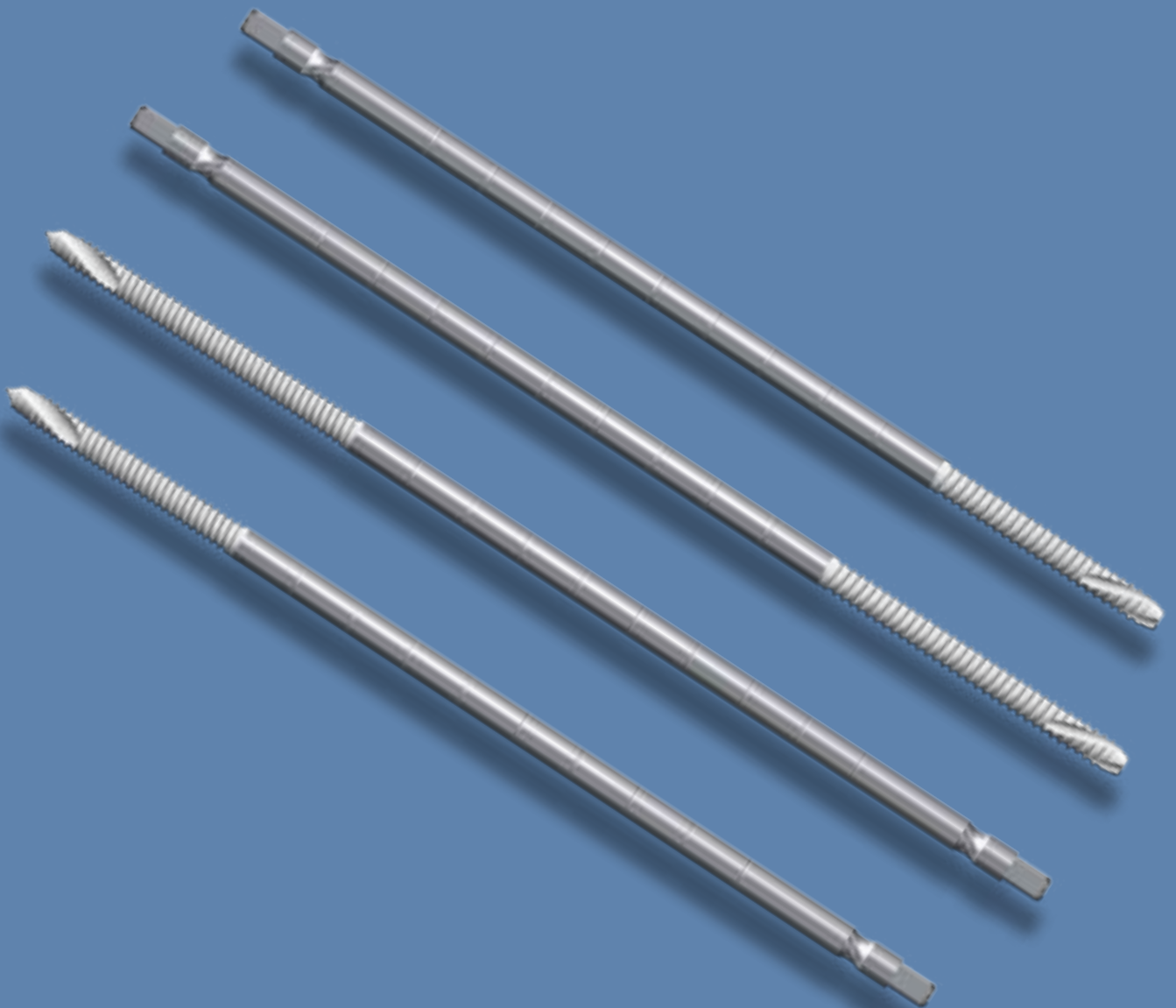


HA Apex™ Pins

Pin Fixation System

HA Coated Half Pins for Long
Term Fixation



Introduction

The Apex™ Pin line has been a success for nearly 20 years with implantations taking place numerous times each day throughout the world. The proven clinical experience attests to the high quality design of the pin.

Stable pin fixation is essential for effective external fixator frames especially during long-term treatments. A well designed Hydroxylapatite (HA) coated pin can help to improve fixation, and reduce the risk of complications.

Hydroxylapatite has a long clinical history and is chemically similar to the mineral components of bone. HA is one of the few materials that supports bone ingrowth and osseointegration.

