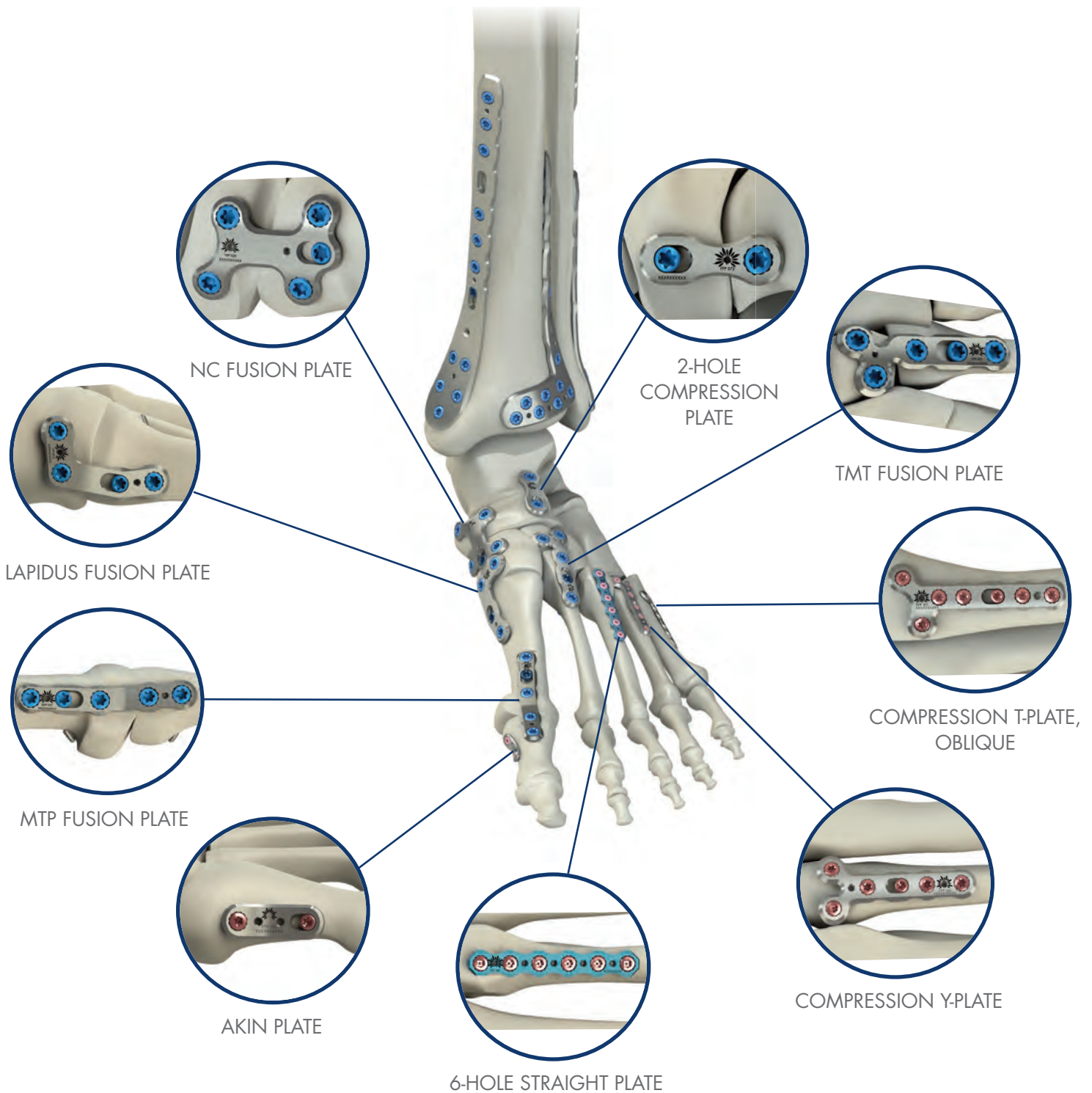


The Flower Akin Plate

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 Akin Plate – Product Rationale





The Flower Akin Plate consists of a low profile neutralization plate designed to uniquely accommodate the specific biomechanical and anatomic considerations of the proximal phalanx.

