

AlloSync™ Anatomic Reconstruction Wedge

Surgical Technique



AlloSync™ – Reconstruction Wedge

AlloSync reconstruction wedges are anatomically contoured grafts made from 100% allograft bone for Cotton and Evans procedures.

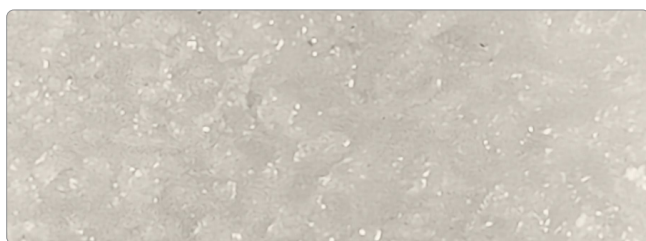
Eight profiles are available for Cotton procedures (plantar flexion opening wedge osteotomy of the medial cuneiform). The convex medial and concave lateral shape maximizes bone contact and does not violate the intercuneiform joint. The 12 profiles available for Evans procedures provide reliable and precise correction.

The AlloSync Reconstruction Wedge Advantage:

- › Made with dense cancellous bone for increased strength
- › Grafts come prehydrated
- › Sterile to device-grade standards
- › Grafts can be soaked in biologic fluids such as PRP or BMC prior to implantation
- › Ambient temperature storage

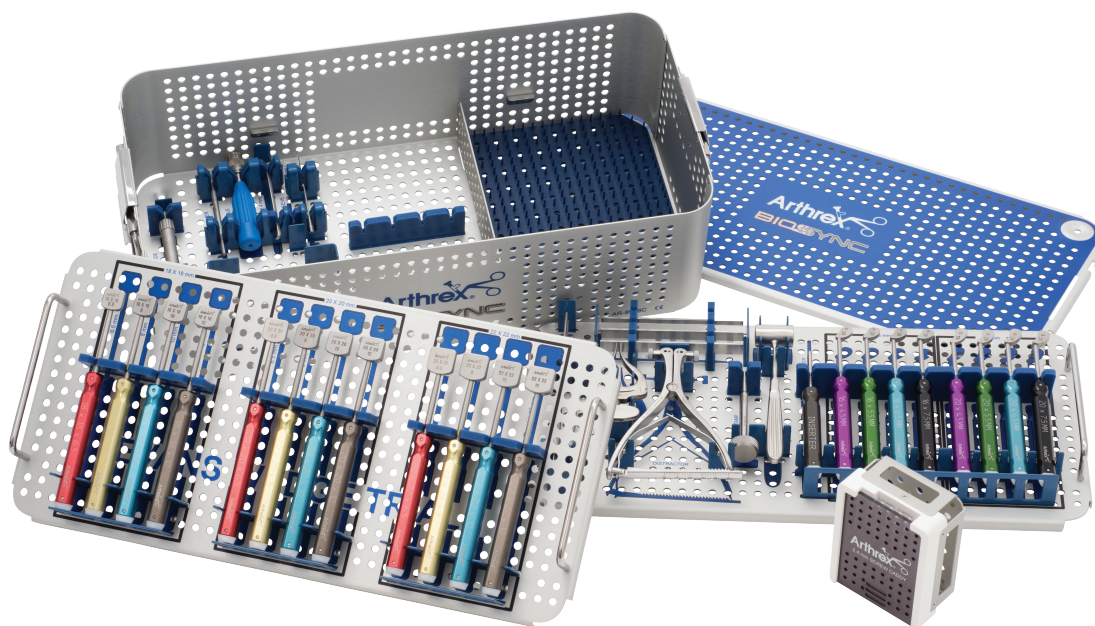


Anatomic Cotton AlloSync Wedge



AlloSync reconstruction wedges can be used in conjunction with the BioSync® reconstruction instrument set (AR-8948S). This set includes wedge trials that correspond with each of the available AlloSync wedges. Additionally, the BioSync wedge tamp can be used for AlloSync wedge insertion and positioning.

BioSync
Reconstruction
Instrument Set
AR-8948S



Anatomic Evans Wedge Surgical Technique



1

Make a longitudinal incision just below the sinus tarsi to expose approximately 3 cm of the calcaneus proximal to the calcaneocuboid joint.