The HA coated Apex™ Pin uses those properties and provides a better pin/bone interface to improve long-term fixation.

The range of HA coated Apex™ Pins offers a wide variety of Stainless Steel Self Drilling/Self Tapping and Blunt Pins in numerous lengths, thread lengths and diameters to meet the different needs of each application.

Due to a unique coating technology the Self Drilling/Self Tapping HA Apex™ Pin provides excellent cutting and drilling capabilities.

Choose the optimal pin from the HA Apex™ Pin range to address your long-term fixation needs.

Features & Benefits

The HA coated Self Drilling/Self Tapping and Blunt Apex™ Pin range with different diameters, lengths and thread lengths provide the optimal choice to meet the needs of the treatment.

The HA coated threads reinforce the pin/bone interface. HA Apex™ Pins are delivered sterile packed for direct use in the O.R.

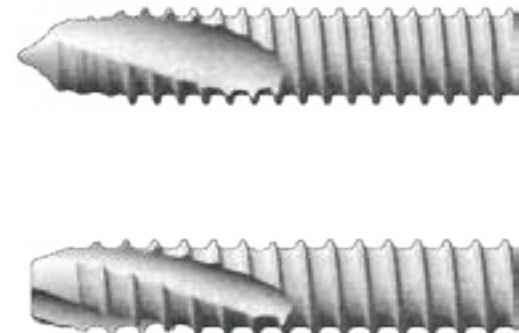
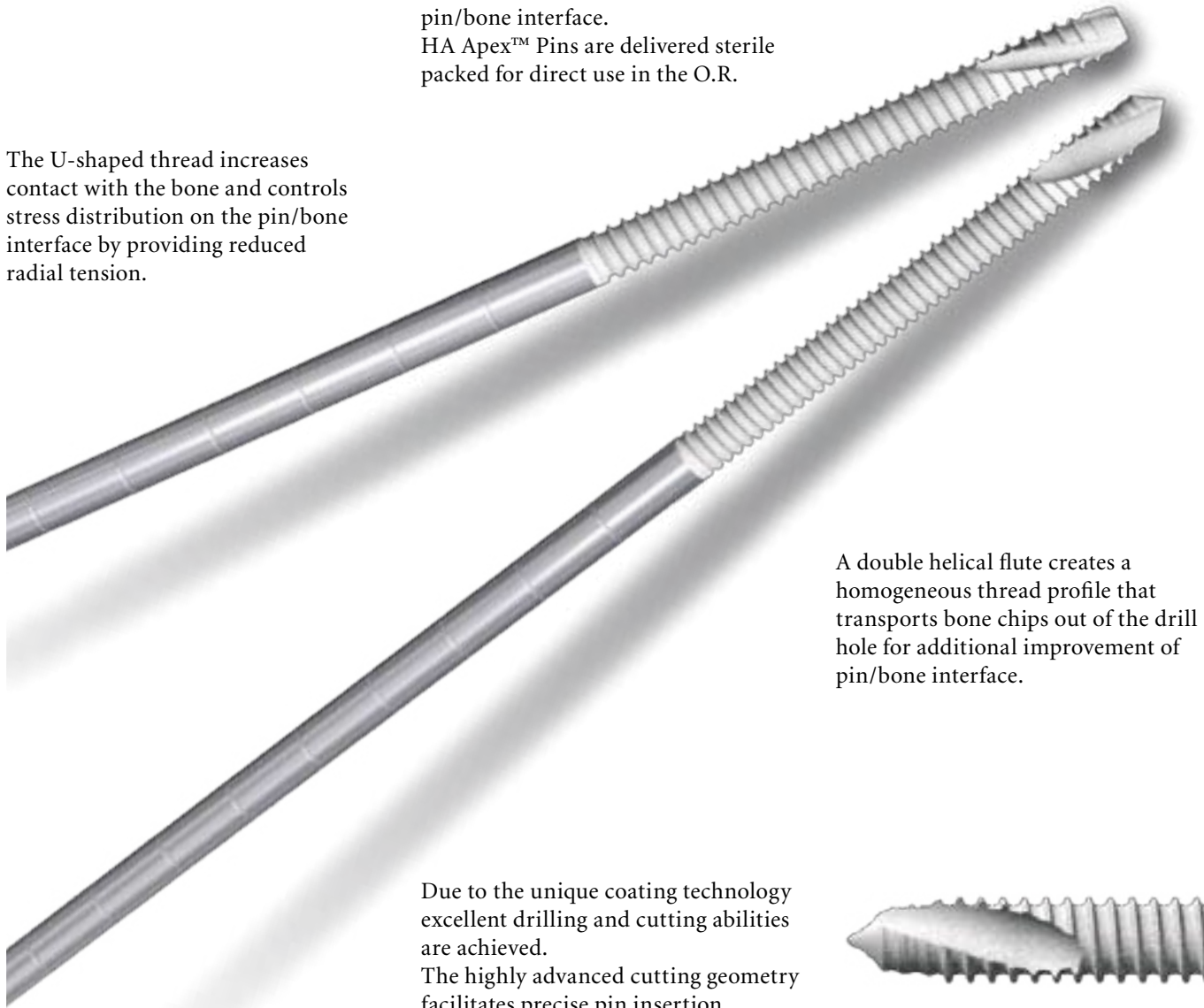
The smooth tip design of the Blunt HA coated Apex™ Pin helps to reduce soft tissue irritation at the far cortex. Pre-drilling is required for this design.

