

# DESIGNED FOR SIMPLICITY AND PREDICTABILITY

The versatile design can be applied in both endoscopic and open techniques.



# endotine

Endotine® is designed for optimal control of brow height and shape.

# **Sutureless Fixation**

Eliminates cumbersome suture, bulky knots and lack of adjustability.

# Multiple Tines Unmatched structural integrity and balanced

distribution of tension.

Bioabsorbable Co-Polymer Eliminates secondary surgery for screw removal.

SUTURE ENDOTINE

**ENDOSCOPIC APPLICATION** 

# **Fast**

ENDOTINE allows fixation times approaching less than one minute per side in the hands of experienced clinicians.

# **Adjustable**

ENDOTINE allows simple read-justment of the tissue for greater aesthetic control of brow height and shape.

## Secure

ENDOTINE's robust construction and multiple-tine design provide secure strength throughout the crucial, early healing period.

Soft-tissue fixation remains the least controllable and least predictable part of the forehead lift procedure. Until now, only suture based and percutaneous screw fixation techniques were available, often with frustrating results.

The ENDOTINE devices deliver a novel and effective solution for fixation of the scalp tissue, addressing the primary challenge of the forehead lift procedure. ENDOTINE devices feature sutureless MultiPoint Technology (MPT™), a breakthrough platform technology designed to facilitate facial aesthetic procedures, reduce operating time and improve surgical outcomes.

The device's unique design provides multiple points of contact with the suspended tissue, distributing tension over a wide area to maximize fixation strength.

# The Right Size for All Types of Patients

Select from three different sizes to match the specific needs of your patient.

Designed for patients with average to below-average scalp thickness.

22202 The ENDOTINE Forehead 3.0, 2-Pack

This ENDOTINE uses tines that are 3.0mm in length to reduce issues of palpability or sensitivity.

23202 The ULTRATINE Forehead 3.0, 2-Pack

This ULTRATINE uses tines that are 3.0mm in length to reduce issues of palpability or sensitivity.

### 22102

The ENDOTINE Forehead 3.5, 2-Pack

Features tines that are 3.5mm in length and is best for patients with average to thick scalps where more secure fixation is desired.

## 23102 The ULTRATINE Forehead 3.5, 2-Pack

Features tines that are 3.5mm in length and is best for patients with average to thick scalps where more secure fixation is desired.

### CFD-010-0167 The ENDOTINE Forehead-mini ™ 3.0

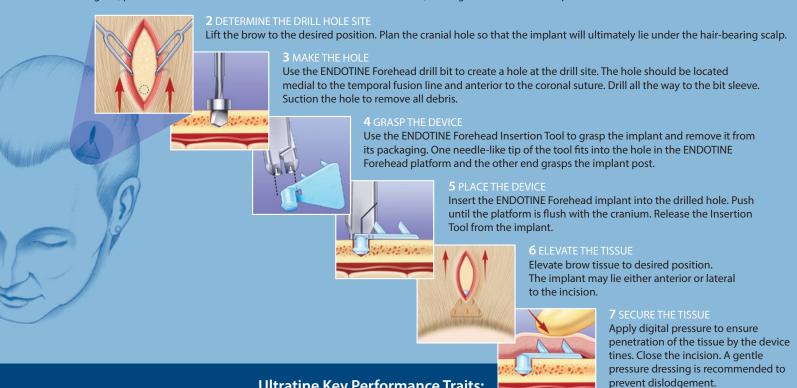
Offers a 60% smaller footprint than the Forehead device and is best for patients with high hairlines, thin scalps, balding patients or those where a smaller, sub 10mm incision is needed.

# Endoscopic and Open Forehead Lift Procedures

The Ultratine Forehead consists of a similar, but uniquely different polylactic acid and polyglycolic acid polymer blend that bio-absorbs in a more desirable way. The structure of the material quickly softens under the skin as periosteal attachment is complete, greatly enhancing the patient's post operative experience.

Endontine Forehead is composed of an 82:18 polylactic acid and polyglycolic acid polymer witha a proven track record of performance and reliability.

