

medartis®

PRECISION IN FIXATION

PRODUCT INFORMATION

Orthognathics 1.5/2.0



MODUS®
Mandible

MEDARTIS

LITERATURE

- 1) Joss, C.U., Vassalli, I.M.
Stability After Bilateral Sagittal Split Osteotomy Advancement Surgery With Rigid Internal Fixation: A Systematic Review
J. Oral Maxillofac Surg. 67:301-313,2009
- 2) Sauerbier, S., Schön, R., Otten, J.-E., Schmelzeisen, R., Gutwald, R.
The development of plate osteosynthesis for the treatment of fracture of the mandibular body – A literature review
J. of Cranio-Maxillofacial Surgery, 2008, 36, 251-259
- 3) Prein, J., Assael, L.A.
Manual of Internal Fixation in the Cranio-Facial Skeleton
Springer-Verlag, Berlin Heidelberg, 1998, p. 187 - 198
- 4) Seeberger R, Asi Y, Thiele O.C, Stucke K, Hoffmann J, Engel M: Neurosensory and temporomandibular joint function after high oblique sagittal split osteotomy (HSSO). An alternative technique in orthognathic surgery.
Br J Oral Maxillofac Surg 2012 Dec 18. Epub ahead of print.
- 5) Seeberger R, Thiele O. C., Mertens C., Hoffmann J., Engel M.: Proximal segment positioning with high oblique sagittal split osteotomy (HSSO): Indications and limits of intraoperative mobile CBCT.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2013 Jan 8. Epub ahead of print.

Orthognathics

1.5/2.0

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MODUS Orthognathics 1.5/2.0

Indication-specific solutions for maxillary and mandibular orthognathic surgeries

A broad portfolio of plate designs

- Ramus plates for stable osteosynthesis on the ascending ramus
- Open sagittal split plates for transverse flexibility after sagittal split
- Closed sagittal split plates for semi-rigid fixation
- L and Z plate design for LeFort I osteotomies based on clinical CT data
- Pre-shaped maxillary plates with various increments



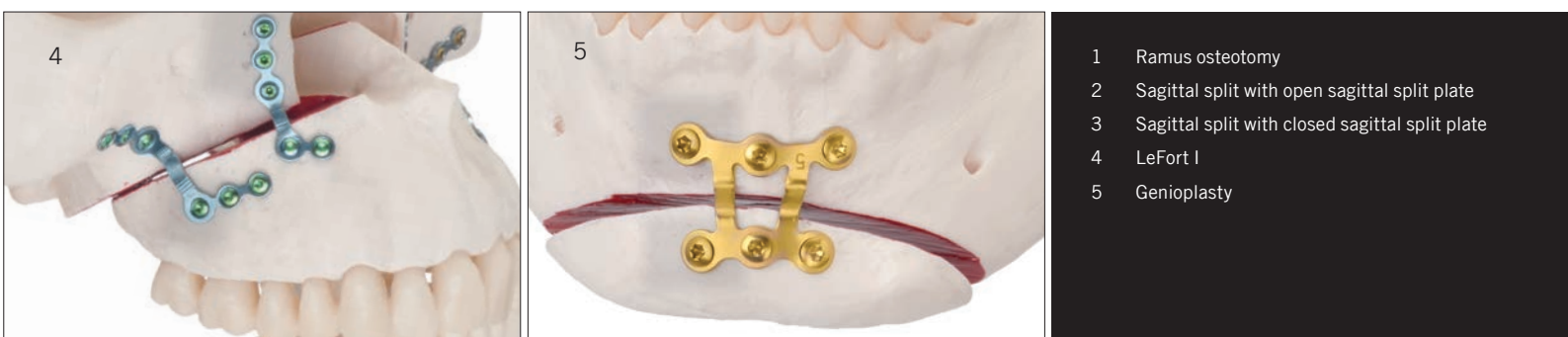
MODUS ORTHOGNATHICS

MODUS Orthognathics offers an innovative range of products for use in orthognathic surgeries. A distinction is drawn between the two indications maxilla (midface) and mandible based on the different forces to which they are subjected and the properties of the bone. The 1.5 system size is used for surgeries on the bones of the midface. The 2.0 system size is used for the mandible, which is exposed to greater forces and exhibits a denser bone structure.

MODUS Orthognathics offers the user a selection of indication-specific plates specially designed for applications in the mandible to cover different approaches to surgery. The ideal implant can be selected based on the chosen osteotomy line, the desired degree of stability and the amount of displacement.

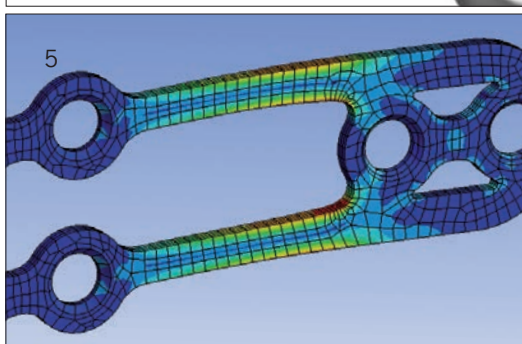
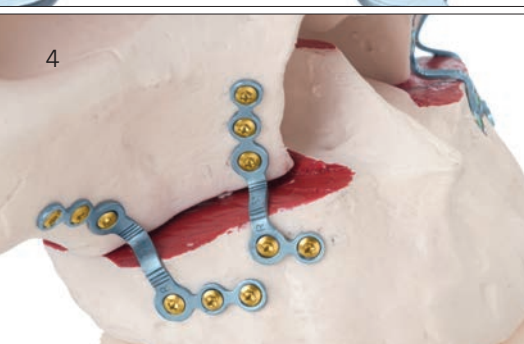
MODUS Orthognathics features anatomical plate designs to optimize osteosynthesis efficiency, with minimal plate contouring required. The small increments in plate size are another key benefit. These permit fixation close to the osteotomy line and help achieve greater stability. Laser markings serve as an orientation guide when bending plates and defining the width of the osteotomy split.

Innovative system storage with an intuitive and user-friendly instrument set ensures a pleasant experience all-round when working with MODUS Orthognathics.



Anatomical Plate Design

MODUS Orthognathics 1.5/2.0



- 1 Chin plate in the clip
- 2 Detail ramus plate
- 3 Detail laser markings on implants
- 4 Part of a skull bone model - LeFort I with cortical screws
- 5 Finite elements analysis of an open sagittal split plate

For further information on the plate range, see the MODUS Ordering Catalog at www.medartis.com/meta/downloads/marketing-material

- L and Z plate design based on clinical CT data
- Slider as an aid for intraoperative occlusion adjustment
- Small increments in plate sizes for fixation nearer to the osteotomy split

INDICATIONS

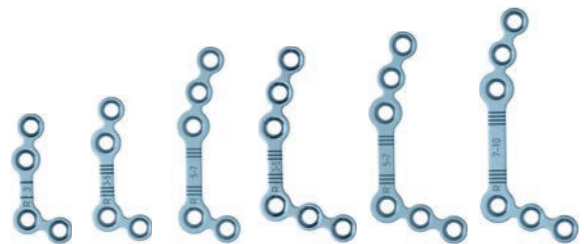
The MODUS Orthognathics range includes a large selection of plates :

- Mandibular and maxillary (midface) osteotomies performed as part of orthognathic surgery:
 - o LeFort I, II, and III
 - o Ramus and corpus osteotomies
 - o Genioplasties



