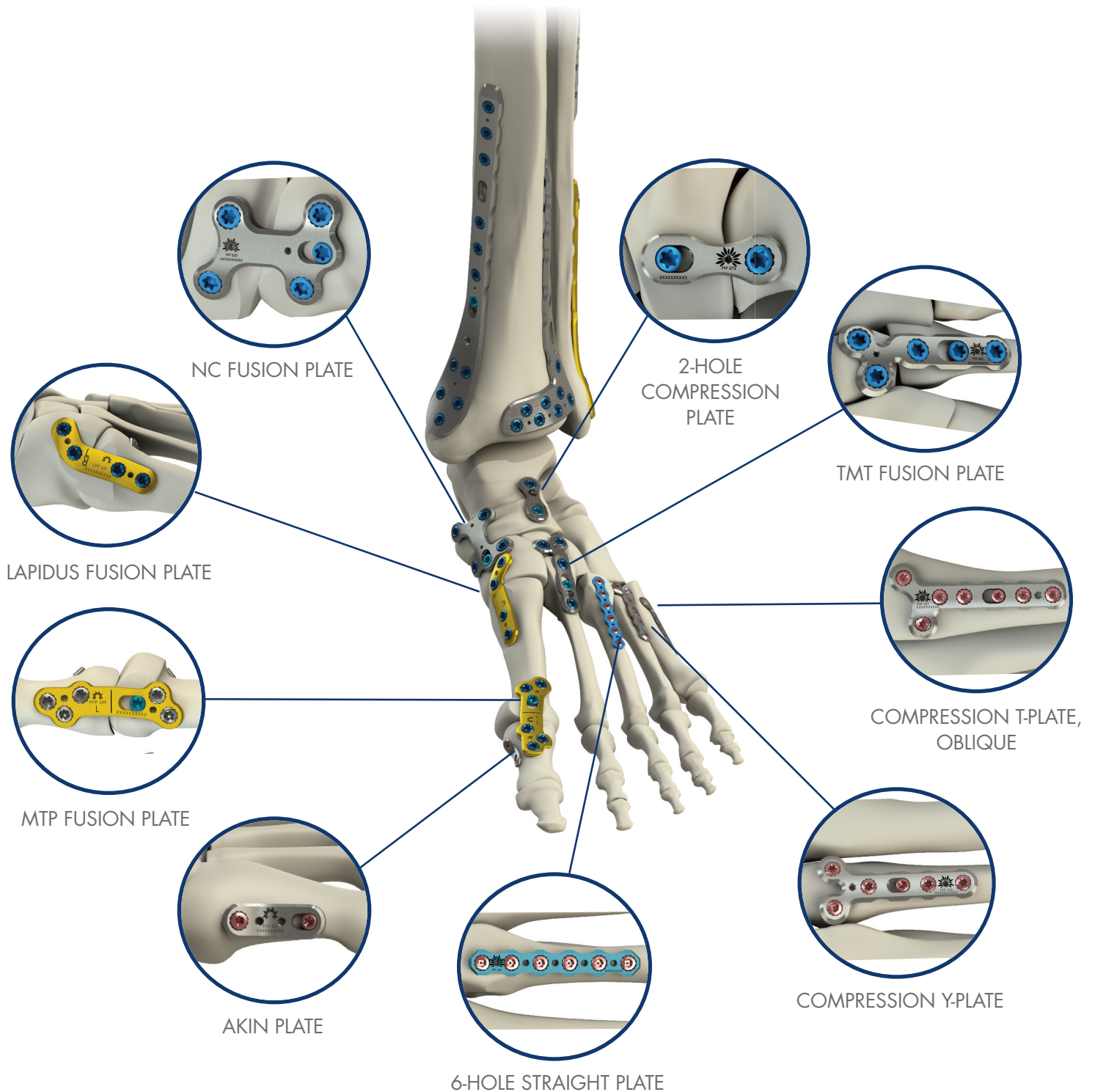


Flower Opening Wedge Plate

PROCEDURE GUIDE

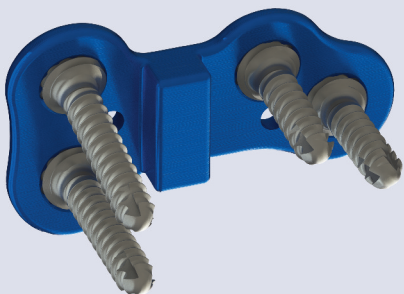
The Flower Foot & Ankle Application



INDICATIONS FOR USE:

The Flower Small and Medium Implants set is intended for use for internal fixation of fractures and reconstruction of bones, including the scapula, olecranon, humerus, radius, ulna, pelvis, distal tibia, fibula, hand and foot in adults and for use in long bones in adolescents (12-21) in whom the growth plates have fused. Examples of these internal fixations and reconstructions include compression fractures, intra-articular and extra-articular fractures, displaced fractures, osteotomies, non-unions and mal-unions. This system can be used for palmar, ventral, dorsal and orthogonal application. The Flower Orthopedics Bone Screw set is intended to be used for the fixation of bone structures, fusion of joints of bone reconstruction.

Flower Opening Wedge Plate – Product Rationale





The Flower Opening Wedge Plate System provides surgeons with multiple sizing options for precise correction, while maintaining overall metatarsal length.

The first metatarsal base opening wedge procedure restores proper anatomic alignment, and corrects bunions without violating the native joint structures.

The low-profile Flower Opening Wedge Plates minimize soft tissue irritation and ensure proper placement with a robust construct.

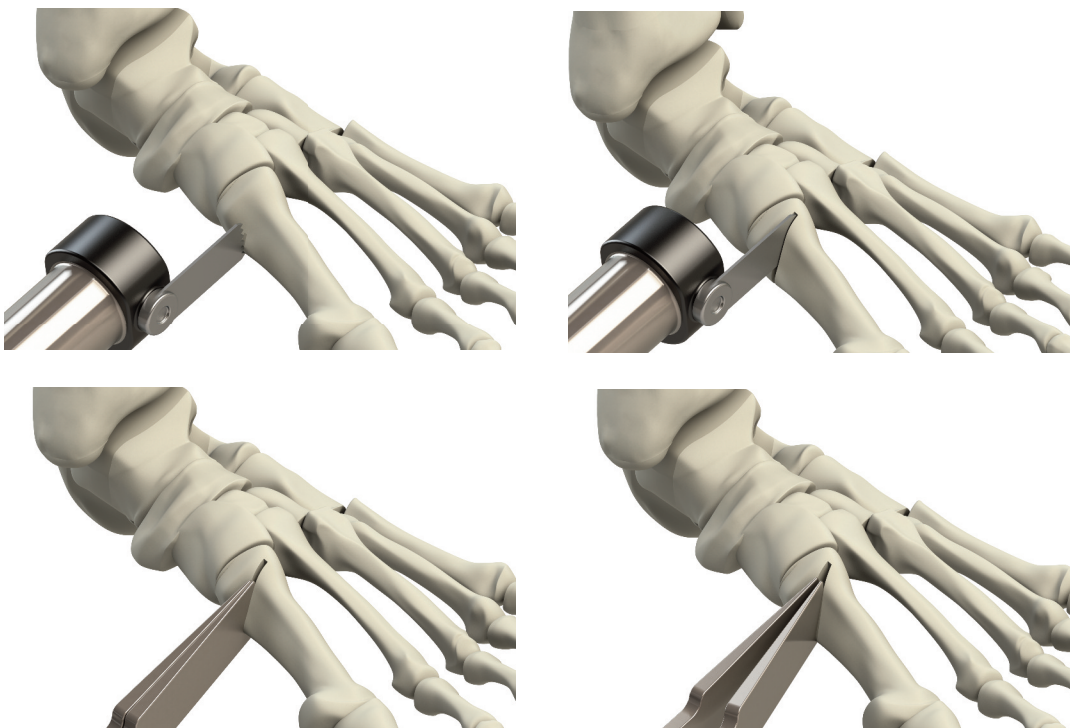
Flower Opening Wedge Plate – Portfolio

	PLATE RATIONALE	SURGICAL BENEFIT
	Anatomic Plate Design	Pre-contoured shape for ease of insertion. Plate placement avoids native joint structures, while maintaining metatarsal length.
	Precise Correction	Seven wedges available to accommodate all anatomy & pathology.
	Low Profile	Minimizes soft tissue irritation, with the plate pre-contoured to the anatomy. Screws sit flush with the top of the plate.
	Bilateral Design	Plates fit equally well on the left & right metatarsal & contours to the bone.