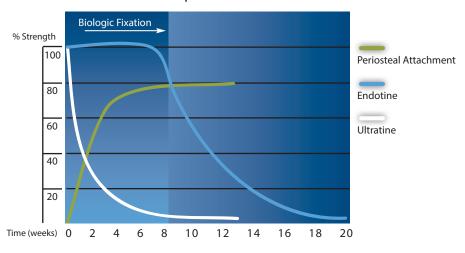
Make a sagittal, paramedian incision in the usual fashion. Perform the dissection, making sure to achieve adequate release.

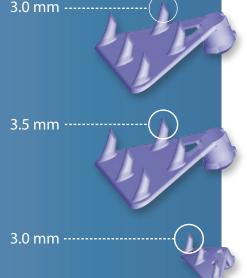


# **Ultratine Key Performance Traits:**

- Ultratine loses 90% of its strength in 60 days, while Endotine loses only 36% of its strength in 60 days.
- Ultratine's rapid strength degradation means the patient has less palpability and sensitivity after 3 months.

# Ultratine versus Endotine **Absorption Profile**





## Endotine Forehead-mini Procedure

### Fewer Tines, More Patients

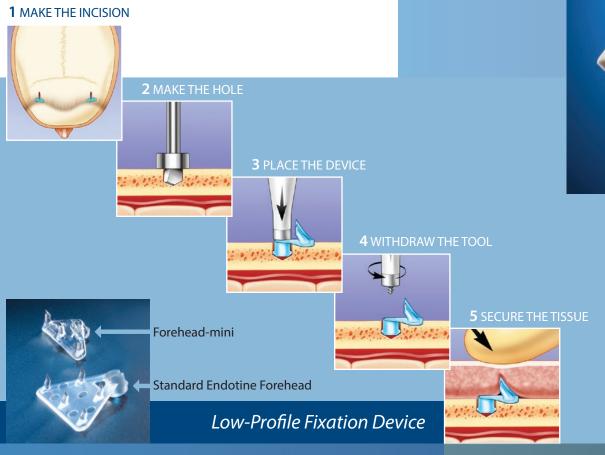
The Forehead-mini provides the security and predictability of ENDOTINE multipoint fixation to patients who are not currently candidates because of concerns with palpability, visibility, sensitivity or prolonged absorption.

Three 3.0mm tines and an ultra thin platform offer security without sensitivity for patients who may be affected by palpability.

With a low profile for reduced visibility and a petite size for a sub-10mm incision, the Forehead-mini is ideally suited for patients with below average scalp thickness.

Reduced visibility and incision size allow the Mini to be placed confidently below the hairline.

With one third the mass of an ENDOTINE Forehead, the Forehead-mini will more quickly absorb to an impalpable size, satisfying sophisticated and discriminating patients who demand a rapid recovery and quick return to daily activities.



### An Expanded Approach to Forehead Lifts

The ENDOTINE Forehead-mini features only three tines versus five for the ENDOTINE Forehead, and a platform that is 60% smaller.

# The low-profile ENDOTINE Forehead-mini fixation device provides high-performance results

### Low-Profile

Three tines on an ultra-thin platform designed to reduce palpability and visibility.

### **High-Performance**

Predictable brow elevation and secure tissue fixation provided by our proven multipoint technology.

### Bleph and brow, an unbeatable combination

You can now achieve the combined goals of removing upper eyelid skin and repositioning of the brow in a single surgical session.

### No endoscope required

By utilizing the upper blepharoplasty incision for access, the ENDOTINE TransBleph helps simplify the browlift procedure. No expensive endoscopic equipment is required, meaning fewer instruments to set up, process and maintain.

The ENDOTINE TransBleph is the best of both worlds for rejuvenation surgeries: the pioneering fixation of multipoint, bioabsorbable implants, and the ability to perform two effective procedures through a single incision—without the need of general anesthesia or expensive equipment.

### CFD-080-0177

### **ENDOTINE TransBleph**

Features tines with tips that are 3.0mm above the platform. This size is designed for patients with thin brow tissue where sensitivity to tine palpability may be a concern.



### AN ENDOTINE TRANSBLEPH FOR ALL PATIENT TYPES

#### CFD-080-0167

### **ENDOTINE TransBleph**

Features tines with tips that are 3.5mm above the platform. This size is designed for patients with thick brow tissue where more aggressive fixation is desired.