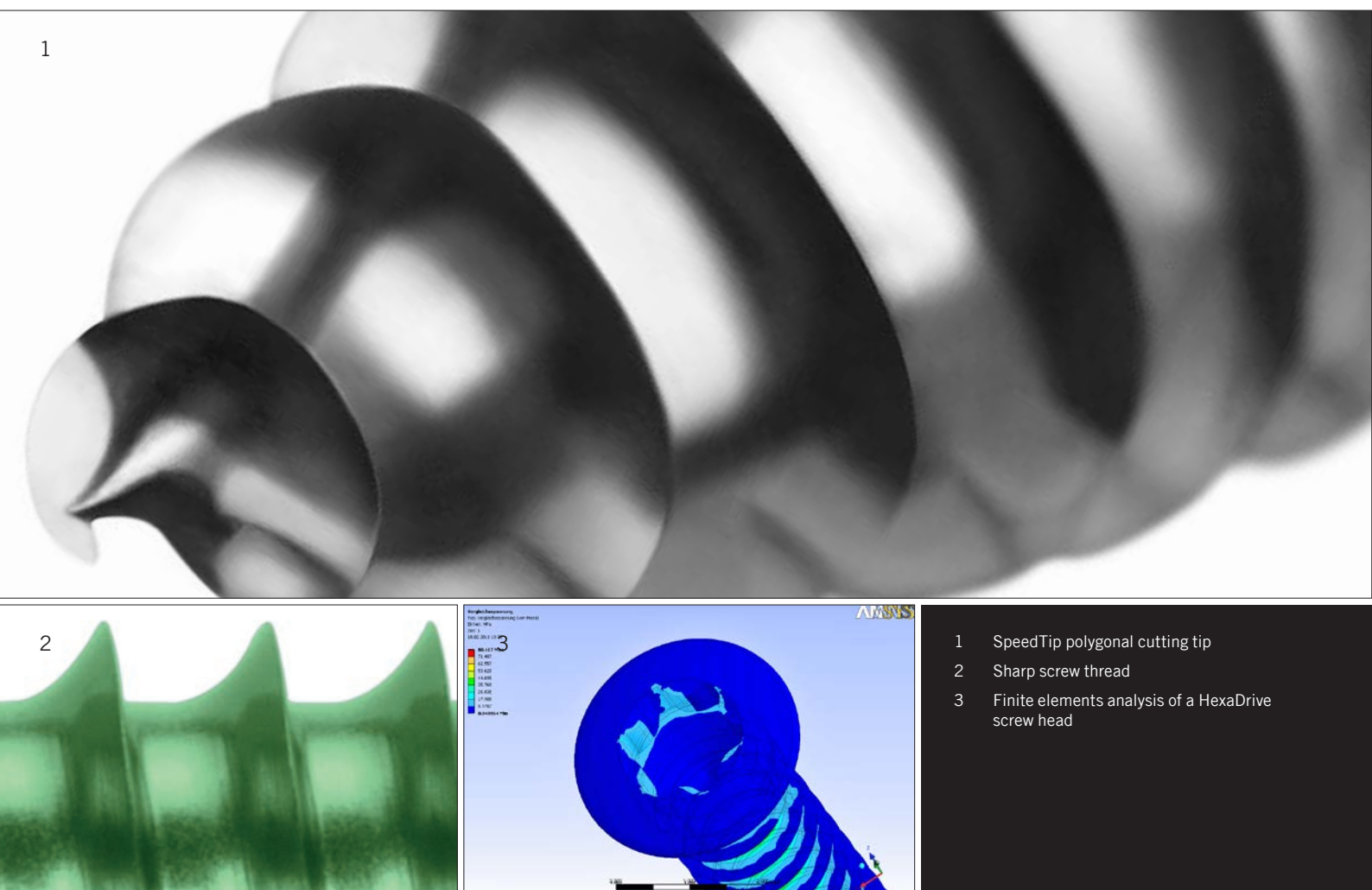
PLATE FEATURES

- Plates can be contoured anatomically for intraoperative ease of use
- Midface: system size 1.5, plate thickness 0.7 mm
- Mandible: system size 2.0, plate thicknesses 0.6 - 1.3 mm
- Anatomical plate design
- Reduced plate height prevents soft tissue irritation
- Laser markings as an orientation guide
- Small increments in plate sizes permit fixation nearer to the osteotomy split
- Reinforced screw holes next to the bar provide optimal plate stability



Superior Screw Technology

MODUS Orthognathics 1.5/2.0



- 1 SpeedTip polygonal cutting tip
- 2 Sharp screw thread
- 3 Finite elements analysis of a HexaDrive screw head

For further information on the screw range, see the MODUS Ordering Catalog at www.medartis.com/meta/downloads/marketing-material

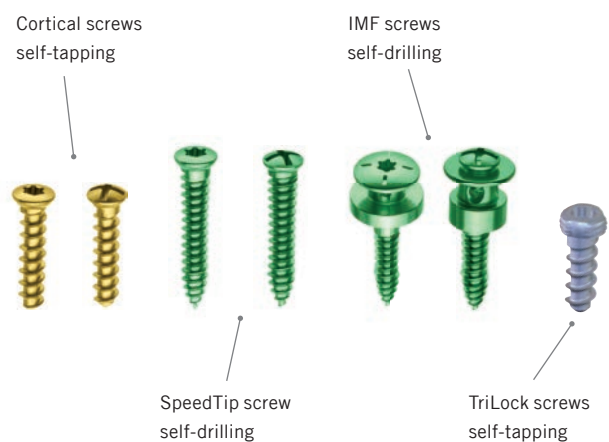
- Outstanding self-tapping screw thread
- HexaDrive interface with excellent self-holding properties
- SpeedTip thread design for time saving and effortless insertion

SCREW OPTIONS

- Selection between HexaDrive or cross-drive screws
- 1.5/1.8/2.0/2.3 mm self-tapping cortical screws
- 1.5/2.0 SpeedTip screws (self-drilling)
- Screw lengths from 4 mm to 23 mm
- 2.0 mm TriLock screws
- 2.0 mm self-drilling IMF screws (optional)

SCREW FEATURES

- HexaDrive technology– the optimal self-retaining mechanism between screw and screwdriver for increased torque transmission
- Excellent self-tapping properties (without cutting flutes) and easy screw insertion due to precision cut thread profile
- SpeedTip technology for self-drilling screws:
 - o Reduced risk of dislocation thanks to excellent grip
 - o Effortless insertion: Only the polygonal tip pushes bone material aside – regardless of screw length
 - o Excellent tactile feedback during insertion
- Screws can be inserted more rapidly due to a thread pitch which is optimized for the length of the screw
- Tapered core diameter close to the screw head for increased torsional and tensile strength



Excellent self-holding properties

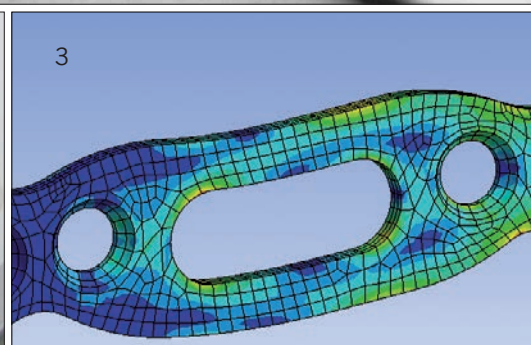
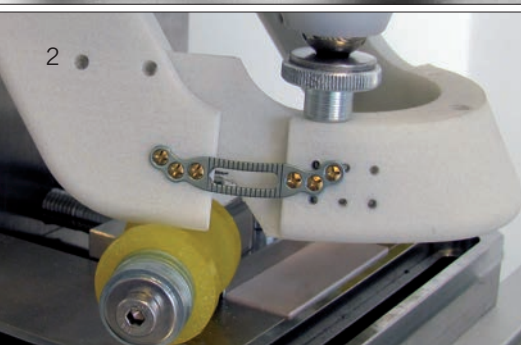
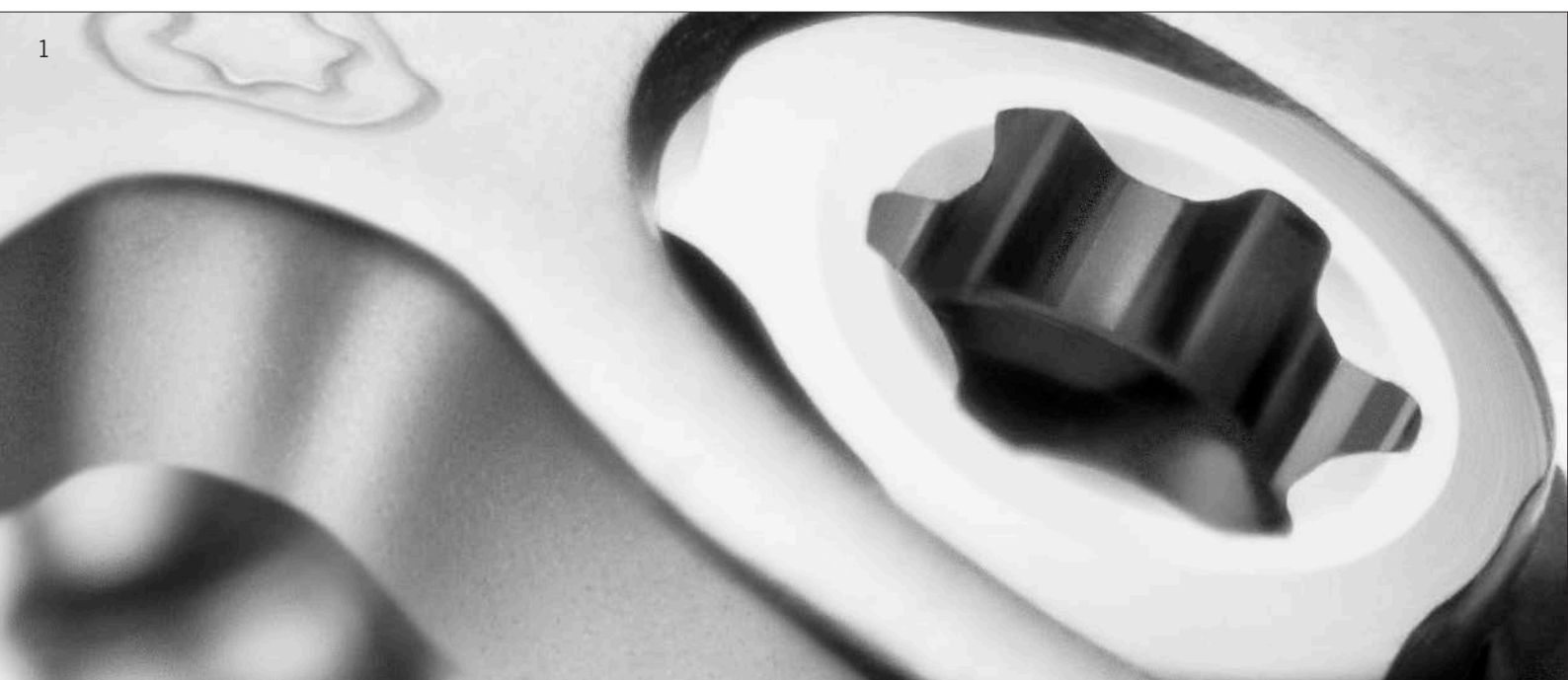
Contact surface for screw retention

Contact surface for torque transmission



Technology and Biomechanics

MODUS Orthognathics 1.5/2.0

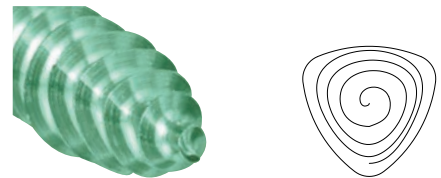


- 1 TriLock locking technology
- 2 Biomechanical testing of an implant
- 3 Finite elements analysis of closed sagittal split plate