The Flower Akin Construct consists of two bicortical screws placed on either side of the osteotomy providing greater fixation than a single interfragmentary screw.

The Flower Akin Plate allows the surgeon to perform a transverse closing wedge osteotomy at the apex of the phalangeal deformity and achieve bicortical fixation. In the event a derotational osteotomy is necessary, bicortical fixation is essential. The Flower Akin Plate allows for use of variable angle locking and non-locking screws. Special compression screws are available for dynamic compression through the plate's compression slot.

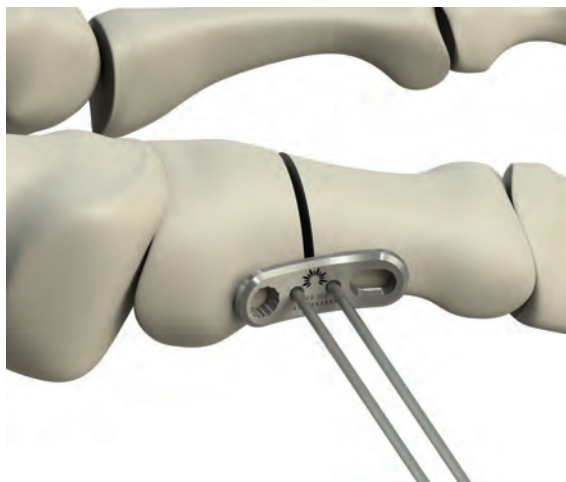
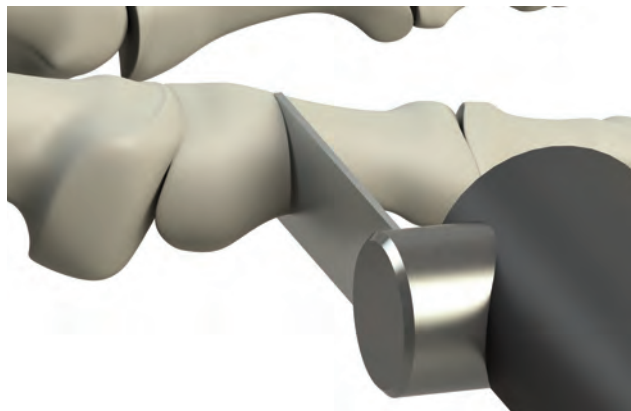
The Flower Akin Plate – Design Features

	PLATE RATIONALE	SURGICAL BENEFIT
	Plate features a locking and compression hole specific to the Akin Procedure.	Variable angle screw holes allow for $\pm 10^\circ$ of angulation in all directions.
	Plate is pre-contoured to fit on the curvature of the phalanx.	Limits need for plate bending and optimizes osteotomy placement at apex of deformity.
	Anatomic and low-profile	Plate avoids soft tissue irritation.
	Robust construct design	Plate and screw construct provides rotational stability and axial compression

The Flower Akin Plate – Surgical Strategy

Step 1 – Osteotomy Placement

- The transverse Akin osteotomy is planned and performed at the apex of the deformity.
- No provisional fixation is necessary if the lateral hinge has been left intact.
- Provisional fixation with a Flower K-Wire Kit (KWK 001) is an option should the lateral hinge be compromised or a derotational osteotomy performed.

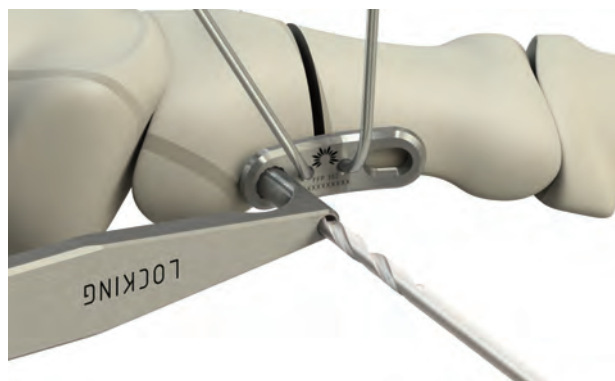


Step 2 – Plate Placement Using Flower K-Wire Kit (KWK 001)

- Contouring should not be necessary on either the phalanx or the plate.
- The plate is placed in the medial curvature of the proximal phalangeal shaft with locking hole proximal to the osteotomy.
- Once placement is confirmed, the plate is held in place with 2 Flower K-Wires.