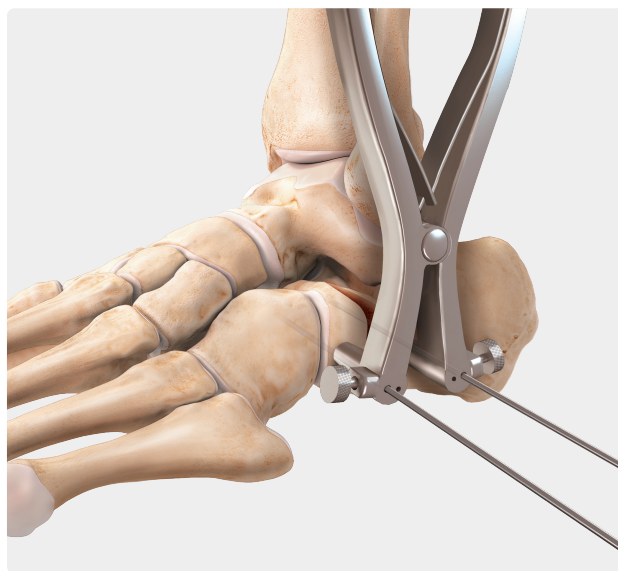
2

Carefully reflect the extensor digitorum brevis muscle belly superiorly and retract the peroneal tendons, along with the sural nerve, inferiorly to expose the anterior process of the calcaneus and the calcaneocuboid joint.



3

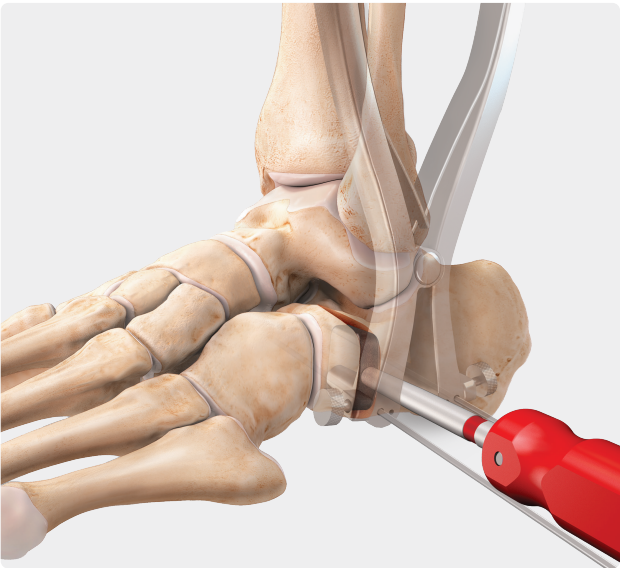
Beginning 10 mm to 15 mm proximal to the calcaneocuboid joint, perform an osteotomy with an oscillating saw parallel to the joint. Leave the medial cortex intact.



4

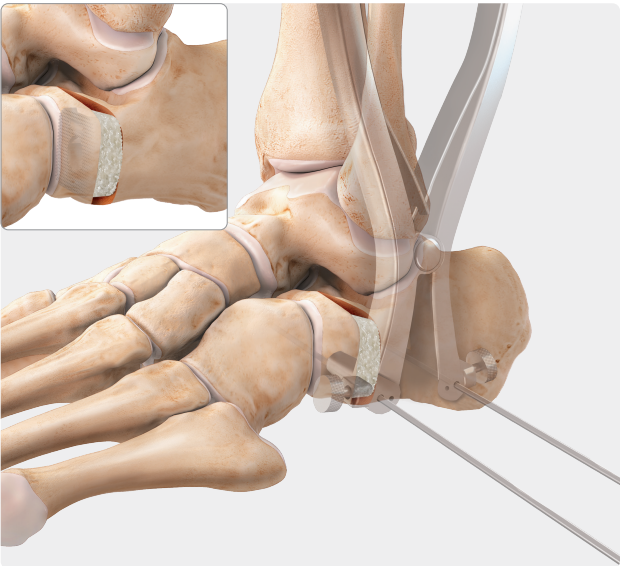
Place 2.4 mm or 1.6 mm guidewires on each side of the osteotomy and use a pin-style distractor to provide controlled distraction and unobstructed access to the osteotomy site. A provisional guidewire may be placed across the calcaneocuboid joint to prevent subluxation of the joint during distraction.

Anatomic Evans Wedge Surgical Technique



5

Anatomic correction is performed by carefully distracting the osteotomy site while preserving the medial cortical hinge. This distraction typically measures between 6.5 mm and 12 mm. Trialing should begin with the small trials and progress as the patient’s size and correction require. Assess whether the desired correction of the talonavicular joint occurs with the trial wedge both clinically and fluoroscopically.