The U-shaped thread increases contact with the bone and controls stress distribution on the pin/bone interface by providing reduced radial tension.

A double helical flute creates a homogeneous thread profile that transports bone chips out of the drill hole for additional improvement of pin/bone interface.

Due to the unique coating technology excellent drilling and cutting abilities are achieved. The highly advanced cutting geometry facilitates precise pin insertion with reduced insertion time and temperature, ensuring enhanced performance.

The cylindrical thread design improves bone purchase, and pull out resistance, and offers the possibility to back out the pin without compromising fixation.



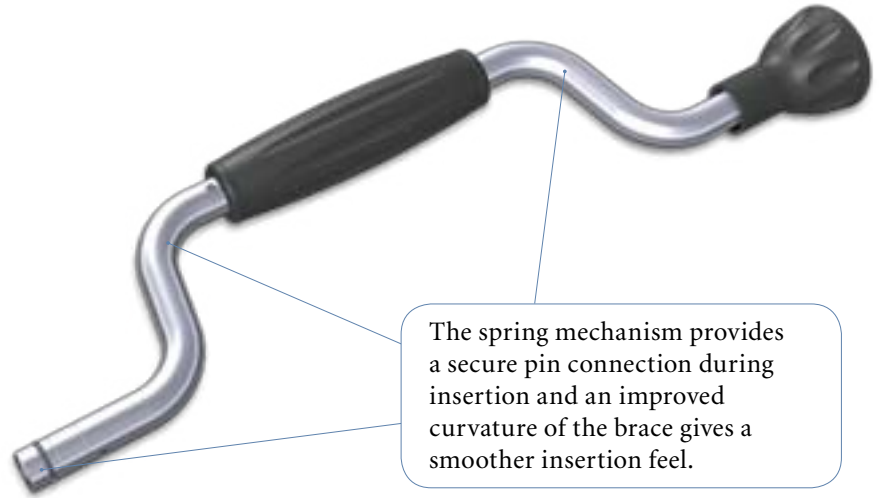
Instruments

Apex™ Instruments

Drill Brace

The Drill Brace is designed for manual pin insertion for better control and reduced insertion temperature.

It provides integrated attachments for 3mm & 4mm and 5mm & 6mm pins. Simply by changing the Drill Handle from one end to the other you gain access to the different attachments.



T-Wrench/Pin Driver

The T-Wrench/Pin Driver is a combined instrument. It is used to insert 4mm & 5mm pins and tighten 7mm bolts.

The T-handle allows greater torque for maximum bolt tightening.



Predrilling Assembly

The Predrilling Assembly consists of a Trocar, a Drill Sleeve and a Soft Tissue Protector which allows for pre-drilling and pin insertion without causing additional damage to the soft tissues. Different lengths enable you to choose the correct device for the thickness of the soft tissue envelope.



Quick Release Apex™ Chuck

The Quick Release Apex™ Chuck is designed for fast and easy engagement of the Apex™ Pins and has a combined standard AO and tri-flange connector. It is designed for insertion of Apex™ Pins by power.