- SpeedTip thread design - screw insertion without pre-drilling
- TriLock - multidirectional ($\pm 15^\circ$) and angular stable
- Osteotomy plates with transverse flexibility
- Ramus plate with the characteristics of an internal fixator

SPEEDTIP THREAD TECHNOLOGY

- Functionally unique cutting tip with rapid gripping
- Immediate gripping of the bone with only a slight axial pressure
- The triangular tip design permits simultaneous drilling and displacement of the bone material
- Reduced insertion torque thanks to the polygonal tip and tapered shaft



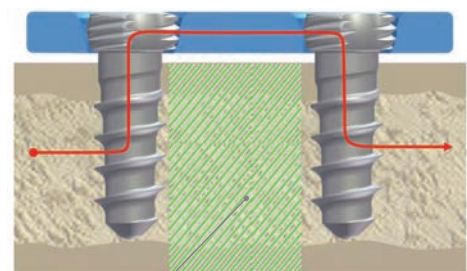
TRILock LOCKING TECHNOLOGY

- Secure, angular stable locking of the screw in the plate
 - Spherical three-point wedge-locking
 - Friction locking through radial bracing of the screw head in the plate – without additional tensioning components
- Screws can pivot freely by $\pm 15^\circ$ in all directions for optimal positioning
- Intra-operative fine tuning capabilities
- TriLock screws can be re-locked in the same plate hole under individual angles up to three times
- Minimal screw head protrusion thanks to submerged locking contour
- No cold welding between plate and screws



BIOMECHANICS

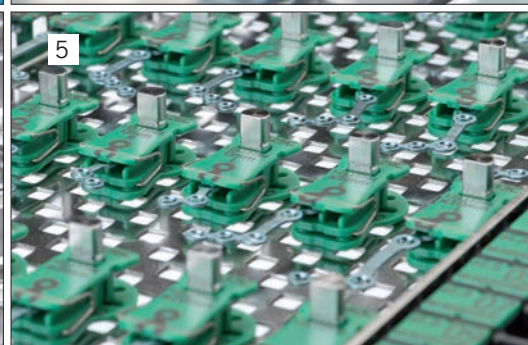
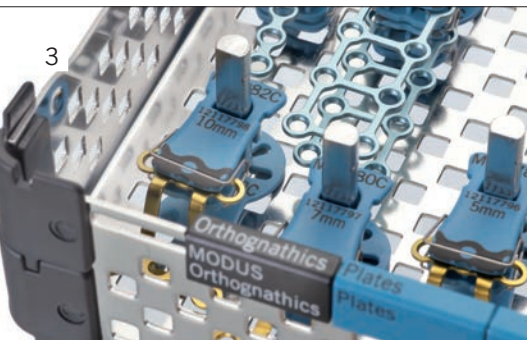
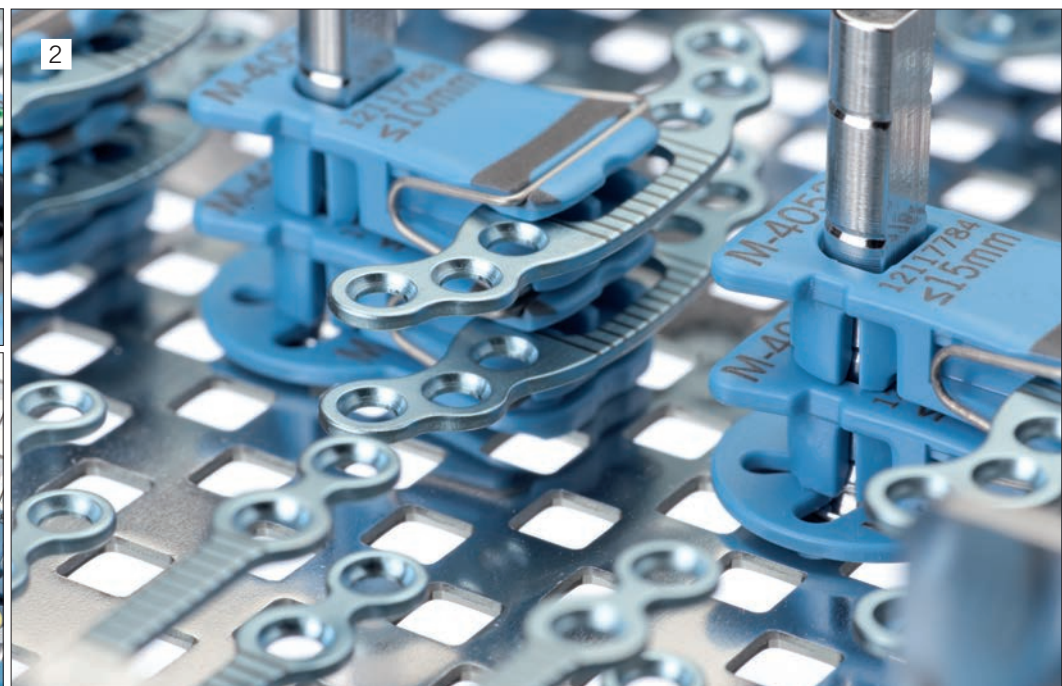
- TriLock ramus plate: internal fixator
 - “Internal fixator” principle for stable osteosynthesis on the ascending ramus
- Open sagittal split plate: Treatment concept according to Prof. Dr. Dr. Dr. h.c. Ulrich Joos, Münster (Germany)
 - Transverse plate elasticity permits independent adjustments to be made postoperatively to ensure that the mandibular condyle is optimally positioned



Load-free zone

Storage in Perfection

MODUS Orthognathics 1.5/2.0



- 1 Screw module
- 2 Detail stackable plates in the clip
- 3 Instrument case with color-coding
- 4 Instrument case
- 5 Plate module

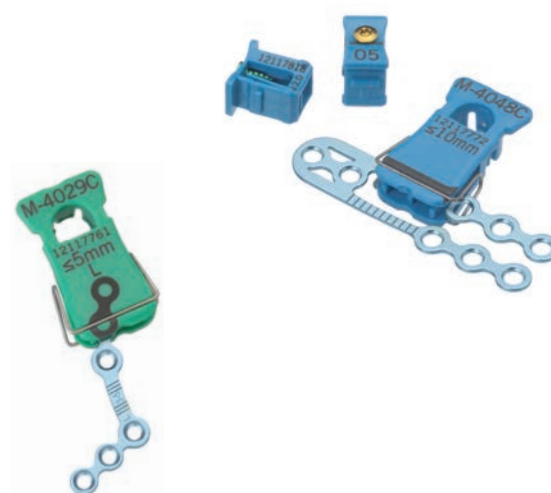
- Flexible, simple, safe
- User-specific sets
- LOT traceability for each implant
- Validated preparation and sterilization

FLEXIBLE - MODULAR CONCEPT

- Economical set configurations
- Set contents can be configured to meet user needs
- Easy implant upgradeability
- Storage of implants in clips

SIMPLE - WELL DESIGNED COLOR-CODING AND LABELING CONCEPT

- Color-coded clips to ensure clear matching of compatible implants
- Barcoding ensures clear matching of drills to screws
- Laser-engraved plate contour on the clip matches the actual dimensions of the plate
- All implant data easy to identify thanks to clearly legible clip labeling, including:
 - o Article number
 - o LOT number
 - o Screw diameter in mm
 - o Screw length in mm