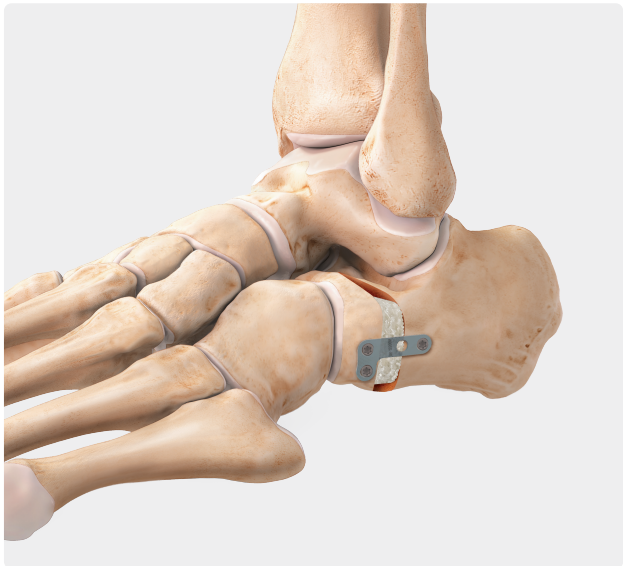
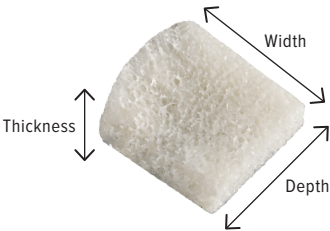


6

Seat the AlloSync graft in the osteotomy until flush with bone. A tamp may be utilized as needed. After removal of the distractor, adequate correction and graft position should be confirmed both clinically and radiographically; if additional implant positioning is required, use the tamp to make adjustments.

AlloSync™ Reconstruction Evans Wedge Trial Sizing					
Footprint Image	Implant Part no.	Width (mm)	Depth (mm)	Thickness (mm)	Thickness Image
	ABS-2810-1806	18	18	6.5	
	ABS-2810-1808			8	
	ABS-2810-1810			10	
	ABS-2810-1812			12	
	ABS-2810-2006	20	20	6.5	
	ABS-2810-2008			8	
	ABS-2810-2010			10	
	ABS-2810-2012			12	
	ABS-2810-2206	22	22	6.5	
	ABS-2810-2208			8	
	ABS-2810-2210			10	
	ABS-2810-2212			12	

Open the selected size wedge. At the surgeon’s discretion, AlloSync wedges may be soaked in biologic fluids such as PRP or BMC prior to insertion.



7

Ancillary fixation can be added when using AlloSync reconstruction wedges. Refer to the Comprehensive Foot System brochure (LB1-0437-EN) to see the various plates that can be used over the AlloSync reconstruction wedges. Commonly used plates for Evans osteotomy include the flat L-plate, medium X-plate, or large X-plate. Plate selection is based on the AlloSync reconstruction wedge used and patient anatomy.

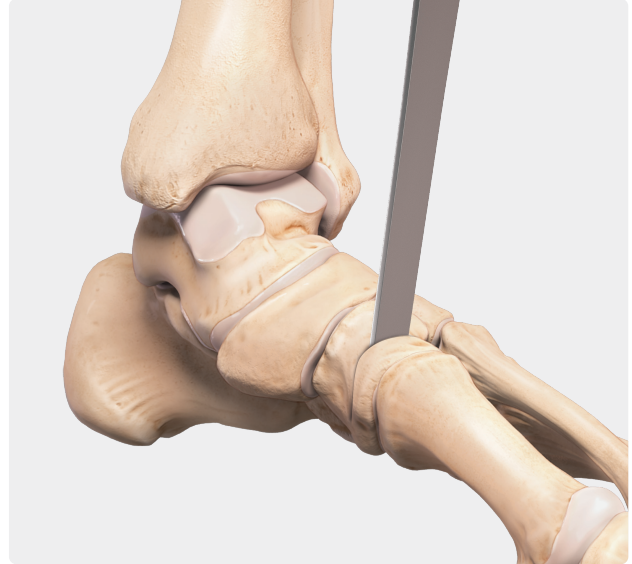
Anatomic Cotton Wedge Surgical Technique

The anatomic design of the AlloSync™ Cotton wedge's helps prevent prominence and violation of the intercuneiform joint (as seen with triangle-shaped wedges). The following surgical technique describes the use of the anatomic AlloSync Cotton reconstruction wedges in an opening wedge cuneiform osteotomy. This technique can also be applied to other opening wedge osteotomies of the foot that require wedges of similar size.