### 1 APPROACH

The supraorbital rim is approached subperiosteally through an upper blepharoplasty incision. The brow is released to create adequate mobility.



An anchoring hole for the ENDOTINE TransBleph is drilled in the frontal bone using the enclosed drill bit.

### 3 PLACE THE DEVICE

The implant is inserted into the hole until the platform lays flush against the frontal bone.

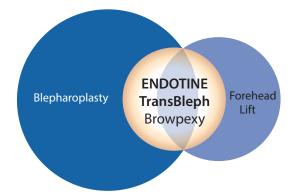
### RELEASE THE DEVICE

The implant is released from the insertion tool.

# **Expand Your Market**

### **5** TWO FIXATION POINTS

- 1) Elevate the periosteum to achieve the desired brow height. Use digital pressure to engage the tissue.
- 2) Elevate the edge of the periosteum up and over the tines for maximum lift.





### CLOSURE

The incision is closed with standard technique and a compression bandage is applied.

# **Endotine Midface Multi-Vector Options**

# Multipoint Fixation Delivers Results in Midface Suspension

Now, with both of the ENDOTINE Midface devices, you can eliminate cumbersome fixation suture with a unique and effective solution that utilizes multiple points of contact to suspend delicate midface tissue. These patented devices incorporate five tiny tines to distribute tension over a wide area, maximizing fixation strength and holding power. What's more, the ENDOTINE Midface implants facilitate rapid deployment via temporal, oral, or lower bleph incisions in minutes, saving valuable OR time while simplifying the surgical procedure. All of which can expand your treatment options and your practice.



### **ENHANCE CHEEK PROJECTION and CHEEK VOLUME**

Uses your patient's own tissue while shortening the lower eyelid for a natural and long lasting rejuvenation effect.

### **FAST**

The ENDOTINE Midface implants provide secure soft tissue fixation in five minutes or less in the hands of an experienced surgeon.

### **ADJUSTABLE**

ENDOTINE Midface devices allow simple adjustment of tension and position for greater aesthetic control of cheek elevation and projection.

### **SECURE**

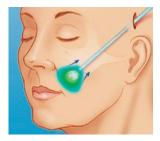
By distributing elevation forces over five tines, the proprietary multipoint technology offers unmatched security of tissue fixation.

### **MULT-VECTOR OPTIONS**

Lateral or vertical lifting allows you to optimize the procedure for each patient.

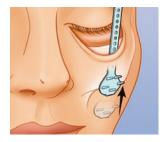


Each ENDOTINE Midface ST comes pre-loaded, ready for immediate placement.



Midface ST SUSPENSION

- Temporal or oral retrograde placement options
- Secure soft-tissue fixation
- Easy adjustability for optimal correction
- Reduced operative time



Midface B SUSPENSION

- Utilizes a lower blepharoplasty incision
- Vertical vector lift
- Securely anchors to infraorbital rim with a bioabsorbable screw
- · No endoscope required

### The ENDOTINE Midface devices -raising midface surgery to an entirely new level.

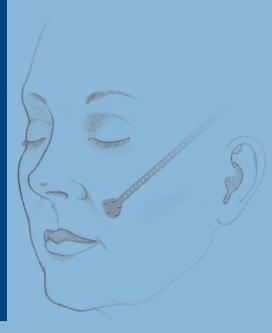
Volume enhancement and projection with the ENDOTINE Midface implants is as simple as the devices are elegant. Easily deployed, their integrated leashes make adjustments simple for optimal control and correction. The bioabsorbable material is present during the critical healing period and then is reabsorbed.

# MultiPoint Technology The Sutureless Solution to the Problem of Fixation

MicroAire is revolutionizing soft-tissue fixation by providing a range of products and applications based on its unique and proprietary MultiPoint Technology ( $MPT^{TM}$ ).

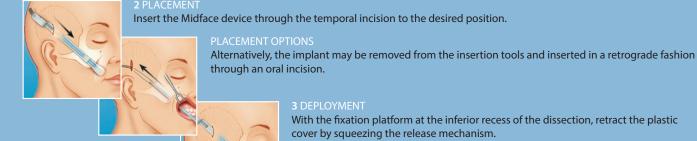
These implantable, bioabsorbable devices are designed with the goal of enabling sutureless fixation, reducing operating time, simplifying procedures and optimizing clinical results.





