Mandible Modular Fixation System.
Comprehensive implant system for mandible trauma and reconstruction.

- Locking and reconstruction plates
- Trauma and microvascular plates
- IMF screw set
Mandible Modular Fixation System

The Synthes Mandible Fixation System provides a comprehensive plating system for mandibular trauma and reconstruction. The system includes numerous instrument options, and features the following plating choices:

**2.0 mm Mandible Locking Plates (MLP)**
- A locking and nonlocking advanced plating system for trauma, microvascular reconstruction and orthognathic surgery
- A variety of plates in four thicknesses and locked or nonlocked, self-drilling or self-tapping screws with StarDrive or PlusDrive recess

**Locking Reconstruction Plates (LRP)**
- Choice of 2.4 mm or 3.0 mm screws
- A locking and nonlocking system for the option of locked or standard screw-and-plate fixation to achieve stability
- Indicated for trauma or reconstruction applications
2.4 mm Mandible Trauma Plates
- Indicated for the fixation of mandibular fractures
- Features LC-DCP and universal fracture plates

2.4 mm Microvascular Plates
- Low-profile, limited-contact plates for mandible reconstruction
- For use in conjunction with a vascularized bone graft

IMF Screw Set
- 2.0 mm screws with cruciform recess
- For temporary perioperative use in stabilizing the occlusion
- For simple, nondisplaced, adult mandibular and maxillary fractures and orthognathic procedures
2.0 mm Mandible Locking Plate Module

Provides locked or nonlocked, self-drilling or self-tapping, 2.0 mm screw-and-plate fixation.

**Indications**
- Trauma
- Reconstructive surgery
- Orthognathic surgery

**Features**
- Single implant system addresses a broad range of indications
- Low-profile plating system minimizes implant palpability
- Made of commercially pure (CP) titanium for biocompatibility

**Locking screws (with PlusDrive and StarDrive recess)**
- Available in self-drilling and self-tapping designs
- Special double-lead threads in screw head engage and lock in threaded plate holes, eliminating a need for two-piece locking screws
- One size screw (2.0 mm) fits all 2.0 mm mandible locking plates (MLP)
- Made of high-strength titanium alloy*
- Locking screws are color-coded blue for ease of identification (nonlocking self-tapping are gold, self-drilling are silver)
- PlusDrive recess improves retention with screwdriver blade, reduces stripping and cam-out and provides off-axis screw placement ability

*Ti-6Al-7Nb
Mandible locking plates

- Four profiles accommodate a wide range of indications
- A variety of straight, angled and curved styles
- Hole spacing designed to optimize fixation in reconstructive surgery
- Design facilitates rapid three-dimensional contouring for improved anatomic fit
- Threaded plate hole accepts both nonlocking and locking 2.0 mm PlusDrive and StarDrive screws
- Mini plates for simple trauma; intermediate, large and extra plates for less stable trauma and microvascular reconstruction applications

Locking design

- Increases construct stability
- Decreases risk of screw back-out and subsequent loss of reduction
- Reduces the need for precise anatomic plate contouring
- Minimizes the risk of stripped screw holes
- Provides a positive stop for locking screws, especially when using the Synthes Battery Powered Screwdriver
- Preserves reduction intraoperatively by maintaining plate-to-bone position

<table>
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<tr>
<th>Thickness</th>
<th>Size</th>
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<tr>
<td>1.0 mm</td>
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<tr>
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<tr>
<td>2.0 mm</td>
<td>Extra</td>
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* Additional plates available in each thickness.
Locking Reconstruction Plate Module

Provides the option of locked or nonlocked screw and plate fixation to achieve stability

**Indications**
- Trauma
- Reconstruction*

**Features**
- Choice of 2.4 mm or 3.0 mm locking, or 2.4 mm nonlocking screws
- Low-profile plate-and-screw construct
- Commercially pure titanium for biocompatibility and MRI safety

*Plate fracture is possible when any plate bears the entire functional load for extended periods. Therefore, the implantation of bone graft immediately or at a later date is necessary to support the construct. (See also Prein J. ed. (1998) Manual of Internal Fixation in the Cranio-Facial Skeleton.)*

**Locking screws (with cruciform recess)**
- Special double-lead thread in the screw head engages and locks in the threaded holes of the plate
- The locking feature eliminates the need for expansion screws
- Color-coding assists in locking screw size identification
Locking reconstruction plates
- Plate hole design offers both locking and nonlocking options for trauma and reconstruction
- Selection includes various sizes of straight, angled, double-angled and condylar head plates
- Threaded plate hole accepts both 2.4 mm and 3.0 mm locking screws for optimal fixation
- Reconstruction plate with condylar head available *

Important: The titanium locking reconstruction plate with condylar head is not intended for use as a permanent prosthetic device, for patients with temporomandibular joint disorders (TMD), or patients with traumatic injuries to the temporomandibular joint (TMJ).