Flower Opening Wedge Plate – Surgical Strategy

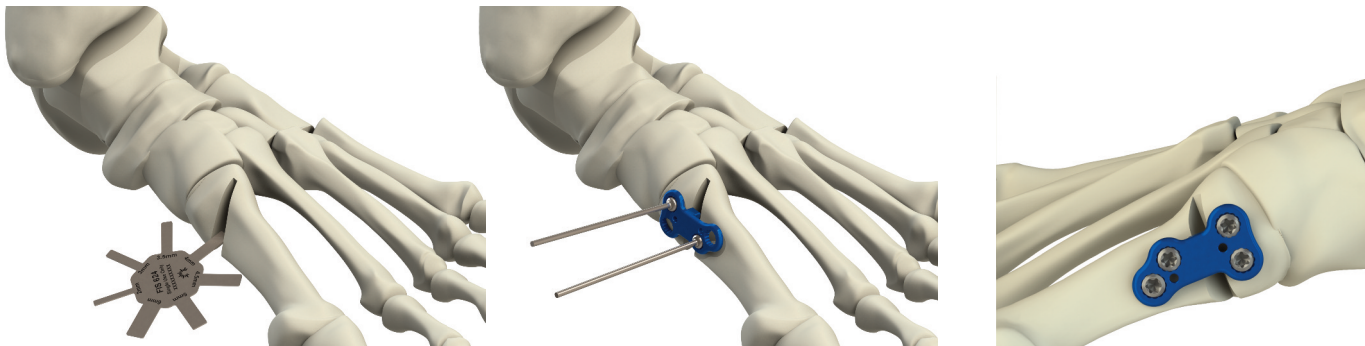
Step 1 – Prepare Osteotomy

- a. An osteotomy is performed in a medial to lateral direction with the sagittal saw. The surgeon may direct the osteotomy slightly proximal.
 - i. It is very important that osteotomy not be taken through the entire metatarsal leaving the lateral cortical wall intact. Osteotomy should extend laterally 60-70% of the metatarsal width.
- b. A straight osteotome is inserted to slowly open the osteotomy.
- c. The hinge may be opened in a controlled manner until the desired correction is achieved.



Step 2 – Trial and Plate Selection

- a. Before choosing an implant, the Opening Wedge Plate Trial (FIS 624) is used to select the correct size.
- b. Each 1mm of wedge width provides approximately 3 degrees of IM angle correction.
- c. Once the appropriate sized plate is selected, provisionally fixate the plate to the bone with the olive wires. They should be placed on the proximal and distal ends of the plate through the screw holes.
- d. Verify placement of the plate and reduction of the IM angle through fluoroscopy.

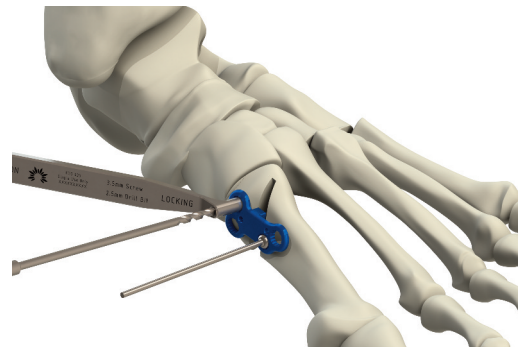


**The Flower Opening Wedge plate is a bilateral design and fits equally well on the left & right metatarsals. The vertical locking holes are always oriented proximally whether a left or right surgery is being performed.*