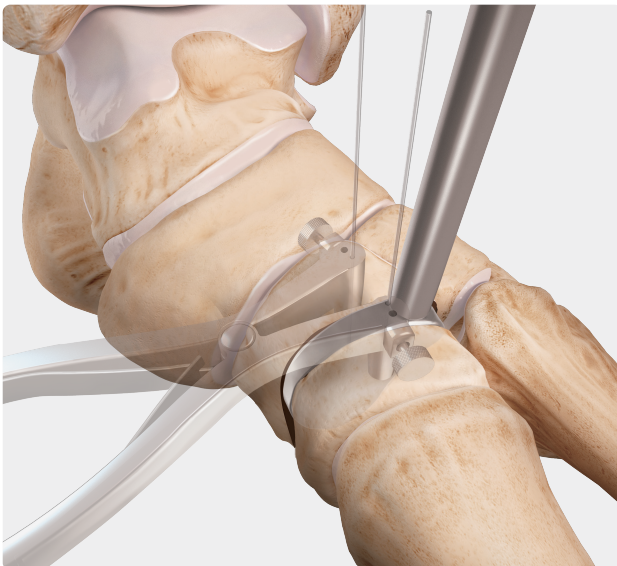
1

Make an incision dorsally over the medial cuneiform. Retract the extensor hallucis longus, and dissect the soft tissues down to the surface of the medial cuneiform. Make a transverse osteotomy in the center of the medial cuneiform parallel to the first tarsometatarsal joint. Take care to preserve the plantar cortex of the cuneiform.



2

Gently open the osteotomy using a single or stacked osteotome technique; maintain distraction with a heart- or pin-style distractor.

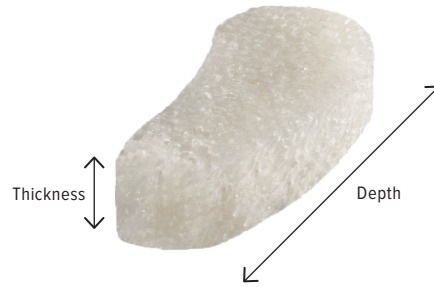


3

Distract the osteotomy site to the surgeon's desired reconstruction between 4.5 mm and 7.5 mm. Start with the smaller trials first and proceed to exchange the colored trial inserters with thicker/larger trials. Assess whether the desired anatomic correction occurs with the trial wedge both clinically and fluoroscopically (shape and size). Correction is verified under fluoroscopy by assessing the declination of the first metatarsal. Once the correct footprint and thickness of the wedge are determined, record the trial's size.

AlloSync™ Reconstruction Cotton Wedge Trial Sizing

Footprint Image	Implant Part no.	Width (mm)	Thickness (mm)	Thickness Image
	ABS-2800-1645	16	4.5	
	ABS-2800-1655		5.5	
	ABS-2800-1665		6.5	
	ABS-2800-1675		7.5	
	ABS-2800-2045	20	4.5	
	ABS-2800-2055		5.5	
	ABS-2800-2065		6.5	
	ABS-2800-2075		7.5	



Open the selected size wedge (box has sticker with corresponding color). Prior to inserting the wedge, the graft may be soaked with a biologic fluid such as PRP or BMC per surgeon preference.



4

Seat the AlloSync graft in the osteotomy until flush with bone. Check final position fluoroscopically, using a tamp if needed. After removal of distraction, adequate correction and graft position should be confirmed both clinically and radiographically.



5

Ancillary fixation can be used with AlloSync reconstruction wedges. Refer to the Comprehensive Foot System brochure (LB1-0437-EN) to see the various plates that can be used over the AlloSync reconstruction wedges. The flat Cotton plate or the 2-hole straight plate can be used for Cotton osteotomy. Plate selection is based on the AlloSync reconstruction wedge used and patient anatomy.