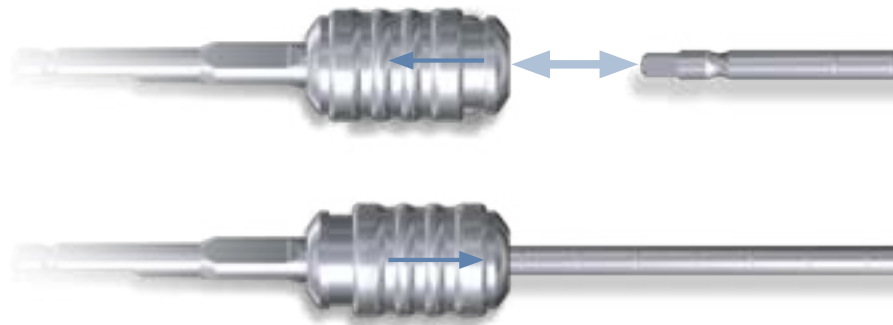
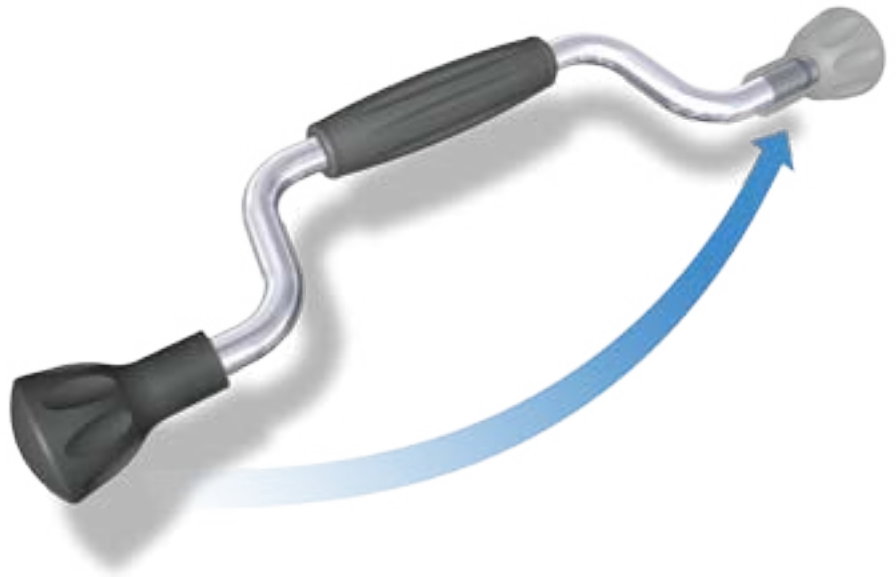
Technical Details

Instructions for Use

Drill Brace

The Drill Brace provides integrated attachments for 3mm & 4mm pins on one end and 5mm & 6mm pins on the other end. For pin insertion, place the pin into the end correlating to the chosen pin diameter.

To access the different attachments for the pins remove the handle and assemble it on the other end.



Quick Release Apex™ Chuck

To assemble the pin to the chuck, pull the sleeve toward the drill and place the pin in the adapter. To secure the pin, push the sleeve forward.

To release the pin from the adapter pull the sleeve toward the drill and remove the adapter from the pin.

When inserting the pin by power, make sure to use a low speed to avoid significant temperature increase which can cause bone necrosis.

