Ready-for-Surgery™ Surgical Technique Guide

Small Headless and Cannulated Screws

FlowerCube[™] sterile-packaged orthopedic implants and instruments provide precise solutions for common foot and ankle procedures.

Seconventus FLOWER

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Ready-for-Surgery Overview

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Building a More Efficient Case

Conventus Flower Orthopedics pioneered the single-use, sterile-packaged Ready-for-Surgery[™] Cube system. The FlowerCube[™] has been proven to produce equivalent outcomes while generating cost savings and surgical efficiencies when compared to traditional orthopedic implant and instrument sets.

- Innovative system that is pre-packaged and ready for use
- Contains single-use, sterile-packaged implants and instruments required for specific surgical indications
- Eliminates pre-op handling and post-op reprocessing



FlowerCube[™] Surgical Efficiency Study Results^{*}



Faster Case Time

Time savings of nearly 20 minutes per case with the FlowerCube[™] compared to procedures using traditional implants



Joint Union

84.51% of study patientsexperienced union of the jointsby 8 weeks post-surgery and98.59% by 12 weeks post-surgery



Third-Party Reimbursement Savings

Over \$1,300 savings in third-party reimbursement costs for procedures performed at an ASC compared to those done in an outpatient hospital setting



Sterilization, reprocessing, and packaging of surgical trays would add \$45 per instrument tray



1. Intended Use and Contraindications

Indications for Use

The Small Headless Compression Screw and Cannulated Screw Set is intended to be used for the fixation of bone fractures, fusion of joints, or bone reconstruction.

Contraindications

Do not use the Small Headless Compression Screw and Cannulated Screw Set in cases of:

- Inadequate bone quantity and/or bone quality
- · Foreign body sensitivity to implant material
- Acute localized infections
- Patients with limited blood supply
- · Patients with unstable physical and/or mental health conditions

2. System Features

The Small Cannulated Screw Set contains:

- 2.0mm Partially Threaded Titanium Cannulated Screws (8mm 24mm length)
- 2.4mm Partially Threaded Titanium Cannulated Screws (8mm 30mm length)
- 2.4mm Titanium Cannulated Headless Compression Screws (6mm 40mm length)
- 3.0mm Titanium Cannulated Headless Compression Screws (10mm 20mm length)



System Overview



2. System Features (cont.)

Headless Compression Screw Design

- Screw head has tapered design to facilitate fragment compression.
- · Pitch differential between the leading and trailing thread maximizes and maintains compression.
- · Screw threads are self-tapping to facilitate smooth insertion in dense cortical bone.

Partially Threaded Cannulated Screw Design

- Self-tapping flutes ease insertion into cortical bone.
- · Partial thread design allows for compression across fracture or osteotomy.

Sterile-Packaged Instrumentation...Always "Ready-for-Surgery"

- Robust 0.8mm Cobalt Chrome (CoCr) smooth trocar-tipped guide wires are designed to stabilize bone fragments and accurately guide cannulated screws.
- Precision single-use instrumentation reduces surgical steps and improves efficiency.
- · Easy-to-use universal instruments are designed to work with all small cannulated screw families.

3. Osteotomy Preparation (Chevron Bunionectomy)

Sterile Instruments:

GWK 100 Guide Wire Kit

Remove the bunion on the medial side of the first metatarsal.

Perform Chevron Osteotomy using appropriately sized saw blade. A guide wire may be placed to ensure precise location when cutting the bone. A marking pen can also be used to locate the cutting site.

After the osteotomy is performed, carefully slide the distal fragments in the lateral direction to correctly align the toe.









4. Guide Wire Insertion

Sterile Instruments:

GWK 100 Guide Wire Kit

Optional Sterile Instruments:

GWK 108 Extra Guide Wires

After the fragments are in the desired position, insert a 0.8mm Smooth Guide Wire to maintain alignment.

Insert the guide wire dorsal to plantar through the osteotomy, until reaching the far cortex. Confirm position of the guide wire visually and on AP, oblique, and lateral x-rays.

Note: Additional guide wires may be used to provisionally secure bone fragments and provide stability during drilling and screw insertion.

Extra guide wires are provided in GWK 108.

5. Screw Measurement

Sterile Instruments:

GWK 100 Guide Wire Kit

Precaution

Prior to measuring screw length, countersinking may be necessary. Countersinking for Partially Threaded Headed Cannulated Screws is recommended. Countersinking is not necessary for Headless Compression Screws.

Tip

The cannulated depth gauge is a 2-in-1 instrument and can also be used as a countersink.

If countersinking is desired, place the sharp end of the cannulated depth gauge over the guide wire and firmly place against the bone. Manually oscillate the cannulated depth gauge until the appropriate depth has been achieved.

Read the required screw length from the end of the guide wire.