Step 3 – Drill Holes and Screw Placement

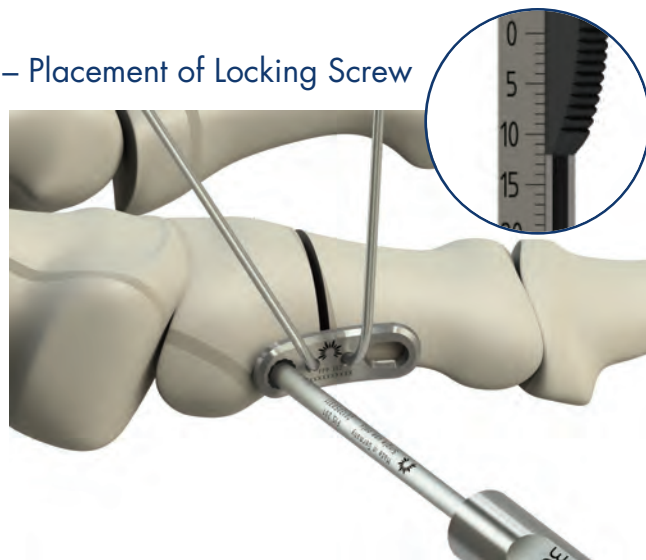
- A 2.4mm variable angle locking screw is recommended for the proximal portion of the construct. Using the locking end of the drill guide, the (DBK 024) is used to make a bicortical drill hole in the proximal locking hole.



The Flower Akin Plate – Surgical Strategy

Step 4 – Drill Hole Measurement using the Depth Gauge – Placement of Locking Screw

- It is important that the depth gauge is fully seated into the drill hole before the hook probe is advanced into the pilot hole.
- The hook of the depth gauge is engaged behind the opposite cortex of the pilot hole and the pilot hole depth can be read off the distal end of the slider.
- Insert the locking screw into the proximal locking hole using the Flower Torque Limiting Screwdriver that is part of the Flower K-Wire Kit (KWK 001).

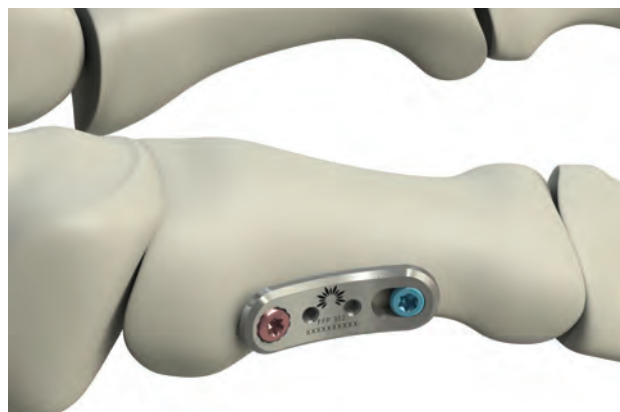


Step 5 – Axial Compression Through the Plate

- A 2.4mm variable angle compression screw is used on the distal portion of the construct. Using the compression end of the drill guide positioned distally in the slot and with the arrow pointed towards to the osteotomy, the compression slot is drilled eccentrically with a 1.8mm drill bit (DBK 024). It is essential that this be drilled in a bicortical fashion.
- Measure the pilot hole using the Flower Depth Gauge found in the KWK 001 and place a 2.4mm compression screw.
- Remove the K-Wires prior to completing placement of the non-locking compression screw.

Step 6 – The Final Construct

The construct allows for potential bicortical fixation combining a proximal locking screw and a distal dynamic compression screw. This allows the surgeon to place the transverse osteotomy at the apex of deformity allowing for maximal deformity correction. In addition, if a derotational osteotomy is needed, the bicortical nature of this construct removes the need for additional fixation.