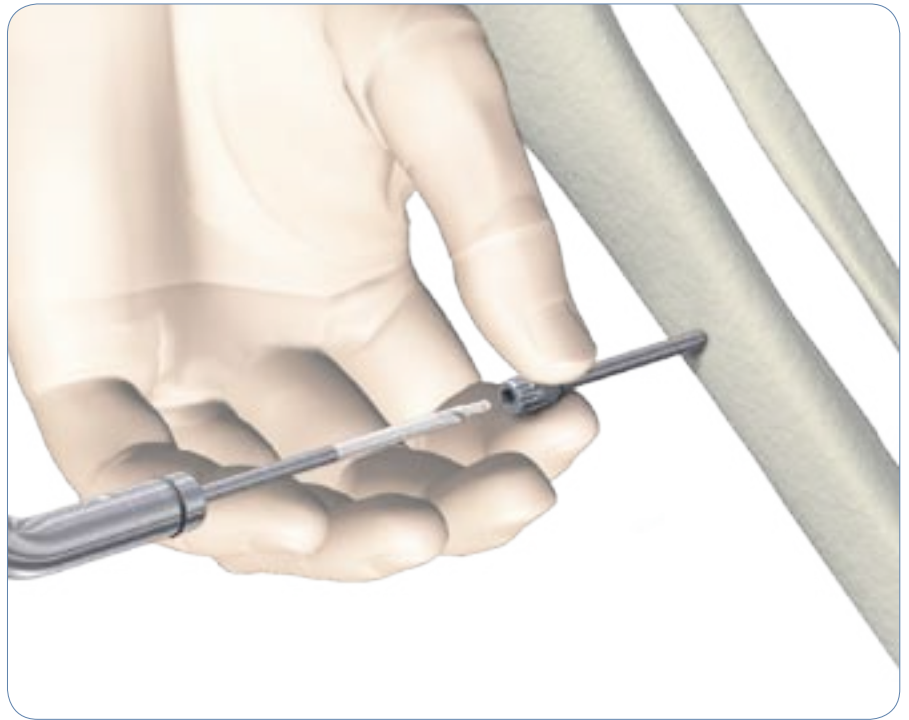


Technical Details

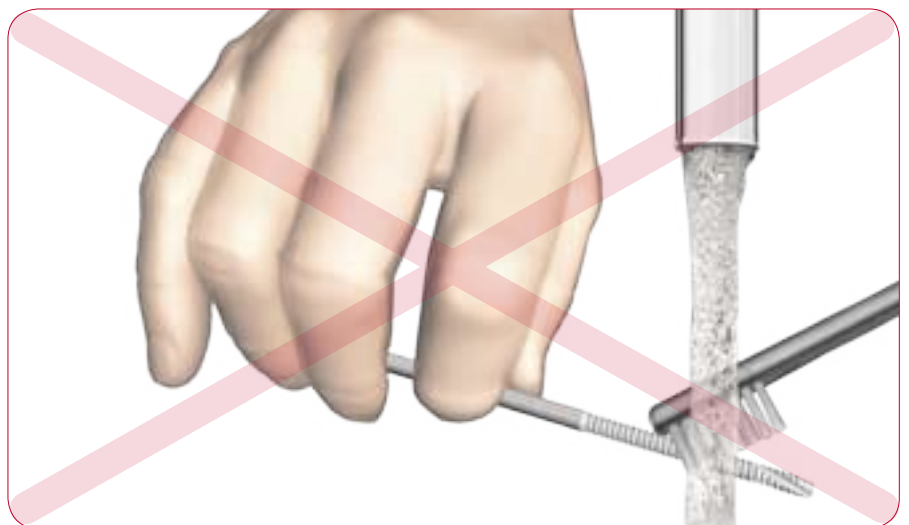
Instructions for Use

Be certain to use the Stryker Apex™ Predrilling Assemblies for pin insertion to avoid damage to the HA coating.

If the HA coating is damaged due to incorrect instrument usage, fixation properties may be compromised.



Do not wash or attempt to re-sterilize an unpacked HA coated Apex™ Pin. The coating may be damaged and the effect of the HA coating may be compromised.



Surgeons must always rely on their own clinical judgement when deciding which treatment and product to use with their patients.

Ordering Information - Implants

HA Coated Self Drilling/Self Tapping



| Stainless Steel REF | Diameter mm Thread/Shaft | Total Length mm | Thread Length mm |
|---------------------|-----------------------------|-----------------|------------------|
| 5013-3-090S | 4mm | 90 | 30 |
| 5013-2-120S | 4mm | 120 | 20 |
| 5013-8-120S | 4mm | 120 | 25 |
| 5013-3-120S | 4mm | 120 | 30 |
| 5013-9-120S | 4mm | 120 | 35 |
| 5013-2-150S | 4mm | 150 | 20 |
| 5013-8-150S | 4mm | 150 | 25 |
| 5013-3-150S | 4mm | 150 | 30 |
| 5013-4-150S | 4mm | 150 | 40 |
| 5017-9-120S | 5mm | 120 | 35 |
| 5017-2-150S | 5mm | 150 | 20 |
| 5017-8-150S | 5mm | 150 | 25 |
| 5017-3-150S | 5mm | 150 | 30 |
| 5017-9-150S | 5mm | 150 | 35 |
| 5017-4-150S | 5mm | 150 | 40 |
| 5017-5-150S | 5mm | 150 | 50 |
| 5017-6-150S | 5mm | 150 | 60 |
| 5017-3-180S | 5mm | 180 | 30 |
| 5017-4-180S | 5mm | 180 | 40 |
| 5017-5-180S | 5mm | 180 | 50 |
| 5017-6-200S | 5mm | 200 | 60 |
| 5017-7-200S | 5mm | 200 | 70 |
| 5014-2-120S | 6mm | 120 | 30 |
| 5014-8-150S | 6mm | 150 | 25 |
| 5014-3-150S | 6mm | 150 | 30 |
| 5014-4-150S | 6mm | 150 | 40 |
| 5014-5-150S | 6mm | 150 | 50 |
| 5014-6-150S | 6mm | 150 | 60 |
| 5014-3-180S | 6mm | 180 | 30 |
| 5014-4-180S | 6mm | 180 | 40 |
| 5014-5-180S | 6mm | 180 | 50 |
| 5014-6-180S | 6mm | 180 | 60 |
| 5014-3-200S | 6mm | 200 | 30 |
| 5014-4-200S | 6mm | 200 | 40 |
| 5014-5-200S | 6mm | 200 | 50 |
| 5014-6-200S | 6mm | 200 | 60 |
| 5014-7-250S | 6mm | 250 | 70 |
| 5014-8-250S | 6mm | 250 | 80 |
| 5014-9-250S | 6mm | 250 | 90 |