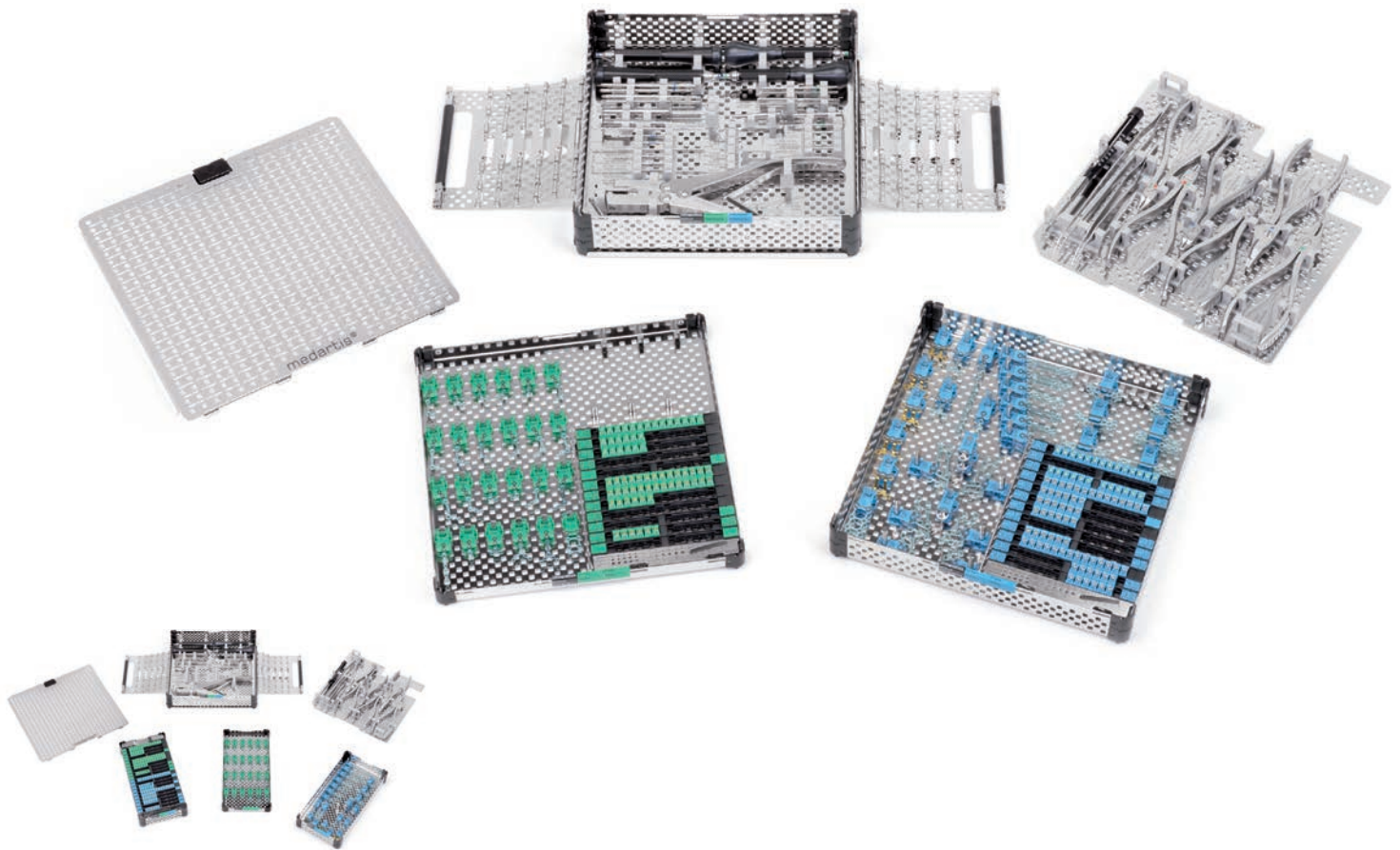
SAFE - VALIDATED PREPARATION AND STERILIZATION

- Implants securely held in the clip permit an optimal washing process
- Sterilization in the container or wrapping in sterilization wrap/film
- Implant cases with validated cleaning and sterilization
- Implant cases easy to stack

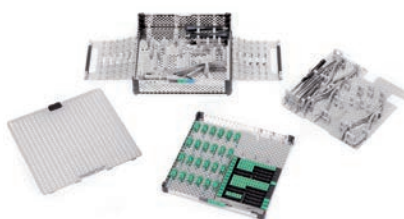


Modular Concept

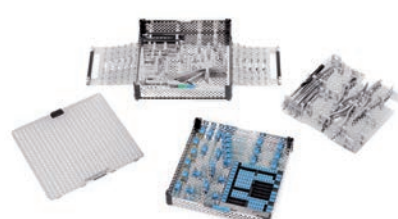
- Economic and compact system
- Easy to handle
- Streamlined organization of implants and instruments
- Clips ensure LOT traceability
- Validated cleaning and sterilization



Also available as separate sets:



MODUS Orthognathics 1.5 (including instruments)

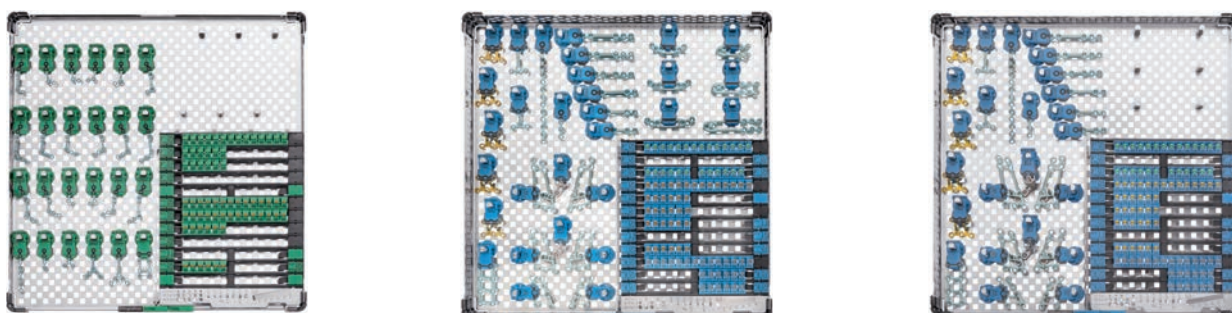


MODUS Orthognathics 2.0 (including instruments)

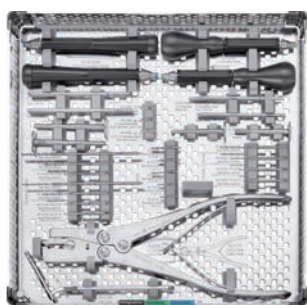
Example of equipped implant cases (1.5/2.0), plates and screws (small)



Example of equipped implant cases (1.5/2.0), plates and screws (large)



Example of an equipped instrument case



Instrument case



Instrument tray

Ordering Information

1.5 Cortical Screws, HexaDrive 4, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
4 mm	M-5220.04C/1	1	M-5220.04C/4	4	M-6762.020
5 mm	M-5220.05C/1	1	M-5220.05C/4	4	M-6762.021
6 mm	M-5220.06C/1	1	M-5220.06C/4	4	M-6762.022
7 mm	M-5220.07C/1	1	M-5220.07C/4	4	M-6762.023
8 mm	M-5220.08C/1	1	M-5220.08C/4	4	M-6762.024
9 mm	M-5220.09C/1	1	M-5220.09C/4	4	M-6762.025
11 mm	M-5220.11C/1	1	M-5220.11C/4	4	M-6762.027

1.5 Cortical Screws, Cross-Drive, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
4 mm	M-5122.04C/1	1	M-5122.04C/4	4	M-6762.002
5 mm	M-5122.05C/1	1	M-5122.05C/4	4	M-6762.003
6 mm	M-5122.06C/1	1	M-5122.06C/4	4	M-6762.004
7 mm	M-5122.07C/1	1	M-5122.07C/4	4	M-6762.005
8 mm	M-5122.08C/1	1	M-5122.08C/4	4	M-6762.006
9 mm	M-5122.09C/1	1	M-5122.09C/4	4	M-6762.007
11 mm	M-5122.11C/1	1	M-5122.11C/4	4	M-6762.009

1.5 SpeedTip Screws, Self-Drilling, HexaDrive 4, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
4 mm	M-5223.04C/1	1	M-5223.04C/4	4	M-6762.032
5 mm	M-5223.05C/1	1	M-5223.05C/4	4	M-6762.033
6 mm	M-5223.06C/1	1	M-5223.06C/4	4	M-6762.034
7 mm	M-5223.07C/1	1	M-5223.07C/4	4	M-6762.035
9 mm	M-5223.09C/1	1	M-5223.09C/4	4	M-6762.036

1.5 SpeedTip Screws, Self-Drilling, Cross-Drive, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
4 mm	M-5121.04C/1	1	M-5121.04C/4	4	M-6762.014
5 mm	M-5121.05C/1	1	M-5121.05C/4	4	M-6762.015
6 mm	M-5121.06C/1	1	M-5121.06C/4	4	M-6762.016
7 mm	M-5121.07C/1	1	M-5121.07C/4	4	M-6762.017
9 mm	M-5121.09C/1	1	M-5121.09C/4	4	M-6762.018

1.8 Cortical Screws, HexaDrive 4, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
5 mm	M-5230.05C/1	1	M-5230.05C/4	4	M-6762.039
7 mm	M-5230.07C/1	1	M-5230.07C/4	4	M-6762.040

1.8 Cortical Screws, Cross-Drive, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
5 mm	M-5132.05C/1	1	M-5132.05C/4	4	M-6762.037
7 mm	M-5132.07C/1	1	M-5132.07C/4	4	M-6762.038

2.0 Cortical Screws, HexaDrive 6, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
4 mm	M-5240.04C/1	1	M-5240.04C/4	4	M-6766.027
5 mm	M-5240.05C/1	1	M-5240.05C/4	4	M-6766.028
6 mm	M-5240.06C/1	1	M-5240.06C/4	4	M-6766.029
7 mm	M-5240.07C/1	1	M-5240.07C/4	4	M-6766.030
8 mm	M-5240.08C/1	1	M-5240.08C/4	4	M-6766.031
9 mm	M-5240.09C/1	1	M-5240.09C/4	4	M-6766.032
11 mm	M-5240.11C/1	1	M-5240.11C/4	4	M-6766.034
13 mm	M-5240.13C/1	1	M-5240.13C/4	4	M-6766.036
15 mm	M-5240.15C/1	1	M-5240.15C/4	4	M-6766.037
17 mm	M-5240.17C/1	1	M-5240.17C/4	4	M-6766.038
19 mm	M-5240.19C/1	1	M-5240.19C/4	4	M-6766.039
21 mm	M-5240.21C/1	1	M-5240.21C/4	4	M-6766.040
23 mm	M-5240.23C/1	1	M-5240.23C/4	4	M-6766.041

2.0 Cortical Screws, Cross-Drive, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
4 mm	M-5180.04C/1	1	M-5180.04C/4	4	M-6766.001
5 mm	M-5180.05C/1	1	M-5180.05C/4	4	M-6766.002
6 mm	M-5180.06C/1	1	M-5180.06C/4	4	M-6766.003
7 mm	M-5180.07C/1	1	M-5180.07C/4	4	M-6766.004
8 mm	M-5180.08C/1	1	M-5180.08C/4	4	M-6766.005
9 mm	M-5180.09C/1	1	M-5180.09C/4	4	M-6766.006
11 mm	M-5180.11C/1	1	M-5180.11C/4	4	M-6766.008
13 mm	M-5180.13C/1	1	M-5180.13C/4	4	M-6766.009
15 mm	M-5180.15C/1	1	M-5180.15C/4	4	M-6766.010
17 mm	M-5180.17C/1	1	M-5180.17C/4	4	M-6766.011
19 mm	M-5180.19C/1	1	M-5180.19C/4	4	M-6766.012
21 mm	M-5180.21C/1	1	M-5180.21C/4	4	M-6766.013
23 mm	M-5180.23C/1	1	M-5180.23C/4	4	M-6766.014