The Flower Akin Plate – Implant Selection

VARIABLE ANGLE LOCKING SCREWS

Screw Diameters	Product Description	Lengths
2.4mm	2.4mm Variable Angle Locking Screw	6mm-30mm



VARIABLE ANGLE COMPRESSION SCREWS

Screw Diameter	Product Description	Lengths
2.4mm	2.4mm Variable Angle Compression Screw	6mm-22mm



FLOWER AKIN PLATE PORTFOLIO

Part #	Product Description	Lengths
FFP 302	Akin Plate	2-Hole



The Flower Akin Plate – Single-Use Instrument Overview

K-WIRE KIT (KWK 001)

Kit Size	Contents of Kit
K-Wire Kit, Small	Torque Wrench (Small), Depth Gauge (Small) K-Wire, D: 0.8mm (2 pieces)

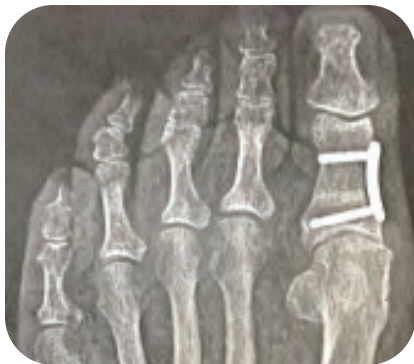
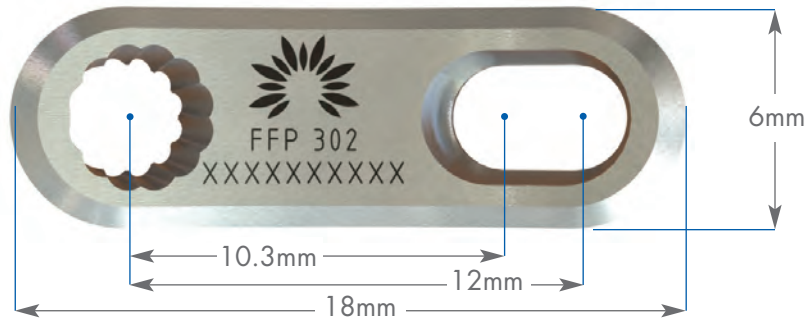


DRILL BIT KIT (DBK 024)

Screw Diameter	Contents of Kit
2.4mm	Drill Bit, D: 1.8mm, Drill Guide



The Flower Akin Plate – Dimensions



FlowerCube™: Schedule. Treat. Turn.



Schedule Case Sooner.

(Ready-for-Surgery™)

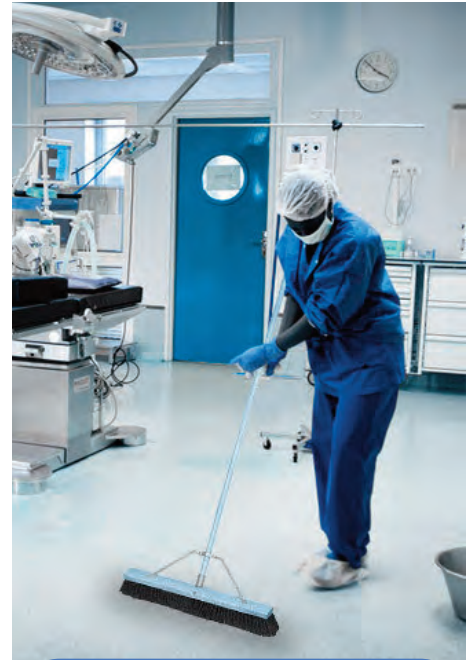
- No cleaning and sterilization
- FlowerCube is always ready to complete the case
- No time consuming set drop off



Treat Confidently.

(Sterile & Disposable)

- Instrument kits are always complete
- Drill bits are always sharp
- Guaranteed sterility



Turn OR Faster.

(FlowerCube)

- FlowerCube is always ready for the next surgery
- No delay with back to back cases
- Enough sterile inventory for multiple cases