Flower Opening Wedge Plate – Surgical Strategy

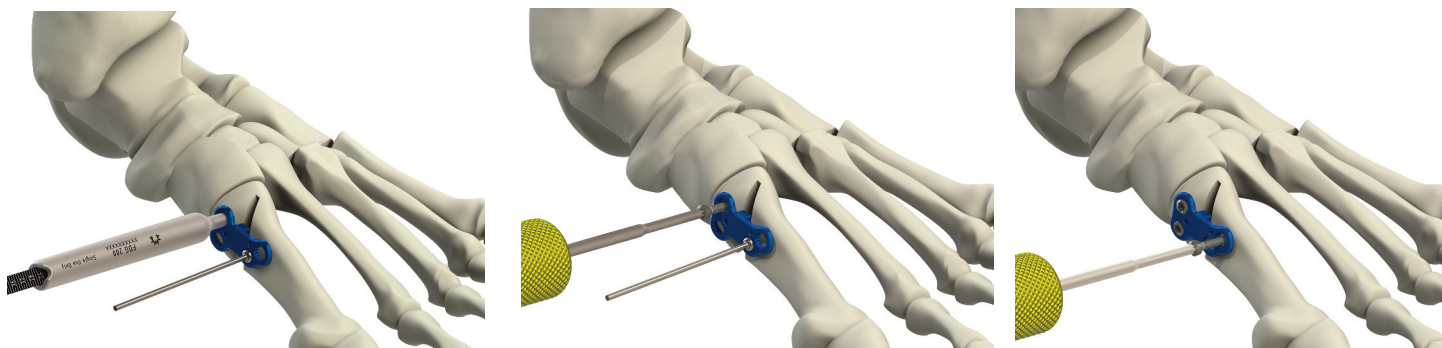
Step 3 – Drill Pilot Hole

- a. 2.7mm variable angle locking screws are recommended for the Flower Opening Wedge Plate. Starting with the proximal locking holes and using a 2.0mm Drill Bit (DBK 027), a pilot hole is created. Use the locking end of the drill guide for all the locking holes in the plate.



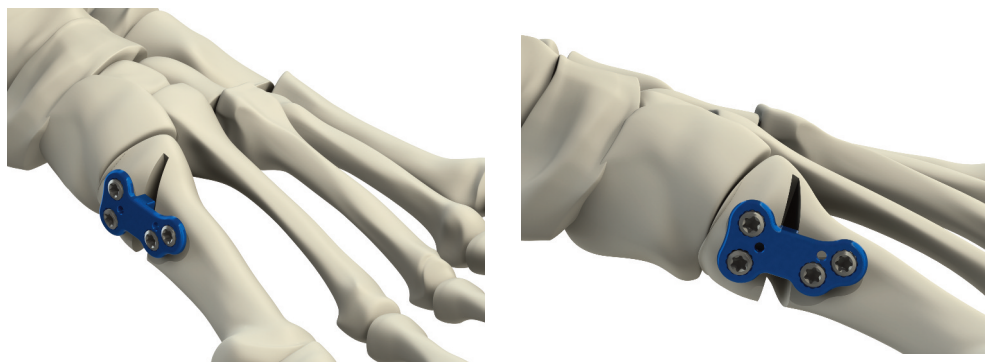
Step 4 – Screw Measurement and Insertion

- a. Extend the hook probe out of the depth gauge far enough to reach the lateral aspect of the metatarsal. Insert the extended hook probe through the pilot hole and confirm this is maintained within the cuneiform.
- b. With the hook probe fully engaged, slide the depth gauge down to the plate so that fully seats into the screw hole. The pilot hole depth is read from the distal end of the tube.
- c. Place the first locking screw into the proximal metatarsal screw hole using the Flower cannulated screw driver that is part of the Flower Olive Wire Kit (OWK 201).
- d. **Note:** This is NOT a torque limiting screw driver. Use three-finger technique. The screws are fully inserted once flush with the top of the plate. Do not overtighten.
- e. Drill the pilot hole and insert the remaining locking screws following the same technique as above.



Final Construct

The final construct displays the correct alignment of the first metatarsal with an opening wedge plate, while maintaining the the overall metatarsal length. The multiple wedge sizes provide surgeons with many correction options. The low-profile minimizes soft tissue irritation and allows for ease of contouring.



Flower Opening Wedge Plate – Implant Selection

OPENING WEDGE PLATES

Part #	Product Description
FOW 020	Opening Wedge Plate, 2mm
FOW 030	Opening Wedge Plate, 3mm
FOW 035	Opening Wedge Plate, 3.5mm
FOW 040	Opening Wedge Plate, 4mm
FOW 045	Opening Wedge Plate, 4.5mm
FOW 050	Opening Wedge Plate, 5mm
FOW 060	Opening Wedge Plate, 6mm