2.0 SpeedTip Screws, Self-Drilling, HexaDrive 6, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
5 mm	M-5243.05C/1	1	M-5243.05C/4	4	M-6766.042
6 mm	M-5243.06C/1	1	M-5243.06C/4	4	M-6766.043
7 mm	M-5243.07C/1	1	M-5243.07C/4	4	M-6766.044
8 mm	M-5243.08C/1	1	M-5243.08C/4	4	M-6766.045
9 mm	M-5243.09C/1	1	M-5243.09C/4	4	M-6766.046
11 mm	M-5243.11C/1	1	M-5243.11C/4	4	M-6766.048

2.0 SpeedTip Screws, Self-Drilling, Cross-Drive, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
5 mm	M-5183.05C/1	1	M-5183.05C/4	4	M-6766.015
6 mm	M-5183.06C/1	1	M-5183.06C/4	4	M-6766.016
7 mm	M-5183.07C/1	1	M-5183.07C/4	4	M-6766.017
8 mm	M-5183.08C/1	1	M-5183.08C/4	4	M-6766.018
9 mm	M-5183.09C/1	1	M-5183.09C/4	4	M-6766.019
11 mm	M-5183.11C/1	1	M-5183.11C/4	4	M-6766.021

2.0 TriLock Screws, HexaDrive 6, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
5 mm	M-5245.05C/1	1	M-5245.05C/4	4	M-6766.054
6 mm	M-5245.06C/1	1	M-5245.06C/4	4	M-6766.055
7 mm	M-5245.07C/1	1	M-5245.07C/4	4	M-6766.056
8 mm	M-5245.08C/1	1	M-5245.08C/4	4	M-6766.057
9 mm	M-5245.09C/1	1	M-5245.09C/4	4	M-6766.058

2.3 Cortical Screws, HexaDrive 6, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
5 mm	M-5250.05C/1	1	M-5250.05C/4	4	M-6766.066
7 mm	M-5250.07C/1	1	M-5250.07C/4	4	M-6766.067

2.3 Cortical Screws, Cross-Drive, in the Clip

Material: Titanium (ASTM F136)



Length	Art. No.	Piece/Pkg	Art. No.	Piece/Pkg	Push-Button
5 mm	M-5190.05C/1	1	M-5190.05C/4	4	M-6766.063
7 mm	M-5190.07C/1	1	M-5190.07C/4	4	M-6766.064

Sliders, Fenestrated, in the Clip

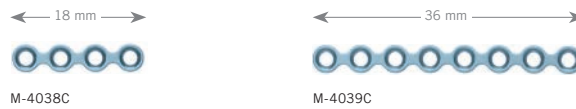
Material: Titanium (ASTM F136)



Art. No.	Interface	∅	Length	Piece/Pkg	Sticker
M-5242.08C	HD6	2.0 mm	8 mm	1	M-6776.035
M-5142.08C	+	2.0 mm	8 mm	1	M-6776.033
M-5252.08C	HD6	2.3 mm	8 mm	1	M-6776.036
M-5152.08C	+	2.3 mm	8 mm	1	M-6776.034

1.5 Straight Plates, in the Clip

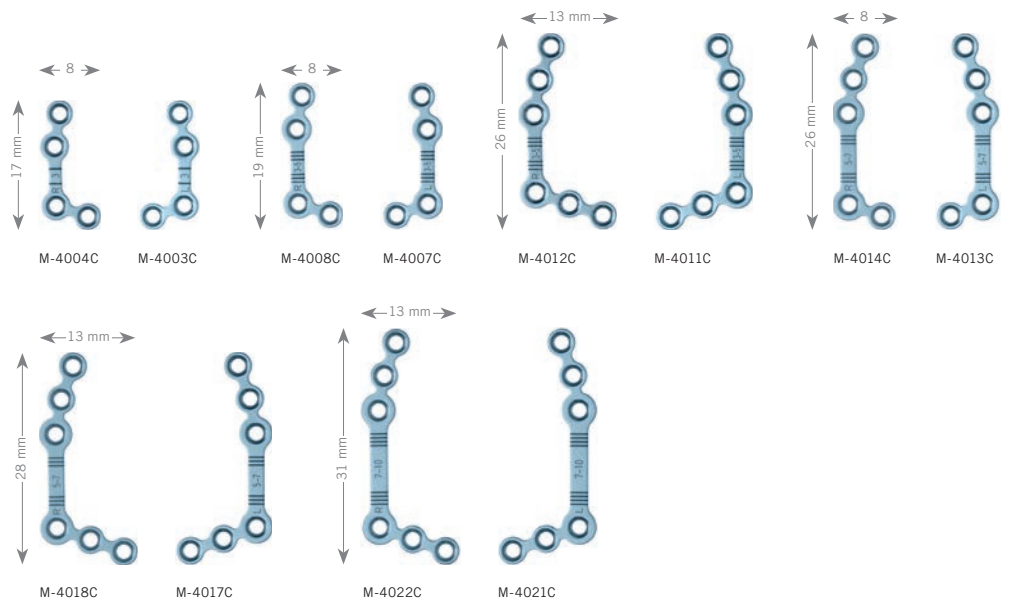
Material: Titanium (ASTM F67)
Plate thickness: 0.7 mm



Art. No.	Description	Holes	Piece/Pkg	Sticker
M-4038C	straight, in the clip	4	1	M-6772.022
M-4039C	straight, in the clip	8	1	M-6772.023

1.5 L-Plates, Medial, in the Clip

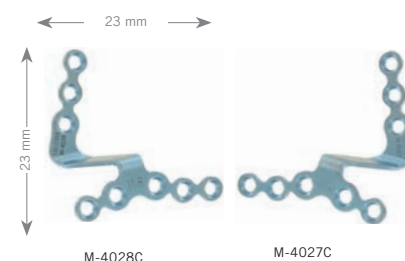
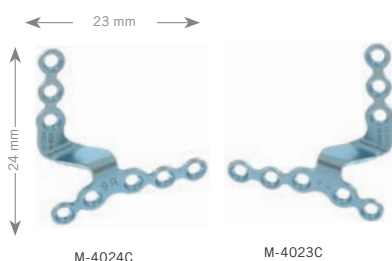
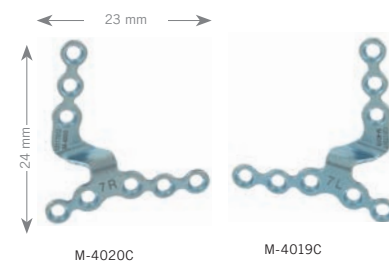
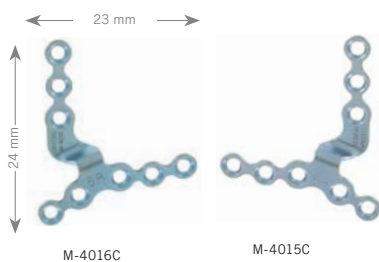
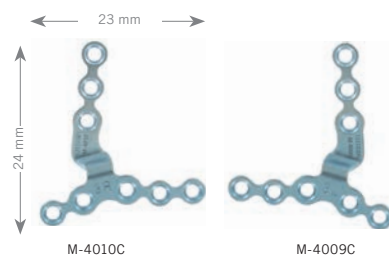
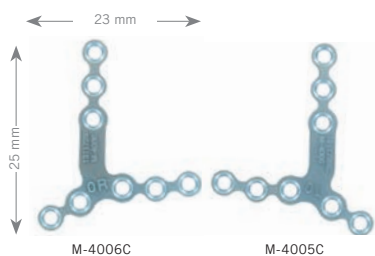
Material: Titanium (ASTM F67)
Plate thickness: 0.7 mm



Art. No.	Description	Bar	Holes	Piece/Pkg	Sticker
M-4003C	L, left, in the clip	max. 3 mm	4	1	M-6772.001
M-4004C	L, right, in the clip	max. 3 mm	4	1	M-6772.002
M-4007C	L, left, in the clip	max. 5 mm	4	1	M-6772.003
M-4008C	L, right, in the clip	max. 5 mm	4	1	M-6772.004
M-4011C	L, left, in the clip	max. 5 mm	6	1	M-6772.005
M-4012C	L, right, in the clip	max. 5 mm	6	1	M-6772.006
M-4013C	L, left, in the clip	max. 7 mm	5	1	M-6772.007
M-4014C	L, right, in the clip	max. 7 mm	5	1	M-6772.008
M-4017C	L, left, in the clip	max. 7 mm	6	1	M-6772.009
M-4018C	L, right, in the clip	max. 7 mm	6	1	M-6772.010
M-4021C	L, left, in the clip	max. 10 mm	6	1	M-6772.011
M-4022C	L, right, in the clip	max. 10 mm	6	1	M-6772.012