Ordering Information

AlloSync™ Reconstruction Wedge

AlloSync Cotton Wedge, 16 × 4.5 mm	ABS-2800-1645
AlloSync Cotton Wedge, 16 × 5.5 mm	ABS-2800-1655
AlloSync Cotton Wedge, 16 × 6.5 mm	ABS-2800-1665
AlloSync Cotton Wedge, 16 × 7.5 mm	ABS-2800-1675
AlloSync Cotton Wedge, 20 × 4.5 mm	ABS-2800-2045
AlloSync Cotton Wedge, 20 × 5.5 mm	ABS-2800-2055
AlloSync Cotton Wedge, 20 × 6.5 mm	ABS-2800-2065
AlloSync Cotton Wedge, 20 × 7.5 mm	ABS-2800-2075
AlloSync Evans Wedge, 18 × 18 × 6.5 mm	ABS-2810-1806
AlloSync Evans Wedge, 18 × 18 × 8 mm	ABS-2810-1808
AlloSync Evans Wedge, 18 × 18 × 10 mm	ABS-2810-1810
AlloSync Evans Wedge, 18 × 18 × 12 mm	ABS-2810-1812
AlloSync Evans Wedge, 20 × 20 × 6.5 mm	ABS-2810-2006
AlloSync Evans Wedge, 20 × 20 × 8 mm	ABS-2810-2008
AlloSync Evans Wedge, 20 × 20 × 10 mm	ABS-2810-2010
AlloSync Evans Wedge, 20 × 20 × 12 mm	ABS-2810-2012
AlloSync Evans Wedge, 22 × 22 × 6.5 mm	ABS-2810-2206
AlloSync Evans Wedge, 22 × 22 × 8 mm	ABS-2810-2208
AlloSync Evans Wedge, 22 × 22 × 10 mm	ABS-2810-2210
AlloSync Evans Wedge, 22 × 22 × 12 mm	ABS-2810-2212

BioSync Reconstruction Instrument Set	AR-8948S
Wedge Inserter	AR-8948-01
Osteotomy Distractor	AR-13225
Distractor, medium	AR-8948CD
Mallet	AR-8826M
BioSync Reconstruction Wedge Instrument Case	AR-8948C
Cotton Wedge Trial, 16 × 4.5 mm	AR-8948T-1645
Cotton Wedge Trial, 16 × 5.5 mm	AR-8948T-1655
Cotton Wedge Trial, 16 × 6.5 mm	AR-8948T-1665
Cotton Wedge Trial, 16 × 7.5 mm	AR-8948T-1675
Cotton Wedge Trial, 20 × 4.5 mm	AR-8948T-2045
Cotton Wedge Trial, 20 × 5.5 mm	AR-8948T-2055
Cotton Wedge Trial, 20 × 6.5 mm	AR-8948T-2065
Cotton Wedge Trial, 20 × 7.5 mm	AR-8948T-2075
Evans Wedge Trial, 18 × 18 × 6.5 mm	AR-8942T-1806
Evans Wedge Trial, 18 × 18 × 8 mm	AR-8942T-1808
Evans Wedge Trial, 18 × 18 × 10 mm	AR-8942T-1810
Evans Wedge Trial, 18 × 18 × 12 mm	AR-8942T-1812
Evans Wedge Trial, 20 × 20 × 6.5 mm	AR-8942T-2006
Evans Wedge Trial, 20 × 20 × 8 mm	AR-8942T-2008
Evans Wedge Trial, 20 × 20 × 10 mm	AR-8942T-2010
Evans Wedge Trial, 20 × 20 × 12 mm	AR-8942T-2012
Evans Wedge Trial, 22 × 22 × 6.5 mm	AR-8942T-2206
Evans Wedge Trial, 22 × 22 × 8 mm	AR-8942T-2208
Evans Wedge Trial, 22 × 22 × 10 mm	AR-8942T-2210
Evans Wedge Trial, 22 × 22 × 12 mm	AR-8942T-2212
Depth Guide	AR-13120G-2
Driver, T-8 hexalobe, self-retaining	AR-8916-27
Handle, small, w/ AO connection	AR-2001AOT
Holding sleeve, for 2.0 and 2.4 mm screws	AR-8920H
Drill Guide, 1.7 mm, Evans wedge	AR-8942-03
BioSync Wedge Tamp	AR-8942-01
Screwholding Forceps, self-retaining	AR-8941F
Osteotome, low profile, short, 5 mm	AR-13203-05
Osteotome, low profile, short, 10 mm	AR-13203-10
Osteotome, low profile, short, 12 mm	AR-13203-12

Products advertised in this brochure/surgical technique guide may not be available in all countries. For information on availability, please contact Arthrex Customer Service or your local Arthrex representative.

This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's directions for use. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level or outcomes.



Arthrex manufacturer, authorized representative, and importer information (Arthrex eIFUs)



US patent information