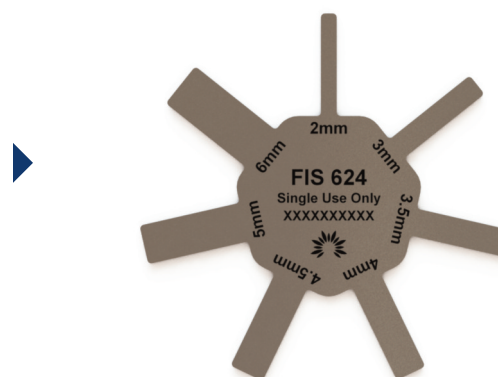
VARIABLE ANGLE LOCKING SCREWS

Screw Diameters	Product Description	Lengths
2.7mm	2.7mm Variable Angle Locking Screw	8mm-30mm
3.0mm	3.0mm Variable Angle Locking Screw	8mm-30mm
3.5mm	3.5mm Variable Angle Locking Screw	8mm-30mm



OPENING WEDGE PLATE TRIALS

Part #	Product Description
FIS 624	Opening Wedge Plate Trial



Flower Opening Wedge Plate – Single-Use Instrument Overview

DRILL BIT KITS

Part #	Contents of Kit
DBK 027	2.0mm Drill Bit and Drill Guide
DBK 030	2.0mm Drill Bit and Drill Guide
DBK 035	2.5mm Drill Bit and Drill Guide
DBK 040	3.0mm Drill Bit and Drill Guide



OLIVE WIRE KIT

Part #	Content of Kit
OWK 201	T15 Medium Cannulated Screwdriver Plating Depth Gauge Olive Wires (2)



We Build a More Efficient Case

Flower Orthopedics is the leader in Ready-for-Surgery™ bone fixation. We deliver efficiencies throughout the supply chain that reduce the overall cost of care.

Designed for specific surgical indications, the FlowerCube™ contains all of the implants and instruments required for the case. All products are sterile packaged, single-use and always Ready-for-Surgery.

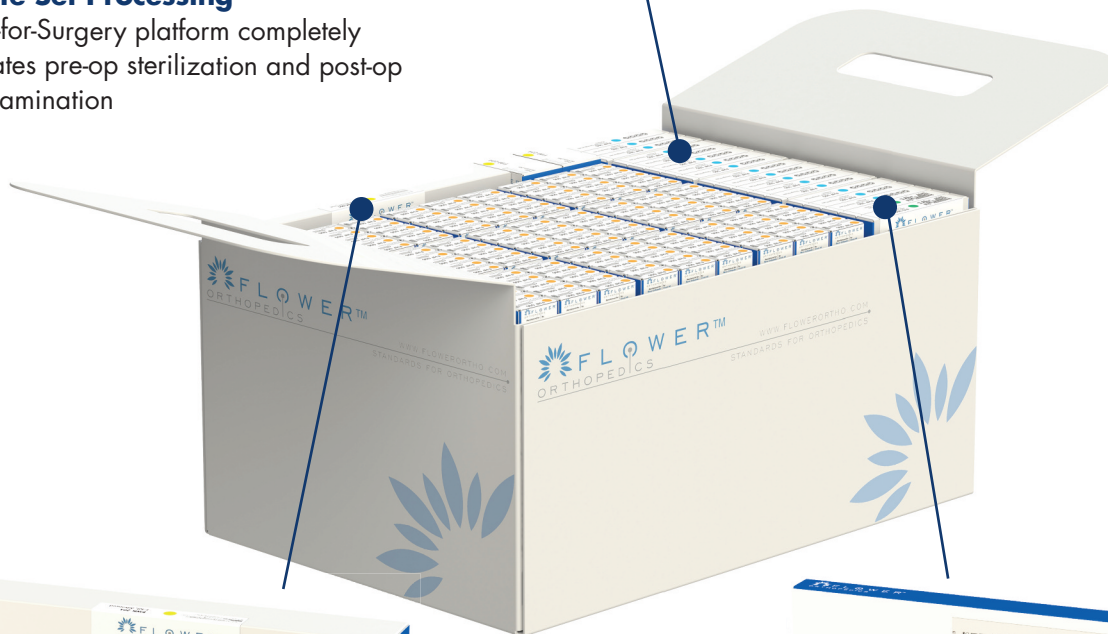


Complete Case Faster

- Single-use instruments are always sharp, pristine and specifically designed to reduce surgical steps

Eliminate Set Processing

- Ready-for-Surgery platform completely eliminates pre-op sterilization and post-op decontamination



Decrease Infection Risk

- Individually packaged instruments are always sterile, reducing infection potential



Reduce OR Turn Over Time

- Complete several back-to-back cases from one FlowerCube

The FlowerCube™

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