### 1 INITIAL INCISIONS

The midface subperiosteal dissection is performed using the surgeon's typical temporal approach, which may include additional incisions (buccal or periorbital). Dissection should continue to the inferior maxilla to assure that the fixation platform is positioned over the maxillary antrum after elevation.



### 4 EIVATION

Once the platform is in position and deployed, apply digital pressure over the cheek to engage.

### **5** INSERTION TOOL REMOVAL

Remove the insertion tools while maintaining digital pressure on the fixation platform.

### **6** ELEVATION

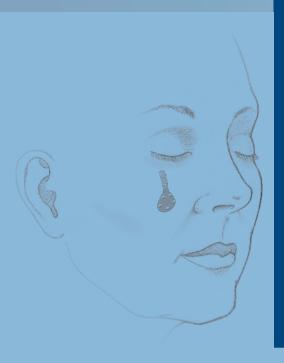
Elevate the midface tissues to the desired position by applying tension to the anchoring leash exiting the temporal incision. Anchor the leash to the temporal fascia with suture and trim leash to lay flat in the incision.

# Midface B Soft Tissue Suspension Procedure

# Multiple Vector Options Choose Your Vector

There's a new concept in midface surgery. One that for the first time delivers enhanced control over conventional approaches to soft-tissue fixation.







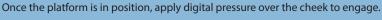
### 1 INITIAL INCISIONS

The midface infraorbital approach is performed using the surgeon's standard technique. Dissection should extend to the inferior maxillary area.



### 2 PLACEMENT

Insert the Midface B device through the infraorbital incision and advance it to the desired position.



### 4 ELEVATION

Elevate the midface tissues to the desired position by applying tension to the anchoring leash.

### 5 SCREW PLACEMENT

Once optimal midface elevation has been achieved, note an appropriate point on the infraorbital rim or zygomatic bone for screw anchor placement.

### 6 CREATE ANCHOR POINT

An anchoring hole for the Midface B is drilled at the desired position using the reusable drill bit. Tap the screw threads into the drilled hole, using the reusable tap.

Gently and slowly advance the screw anchor with installation tool in a clockwise fashion.



### 8 TRIM

Using clipper tool, trim off winged portion of the anchor screw and excess leash.



# **Endotine Ribbon-Lift Procedure**

# Indispensable Instrument Incomparable Ease and Predictability in Lower-face Procedures

Using patented multipoint fixation technology, the bioabsorbable Endotine Ribbon™ implant offers unprecedented flexibility, with a variety of surgical approaches, lift vectors, degrees of lift, and ease of use.

**Revolutionary Evolution**—Improve your fixation methodology & flexibility without changing your surgical approach.

Self-Contained—The Endotine Ribbon's protective cover doubles as its insertion device.

**Simple and Quick**—Using a minimally invasive approach, perform an entire procedure in minutes per side under local anesthesia.

**Minimally-Invasive or Open Surgical Approach.** The Ribbon deploys quickly and easily in a neck lift, a jowl lift, or as part of a full face lift, via a tiny incision or a fully open procedure.

**Adjustable Lift Vector and Degree of Lift.** Choose your lift vector and degree of lift to suit the patient's needs and procedure. Vary vector and degree of lift instantaneously for dramatic intraoperative results and beautiful cervicomental definition.

**Secure and Adjustable.** The Ribbon's patented MultiPoint design greatly surpasses the fixation power of multiple traditional suture loops but can be easily repositioned for optimal correction.

**Long or Short Device.** You customize the Ribbon to the procedure and the patient's anatomy. Trim the fixation-area or the smooth-leash length to create the best dimension for an ideal surgical outcome.

**Results and Patient Satisfaction.** Unlike any other traditional method, the Endotine Ribbon's combination of secure fixation and bioabsorbability lets nature's healing process proceed without residual fixation artifacts to detract from the results, leading to greater patient satisfaction!



MICRO/IRE

ENDOTINE Ribbon

- Short learning curve
- No special instruments
- Straightforward placement





Before

After

Ribbon Lift Procedure for the Neck



Make the appropriate incision.