90 85 80 75 70166162158154150146142138134130126122118114110



6. Pilot Hole Preparation

Sterile Instruments:

CDB 017	Cannulated Drill Bit, 1.7mm
CDB 020	Cannulated Drill Bit, 2.0mm
CDB 024	Cannulated Drill Bit, 2.4mm

Use the 1.7mm Cannulated Drill Bit (CDB 017) to drill the pilot hole for both the 2.0mm and 2.4mm screws. Place the cannulated drill bit directly over the guide wire and drill to the appropriate length.

Use the 2.0mm Cannulated Drill Bit (CDB 020) to drill the pilot hole for the 3.0mm screws.

Precaution for Headless Compression Screws

When drilling in dense bone, it is recommended to drill the near cortex using the 2.4mm Cannulated Drill Bit. This allows the head of the screw to engage the near cortex during screw insertion.

Note: Both the headless compression screws and partially threaded cannulated screws are self-tapping.







7. Screw Insertion

Sterile Instruments:

GWK 100 Guide Wire Kit

Insert either the headless compression screw or partially threaded cannulated screw over the guide wire by hand, using the T6 cannulated screwdriver to compress the bone fragments.

Precaution

Do not over-tighten screws as this could result in loss of bone reduction or fracture.

Headless Compression Screw Insertion



Cannulated Screw Insertion



8. Sterile Implants

T	2.0mm Partially Threaded Cannulated Screws	
	Product #	Product Description
	CSP 008	2.0mm x 8mm
	CSP 010	2.0mm x 10mm
	CSP 012	2.0mm x 12mm
	CSP 014	2.0mm x 14mm
	CSP 016	2.0mm x 16mm
	CSP 018	2.0mm x 18mm
	CSP 020	2.0mm x 20mm
	CSP 022	2.0mm x 22mm
	CSP 024	2.0mm x 24mm

2.4mm Partially Threaded Cannulated Screws		
Product #	Product Description	
CSP 108	2.4mm x 8mm	
CSP 110	2.4mm x 10mm	
CSP 112	2.4mm x 12mm	
CSP 114	2.4mm x 14mm	
CSP 116	2.4mm x 16mm	
CSP 118	2.4mm x 18mm	
CSP 120	2.4mm x 20mm	
CSP 122	2.4mm x 22mm	
CSP 124	2.4mm x 24mm	
CSP 126	2.4mm x 26mm	
CSP 128	2.4mm x 28mm	
CSP 130	2.4mm x 30mm	

8. Sterile Implants (cont.)

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2.4mm Headless Compression Screws		
Product #	Product Description	
HCS 106	2.4mm x 6mm	
HCS 108	2.4mm x 8mm	
HCS 110	2.4mm x 10mm	
HCS 112	2.4mm x 12mm	
HCS 114	2.4mm x 14mm	
HCS 116	2.4mm x 16mm	
HCS 118	2.4mm x 18mm	
HCS 120	2.4mm x 20mm	
HCS 122	2.4mm x 22mm	
HCS 124	2.4mm x 24mm	
HCS 126	2.4mm x 26mm	
HCS 128	2.4mm x 28mm	
HCS 132	2.4mm x 32mm	
HCS 136	2.4mm x 36mm	
HCS 140	2.4mm x 40mm	

3.0mm Headless Compression Screws		
Product #	Product Description	
HCS 610	3.0mm x 10mm	
HCS 612	3.0mm x 12mm	
HCS 614	3.0mm x 14mm	
HCS 616	3.0mm x 16mm	
HCS 618	3.0mm x 18mm	
HCS 620	3.0mm x 20mm	

9. Sterile Instruments

Product #	Product Description
GWK 100	Guide Wire Kit
GWK 108	Extra Guide Wires
CBD 017	Cannulated Drill Bit, 1.7mm
CBD 020	Cannulated Drill Bit, 2.0mm
CBD 024	Cannulated Drill Bit, 2.4mm



NEW Ready-for-Surgery[™] Cube Reconfiguration

FLOWER

The next generation of sterile-packaged orthopedic implants and instruments are now reconfigured for mix-and-match efficiency

Conventus Flower Orthopedics pioneered the single-use sterile-packaged Ready-for-Surgery[™] Cube System.

The Small Cannulated Screws have been reconfigured in order to address more orthopedic surgical procedures.

Key Features

- Extremity-focused solutions
- New, more streamlined configurations
- Procedure-specific configurations
- Redundant instruments in system

Key Benefits

- Easier and more efficient to use
- Can be used for multiple cases
- Multiple implant solutions per procedure Cube
- Minimal logistical management = time savings = cost savings



The right procedure. The right implants. The right solution.

FlowerCube[™] sterile-packaged procedure solutions eliminate the need for hospital sterile processing, minimize infection risks to patients, and provide turnkey solutions for last-minute trauma and add-on cases.

*Data on file at Conventus Flower Orthopedics IRB approved, prospective, multi-center clinical trial

- Evaluating arthodesis of first MPJ
- 71 patients at both hospital and ASC locations
- Primary outcome measure: Fusion rate 12 weeks post surgery
- Secondary outcome measure: Cost and time efficiency

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