1.5 Maxillary Plates, Pre-shaped, Medial, in the Clip

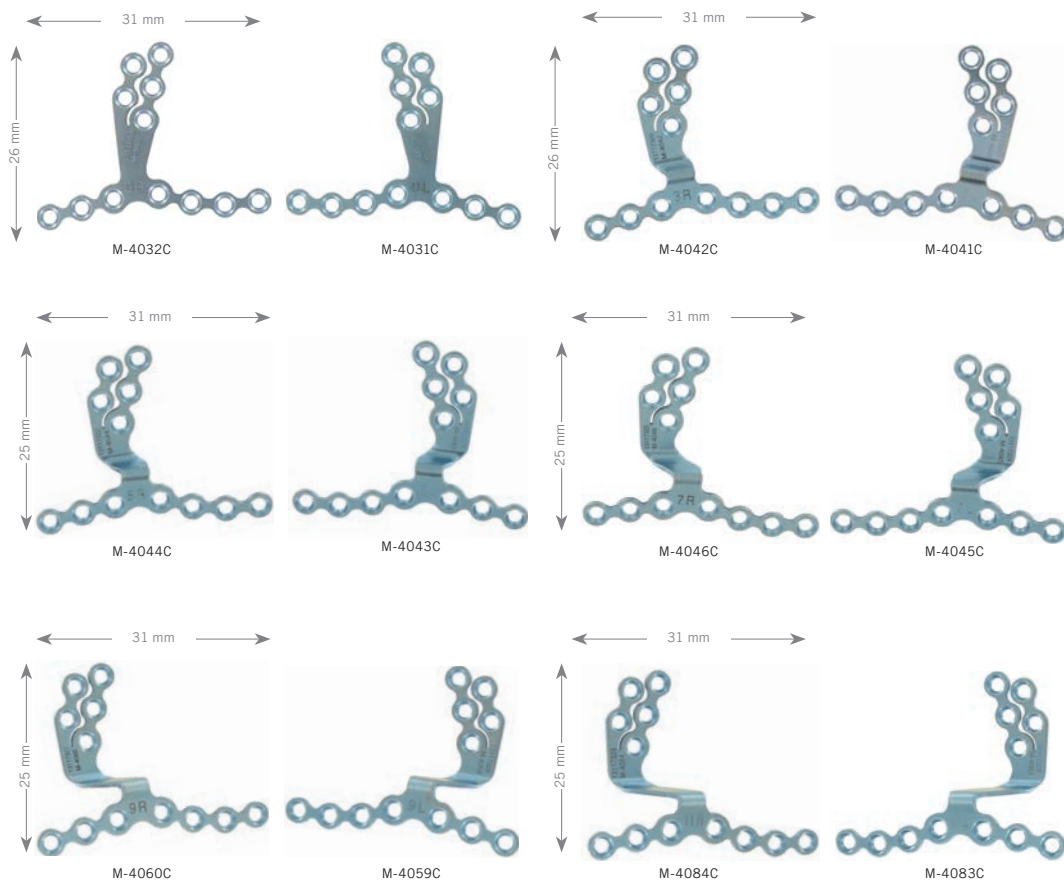
Material: Titanium (ASTM F67)
Plate thickness: 0.7 mm



Art. No.	Description	Bar	Holes	Piece/Pkg	Sticker
M-4005C	LeFort I, left, in the clip	0 mm	8	1	M-6772.25
M-4006C	LeFort I, right, in the clip	0 mm	8	1	M-6772.26
M-4009C	LeFort I, left, in the clip	3 mm	8	1	M-6772.27
M-4010C	LeFort I, right, in the clip	3 mm	8	1	M-6772.28
M-4015C	LeFort I, left, in the clip	5 mm	8	1	M-6772.29
M-4016C	LeFort I, right, in the clip	5 mm	8	1	M-6772.30
M-4019C	LeFort I, left, in the clip	7 mm	8	1	M-6772.31
M-4020C	LeFort I, right, in the clip	7 mm	8	1	M-6772.32
M-4023C	LeFort I, left, in the clip	9 mm	8	1	M-6772.33
M-4024C	LeFort I, right, in the clip	9 mm	8	1	M-6772.34
M-4027C	LeFort I, left, in the clip	11 mm	8	1	M-6772.35
M-4028C	LeFort I, right, in the clip	11 mm	8	1	M-6772.36

1.5 Maxillary Plates, Pre-shaped, Medial, in the Clip

Material: Titanium (ASTM F67)
Plate thickness: 0.7 mm

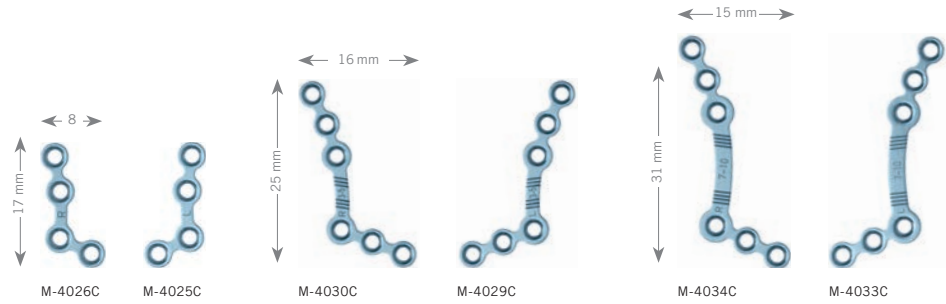


Art. No.	Description	Bar	Holes	Piece/Pkg	Sticker
M-4031C	LeFort I, left, in the clip	0mm	12	1	M-6772.037
M-4032C	LeFort I, right, in the clip	0mm	12	1	M-6772.038
M-4041C	LeFort I, left, in the clip	3mm	12	1	M-6772.039
M-4042C	LeFort I, right, in the clip	3mm	12	1	M-6772.040
M-4043C	LeFort I, left, in the clip	5mm	12	1	M-6772.041
M-4044C	LeFort I, right, in the clip	5mm	12	1	M-6772.042
M-4045C	LeFort I, left, in the clip	7mm	12	1	M-6772.043
M-4046C	LeFort I, right, in the clip	7mm	12	1	M-6772.044
M-4059C	LeFort I, left, in the clip	9mm	12	1	M-6772.045
M-4060C	LeFort I, right, in the clip	9mm	12	1	M-6772.046
M-4083C	LeFort I, left, in the clip	11mm	12	1	M-6772.047
M-4084C	LeFort I, right, in the clip	11mm	12	1	M-6772.048

1.5 Z-Plates, Lateral, in the Clip



Material: Titanium (ASTM F67)
Plate thickness: 0.7 mm

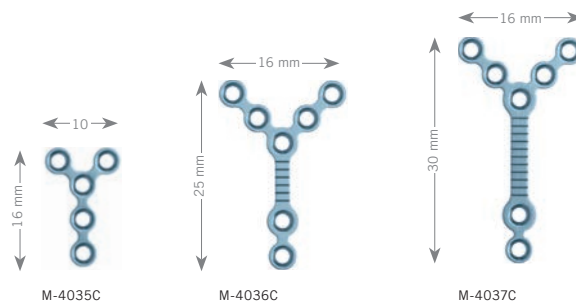


Art. No.	Description	Bar	Holes	Piece/Pkg	Sticker
M-4025C	Z, left, in the clip	0 mm	4	1	M-6772.013
M-4026C	Z, right, in the clip	0 mm	4	1	M-6772.014
M-4029C	Z, left, in the clip	max. 5 mm	6	1	M-6772.015
M-4030C	Z, right, in the clip	max. 5 mm	6	1	M-6772.016
M-4033C	Z, left, in the clip	max. 10 mm	6	1	M-6772.017
M-4034C	Z, right, in the clip	max. 10 mm	6	1	M-6772.018

1.5 Y-Plates, in the Clip



Material: Titanium (ASTM F67)
Plate thickness: 0.7 mm

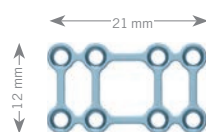


Art. No.	Description	Bar	Holes	Piece/Pkg	Sticker
M-4035C	Y, in the clip	0 mm	5	1	M-6772.019
M-4036C	Y, in the clip	max. 5 mm	7	1	M-6772.020
M-4037C	Y, in the clip	max. 10 mm	7	1	M-6776.021

1.5 Grid Plate, in the Clip

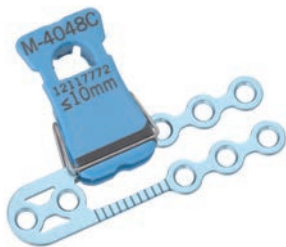


Material: Titanium (ASTM F67)
Plate thickness: 0.7 mm

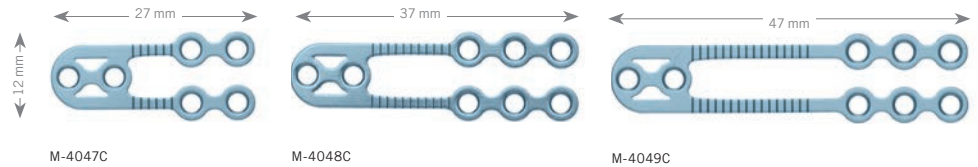


Art. No.	Description	Holes	Piece/Pkg	Sticker
M-4040C	rectangular, in the clip	8 (4x2)	1	M-6772.024

2.0 Sagittal Split Plates, in the Clip



Material: Titanium (ASTM F67)
Plate thickness: 0.7 mm, 0.8 mm

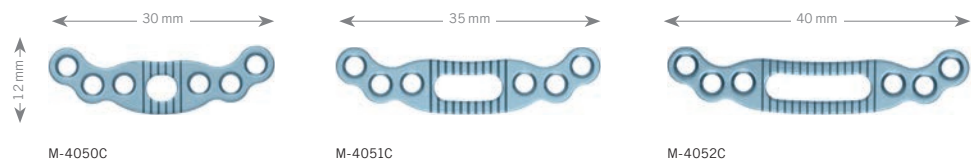


Art. No.	Description	Bar	Holes	Piece/Pkg	Sticker
M-4047C	open, in the clip	max. 5 mm	6	1	M-6776.001
M-4048C	open, in the clip	max. 10 mm	8	1	M-6776.002
M-4049C	open, in the clip	max. 15 mm	8	1	M-6776.003