HA Coated Blunt



| Stainless Steel REF | Diameter mm Thread/Shaft | Total Length mm | Thread Length mm |
|---------------------|-----------------------------|-----------------|------------------|
| 5008-2-150S | 4mm | 150 | 20 |
| 5008-8-150S | 4mm | 150 | 25 |
| 5008-3-150S | 4mm | 150 | 30 |
| 5008-4-150S | 4mm | 150 | 40 |
| 5009-2-200S | 5mm | 200 | 20 |
| 5009-8-200S | 5mm | 200 | 25 |
| 5009-3-200S | 5mm | 200 | 30 |
| 5009-9-200S | 5mm | 200 | 35 |
| 5009-4-200S | 5mm | 200 | 40 |
| 5009-5-200S | 5mm | 200 | 50 |
| 5009-6-200S | 5mm | 200 | 60 |
| 5009-7-250S | 5mm | 250 | 70 |
| 5009-8-250S | 5mm | 250 | 80 |
| 5009-9-250S | 5mm | 250 | 90 |
| 5010-8-200S | 6mm | 200 | 25 |
| 5010-3-200S | 6mm | 200 | 30 |
| 5010-4-200S | 6mm | 200 | 40 |
| 5010-5-200S | 6mm | 200 | 50 |
| 5010-6-200S | 6mm | 200 | 60 |
| 5010-7-250S | 6mm | 250 | 70 |
| 5010-8-250S | 6mm | 250 | 80 |
| 5010-9-250S | 6mm | 250 | 90 |

Special Order

All Implants are single packed and sterile.

Ordering Information - Instruments

REF Description

Apex™ Instruments



5057-0-300 Drill Brace Assembly



5057-0-310 Handle for Drill Brace



4920-9-030 T-Wrench 7mm, Pin Driver 4mm, 5mm



5057-6-300 Pin Cutter, 4mm, 5mm & 6mm, Extension Handles



5057-1-004 Quick Release Apex™ Chuck with AO fitting, 4mm



5057-1-005 Quick Release Apex™ Chuck with AO fitting, 5mm



5057-1-006 Quick Release Apex™ Chuck with AO fitting, 6mm



5057-4-000 Predrilling Assembly, Ø 4.0mm, extra short 35mm protection length

5057-5-000 Predrilling Assembly, Ø 5.0mm, extra short 50mm protection length

5057-6-000 Predrilling Assembly, Ø 6.0mm, extra short 60mm protection length

5057-4-100 Predrilling Assembly, Ø 4.0mm, short 70mm protection length

5057-5-100 Predrilling Assembly, Ø 5.0mm, short 73mm protection length

5057-6-100 Predrilling Assembly, Ø 6.0mm, short 90mm protection length

5057-4-200 Predrilling Assembly, Ø 4.0mm, long 100mm protection length

5057-5-200 Predrilling Assembly, Ø 5.0mm, long 113mm protection length

5057-6-200 Predrilling Assembly, Ø 6.0mm, long 120mm protection length

For more information about Standard Apex Pins and Apex Instrumentation we refer to the brochure Apex Pin Fixation System (Ref.-No. 5075-4-000).

Notes

Joint Replacements

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