2.4 mm Titanium Locking Reconstruction Plate, 20 holes (449.621)

2.4 mm Titanium Locking Reconstruction Plate, with angle, 6 x 23 holes, right (449.633)

2.4 mm Titanium Locking Reconstruction Plate, with double angle, 5 x 22 x 5 holes (449.637)

* Titanium Locking Reconstruction Plate, with condylar head, 5 x 20 holes, right (449.648)
2.4 mm Mandible Trauma Module

**Indications**
- Mandible trauma
- Reconstruction

**Features**
- Mandible trauma plates available in straight, angled or crescent shapes
- LC-DCP and universal fracture plates used in conjunction with a tension band plate to rigidly fix the fracture
- Longer length 2.4 mm screws, in pop-up rack, for lag screw fixation
- Made of commercially pure (CP) titanium for biocompatibility

![Diagram of Mandible Trauma Module](image)

- 2.4 mm Titanium Compression Tension Band Plate, 6 holes (449.110)
- 2.4 mm Titanium LC-DCP Plate, 5 holes (449.15)
- 2.4 mm Titanium Universal Fracture Plate, 8 holes (449.38)
- 2.4 mm Titanium Crescent LC-DCP Plate, 6 holes (449.26)
- 2.4 mm Titanium Universal Fracture Plate, with angle, 4 x 4 holes (449.84)
2.4 mm Microvascular Module

**Indications**
- For mandible reconstruction

**Features**
- Single, continuous plate is flush, yet provides proper projection of the mandible
- Limited plate-to-bone contact improves vascularity beneath plate
- Low plate-screw profile reduces palpability and is more easily contoured
- Notched plate design aids in three-dimensional contouring
- Made of commercially pure (CP) titanium for biocompatibility

2.4 mm Titanium Microvascular Plate, with angle, 6 x 18 holes, right (449.446)

2.4 mm Titanium Microvascular Plate, with double angle, 5 x 22 x 5 holes (449.451)
IMF Screw Set

For temporary, perioperative use in stabilizing the occlusion in simple, adult mandibular and maxillary fractures and orthognathic procedures

- Not intended for long-term stabilization or definitive management of facial fractures

**Indications**
- Indirect stabilization of the maxilla and mandible following craniofacial and mandibular trauma or reconstruction

**Contraindications**
- Severely comminuted and/or displaced fractures
- Unstable, segmented maxillary or mandibular arches
- Combined maxillary and mandibular fractures
- Pediatric injuries

**Implant features**
- 2.0 mm screws, available in 8 mm and 12 mm thread lengths
- Made of extra-hard 316L stainless steel for maximum strength
- Self-drilling and self-tapping for easy, one-step insertion
- Groove under screw head secures wires or elastics
- Cruciform recess works with existing Synthes instrumentation
- Two cross holes in the screw align with the cruciform head slots, simplifying wire passage

**System features**
- Simplified intermaxillary fixation technique when compared to arch bars
- Reduces application time
- Minimizes the potential risk of wire punctures
- Can easily be applied or removed in the OR, ER or office setting

**Patient comfort benefits**
- Minimal hardware
- Reduced soft tissue trauma
- Improved postoperative oral hygiene
Mandible Modular Fixation System

Graphic case options
- 3-high (one instrument level and two implant levels, holds up to 4 insert trays)
- 4-high (two instrument levels and two implant levels, holds up to 8 insert trays)
- 4-high, long (two instrument levels and two implant levels, holds up to 12 insert trays)
- Customized instrument and implant options

Note: For additional information on the instruments, implants, cases, and insert trays for this system, please refer to the Synthes Mandible Instrument and Set Information brochure.