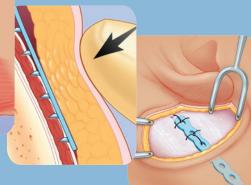








For optimal results, device placement should follow full release of the surgical plane.



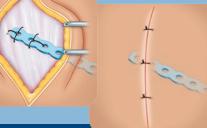
Engage the tissue and elevate to the desired position.





6 CLOSE Close the incision and apply a compression dressing as appropriate.





Ribbon Lift Procedure for the Jowl

# **Instruments**

# **Manual Surgical Drill**

CATALOG NO. CFD-899-4000





Simplify your OR, and your procedures, with the Manual Surgical Drill. This unique manual drill provides an innovative design that delivers both performance and control in one easy to use package.

- Designed for all drilling applications
- · Sealed, maintenance-free design
- Eliminates cumbersome cables, tanks and hoses; nothing to hook up or attach
- Unique transmission delivers high torque with minimal effort
- Axial design provides both enhanced comfort and control for manual drilling
- Universal 3-Jaw chuck allows use of a wide variety of drill bit sizes



# **Forehead Instrument Kit**

CATALOG NO. CFD-010-4320

For use with Endotine Forehead and Ultratine implants. Kit includes sterilization case, two cranial drill bits with depth stop and implant insertion tool.

### Replacement Components

CFD-010-4313 Endotine Drill Bit With Stop
CFD-010-4305 Endotine Insertion Instrument



# **Midface B Instrument Kit**

**CATALOG NO. CFD-020-4320** 

Replacement Components

CFD-020-4200 Endotine Midface B Tap Tool
CFD-020-4250 Endotine Installation Tool

CFD-020-4302 Endotine Midface B 1.25mm Drill Bit CFD-020-4400 Endotine Midface B Screw Clipper

PRODUCT NUMBER	PRODUCT NAME	PRODUCT DESCRIPTION	QUANTITY
22202	ENDOTINE Forehead™ 3.0	Bioabsorbable brow fixation device, 3.0mm tine height.	2 Pack
22102	ENDOTINE Forehead™ 3.5	Bioabsorbable brow fixation device, 3.5mm tine height.	2 Pack
23202	ULTRATINE Forehead™ 3.0	Bioabsorbable brow fixation device, 3.0mm tine height.	2 Pack
23102	ULTRATINE Forehead™ 3.5	Bioabsorbable brow fixation device, 3.5mm tine height.	2 Pack
CFD-010-0167	ENDOTINE Forehead- <i>mini</i> ™ 3.0	Bioabsorbable brow fixation device, 3.0mm tine height. Includes disposable drill bit and insertion tool.	Single
CFD-080-0177	ENDOTINE TransBleph™ 3.0	Bioabsorbable brow fixation device, 3.0mm tine height. Includes disposable drill bit and insertion tool.	Single
CFD-080-0167	ENDOTINE TransBleph™ 3.5	Bioabsorbable brow fixation device, 3.5mm tine height. Includes disposable drill bit and insertion tool.	Single
13005	ENDOTINE Ribbon™	Bioabsorbable brow fixation device, 2.5mm tine height.	5 Pack
CFD-060-0197	ENDOTINE Midface™ ST 4.5	Bioabsorbable midface suspension device, 4.5mm tine height. Fixes to soft tissue.	Single
CFD-020-0197	ENDOTINE Midface™ B 4.5	Bioabsorbable midface suspension device and anchor screws. Fixes to bone.	Single
CFD-010-4320	ENDOTINE Forehead™ Instrument Kit	ENDOTINE Forehead insertion tool, drill bits and sterilization tray with lid.	Single
CFD-020-4320	ENDOTINE Midface™ B Instrument Kit	Clipper, drill bit, tap tool, anchor inserter and sterilization tray with lid.	Single
CFD-899-4000	Manual Surgical Drill	Manual surgical hand drill	Single
19005	SurgiWire™ Incisionless Dissector	Subcutaneous dissection device	5 Pack



© 2016, MicroAire Surgical Instruments LLC. All rights reserved.

Phone: 800.722.0822 +1.434.975.8000

FAX: 800.648.4309 +1.434.975.4131

www.MicroAire.com



MicroAire Surgical Instruments, LLC 3590 Grand Forks Boulevard Charlottesville, Virginia 22911 USA