2.0 Sagittal Split Plates, in the Clip



Material: Titanium (ASTM F67)
Plate thickness: 0.8 mm, 0.9 mm, 1.0 mm

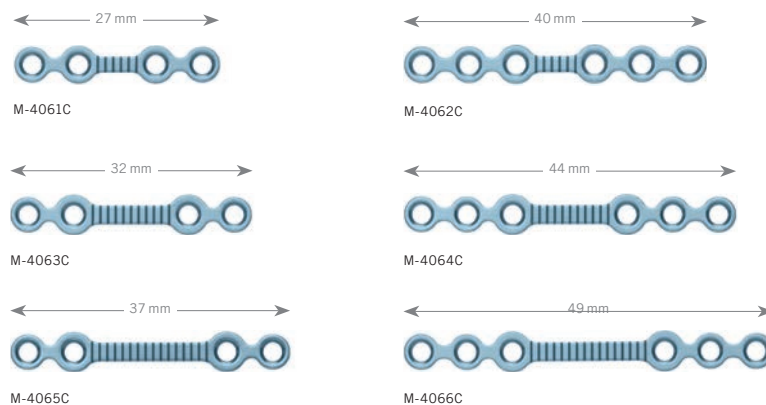


Art. No.	Description	Bar	Holes	Piece/Pkg	Sticker
M-4050C	closed, in the clip	max. 5 mm	6	1	M-6776.004
M-4051C	closed, in the clip	max. 10 mm	6	1	M-6776.005
M-4052C	closed, in the clip	max. 15 mm	6	1	M-6776.006

2.0 Sagittal Split Plates, in the Clip



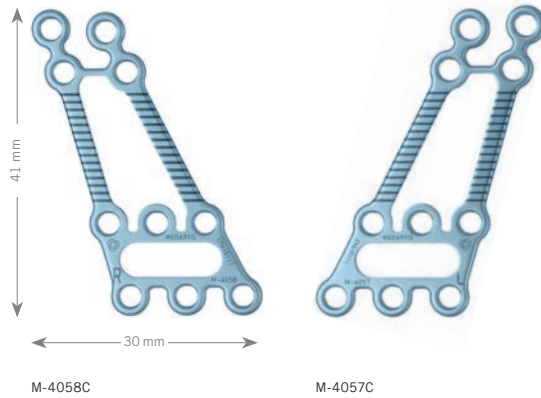
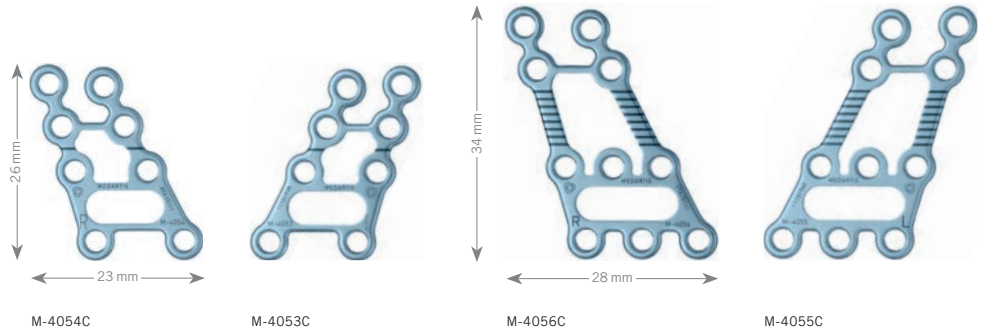
Material: Titanium (ASTM F67)
Plate thickness: 1.0 mm



Art. No.	Description	Bar	Holes	Piece/Pkg	Sticker
M-4061C	straight, in the clip	max. 5 mm	4	1	M-6776.013
M-4062C	straight, in the clip	max. 5 mm	6	1	M-6776.014
M-4063C	straight, in the clip	max. 10 mm	4	1	M-6776.015
M-4064C	straight, in the clip	max. 10 mm	6	1	M-6776.016
M-4065C	straight, in the clip	max. 15 mm	4	1	M-6776.017
M-4066C	straight, in the clip	max. 15 mm	6	1	M-6776.018

2.0 TriLock Ramus Plates, in the Clip

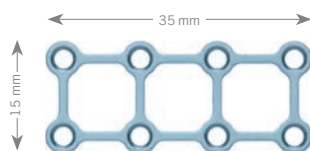
Material: Titanium (ASTM F67)
Plate thickness: 1.3 mm



Art. No.	Description	Bar	Holes	Piece/Pkg	Sticker
M-4053C	left, in the clip	0 mm	8	1	M-6776.007
M-4054C	right, in the clip	0 mm	8	1	M-6776.008
M-4055C	left, in the clip	max. 7 mm	10	1	M-6776.009
M-4056C	right, in the clip	max. 7 mm	10	1	M-6776.010
M-4057C	left, in the clip	max. 14 mm	10	1	M-6776.011
M-4058C	right, in the clip	max. 14 mm	10	1	M-6776.012

2.0 Grid Plate, in the Clip

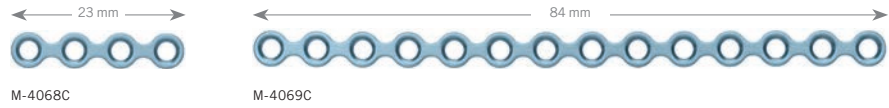
Material: Titanium (ASTM F67)
Plate thickness: 1.0 mm



Art. No.	Description	Holes	Piece/Pkg	Sticker
M-4067C	square, in the clip	8 (4x2)	1	M-6776.019

2.0 Straight Plates, in the Clip

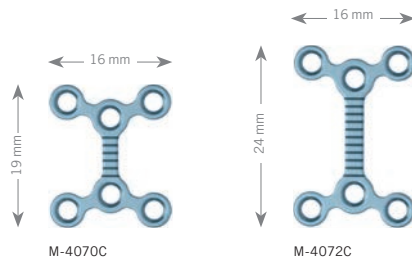
Material: Titanium (ASTM F67)
Plate thickness: 1.0 mm



Art. No.	Description	Holes	Piece/Pkg	Sticker
M-4068C	straight, in the clip	4	1	M-6776.020
M-4069C	straight, in the clip	14	1	M-6776.021

2.0 Chin Plates, in the Clip

Material: Titanium (ASTM F67)
Plate thickness: 1.0 mm



Art. No.	Description	Bar	Holes	Piece/Pkg	Sticker
M-4070C	X, in the clip	max. 5 mm	6	1	M-6776.022
M-4072C	X, in the clip	max. 10 mm	6	1	M-6776.023

2.0 Chin Plates, Pre-shaped, in the Clip

Material: Titanium (ASTM F67)
Plate thickness: 0.6 mm



Art. No.	Description	Bar	Holes	Piece/Pkg	Sticker
M-4074C	flat, in the clip	0 mm	6	1	M-6776.024
M-4076C	pre-shaped, in the clip	3 mm	6	1	M-6776.025
M-4078C	pre-shaped, in the clip	5 mm	6	1	M-6776.026
M-4080C	pre-shaped, in the clip	7 mm	6	1	M-6776.027
M-4082C	pre-shaped, in the clip	10 mm	6	1	M-6776.028

Twist Drills for Screws Ø 1.5 mm



M-3019



M-3039



M-3059



M-3029



M-3049



M-3069

Art. No.	Ø Twist Drill	Stop	Length	Drill Shaft End	Piece/Pkg
M-3019	1.1	5 mm	35 mm	Dental	1
M-3039	1.1	7 mm	37 mm	Dental	1
M-3059	1.1	16 mm	46 mm	Dental	1
M-3029	1.1	5 mm	48 mm	Stryker	1
M-3049	1.1	7 mm	50 mm	Stryker	1
M-3069	1.1	16 mm	59 mm	Stryker	1

Twist Drills for Gliding Hole Ø 1.5 mm



M-3099



M-3109

Art. No.	Ø Twist Drill	Stop	Length	Drill Shaft End	Piece/Pkg
M-3099	1.5	25 mm	55 mm	Dental	1
M-3109	1.5	25 mm	68 mm	Stryker	1

Twist Drills for Screws Ø 2.0 mm



M-3119



M-3139



M-3159



M-3459



M-3129



M-3149



M-3169



M-3469



M-3319*



M-3339*



M-3359*

Art. No.	Ø Twist Drill	Stop	Length	Drill Shaft End	Piece/Pkg
M-3119	1.5	5 mm	35 mm	Dental	1
M-3139	1.5	7 mm	37 mm	Dental	1
M-3159	1.5	25 mm	55 mm	Dental	1
M-3459	1.5	25 mm	99 mm	Dental	1
M-3129	1.5	5 mm	48 mm	Stryker	1
M-3149	1.5	7 mm	50 mm	Stryker	1
M-3169	1.5	25 mm	68 mm	Stryker	1
M-3469	1.5	25 mm	112 mm	Stryker	1
M-3319*	1.5	5 mm	14.5 mm	Dental	1
M-3339*	1.5	7 mm	16.5 mm	Dental	1
M-3359*	1.5	13 mm	22.5 mm	Dental	1

* for MODUS 90° screwdriver

Twist Drill for Screws Ø 2.3 mm (and for Gliding Hole Ø 2.0 mm)



M-3239



M-3259



M-3279



M-3249



M-3269



M-3289



M-3419*



M-3439*

Art. No.	Ø Twist Drill	Stop	Length	Drill Shaft End	Piece/Pkg
M-3239	2.0	7 mm	37 mm	Dental	1
M-3259	2.0	25 mm	55 mm	Dental	1
M-3279	2.0	25 mm	99 mm	Dental	1
M-3249	2.0	7 mm	50 mm	Stryker	1
M-3269	2.0	25 mm	68 mm	Stryker	1
M-3289	2.0	25 mm	112 mm	Stryker	1
M-3419*	2.0	7 mm	19 mm	Dental	1
M-3439*	2.0	13 mm	25 mm	Dental	1

* for MODUS 90° screwdriver

Screwdriver 1.5 (Single Components)



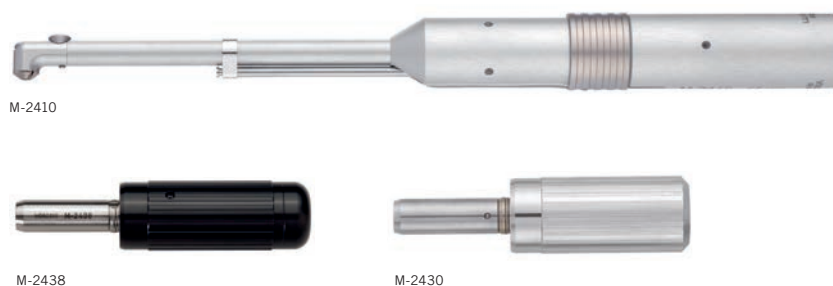
Art. No.	Interface	Description	Length	Piece/Pkg
M-2552		tension sleeve for M-2512	45 mm	1
M-2032		screwdriver handle	110 mm	1
M-2662	HD4	screwdriver blade, self-holding	69 mm	1
M-2522		screwdriver blade, self-holding	69 mm	1
M-2512		screwdriver blade for M-2552	69 mm	1

Screwdriver 2.0 (Single Components)



Art. No.	Interface	Description	Length	Piece/Pkg
M-2553		tension sleeve for M-2513	45 mm	1
M-2046		screwdriver handle	110 mm	1
M-2663	HD6	screwdriver blade, self-holding	84 mm	1
M-2523		screwdriver blade, self-holding	84 mm	1
M-2513		screwdriver blade for M-2553	87 mm	1

90° Screwdriver



Art. No.	System	Description	Length	Piece/Pkg
M-2410	1.5 - 2.0, TriLock	without rotation knob	218 mm	1
M-2438	1.5 - 2.0, TriLock	torque-limiting knob	58 mm	1
M-2430	1.5 - 2.0, TriLock	rotation knob	46 mm	1

Screwdriver Blades



M-2493



M-2563 °



M-2588

Art. No.	Interface	Description	Length	Shaft end	Piece/Pkg
M-2493		self-holding	12 mm	Dental	1
M-2563*			12 mm	Dental	1
M-2588	HD6	self-holding	13 mm	Dental	1

Can be used with screw holding fork

1.5 - 2.5 Depth Gauge



M-2250



M-2250.1

Art. No.	System	Description	Length	Piece/Pkg
M-2250	1.5 - 2.5		164 mm	1
M-2250.1	1.5 - 2.5	caliper needle (replacement part)	163 mm	1

Drill Guide TriLock 2.0/2.3/2.5



Art. No.	System	Description	Length	Piece/Pkg
M-2198	2.0 - 2.5		125 mm	1

Plate and Screw Holding Forceps



M-2009



M-2019

Art. No.	System	Description	Length	Piece/Pkg
M-2009		angled, small	149 mm	1
M-2019		angled, large	199 mm	1

Plate Cutting Pliers



A-2046



M-2170

Art. No.	System	Length	Piece/Pkg
A-2046	1.2 - 2.8	207 mm	1
M-2170	0.9 - 2.0	180 mm	1

Plate Bending Pliers



M-2002



M-2006



M-2012



M-2158

Art. No.	System	Description	Length	Piece/Pkg
M-2002	1.5		152 mm	1
M-2006	2.0 - 2.5		156 mm	1
M-2012	0.9 - 1.5	with pin	140 mm	1
M-2158	2.0 - 2.5	with pin	140 mm	1

Holding Rack for Implant and Instrument Cases



Art. No.	Description	Piece/Pkg
M-6710	steel	1

Lid for Implant and Instrument Cases



M-6706

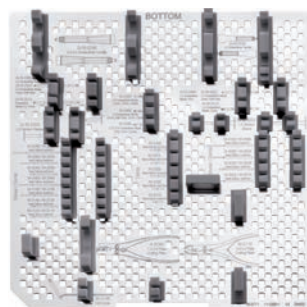
M-6707

Art. No.	Description	Dimension	Piece/Pkg
M-6706	steel	120 x 240 mm	1
M-6707	steel	240 x 240 mm	1

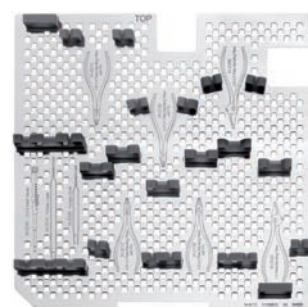
Instrument Case and Trays



M-6614



M-6711



M-6712

Art. No.	Description	Dimension	Piece/Pkg
M-6614	instrument case	240 x 240 x 54 mm	1
M-6711	instrument tray, bottom		1
M-6712	instrument tray, top		1

Implant Cases for Orthognathic Plates and Screws, 1.5/2.0 (Small, Empty)



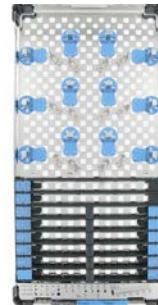
M-6607.01



M-6608.04



M-6611.02



M-6615.01

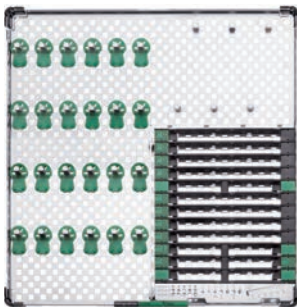


M-6617.02

Art. No.	Description	Dimension	Piece/Pkg
M-6607.01	implant case, plates, 1.5	120 x 240 x 20 mm	1
M-6608.04	implant case, plates, 2.0	120 x 240 x 37 mm	1
M-6611.02	implant case, screws, 1.5/2.0	120 x 240 x 37 mm	1
M-6615.01	implant case, plates/screws, 2.0	120 x 240 x 20 mm	1
M-6617.02	implant case, plates/screws, 1.5	120 x 240 x 20 mm	1

More options available on demand.

Implant Cases for Orthognathic Plates and Screws, 1.5/2.0 (Large, Empty)



M-6601.04



M-6603.02

Art. No.	Description	Dimension	Piece/Pkg
M-6601.04	implant case, plates/screws, 1.5	240 x 240 x 20 mm	1
M-6603.02	implant case, plates/screws, 2.0	240 x 240 x 37 mm	1

More options available on demand.

Clinical Examples

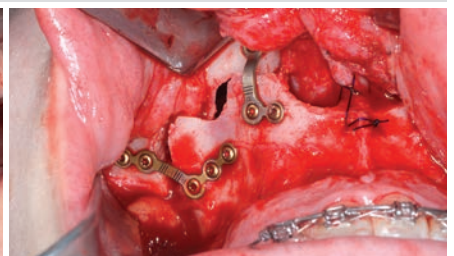
Case 1 - Maxillary forward displacement



Preoperative image

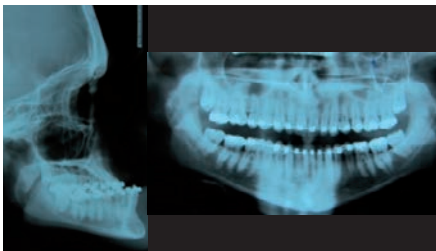


Intraoperative view of a LeFort I osteotomy

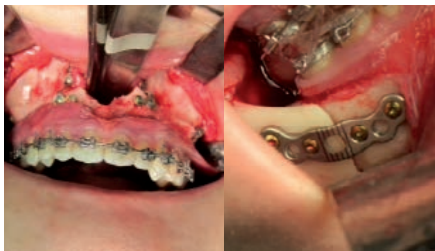


Postoperative result
Osteosynthesis with 1.5 L and Z plates

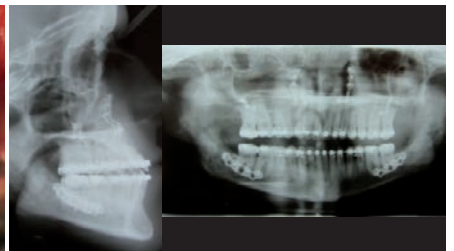
Case 2 - Bimaxillary repositioning osteotomy with 2 closed sagittal split plates



Preoperative X-ray of maxillary retrognathism together with mandibular prognathism



Maxillary forward displacement and fixation with 1.5 LeFort plates and SpeedTip screws
Semi-rigid fixation after mandibular backward displacement

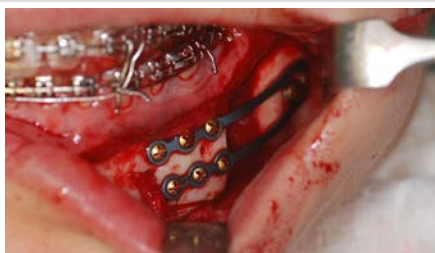


Postoperative X-ray with optimal occlusion

Fall 3 – Bimaxillary repositioning osteotomy with 2 open sagittal split plates



Preoperative X-ray of retrognathism

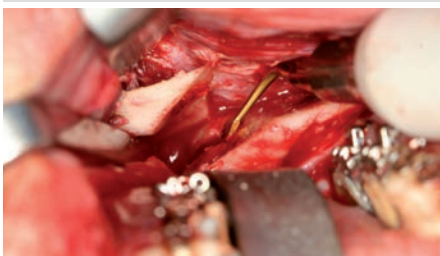


Intraoperative view
Sagittal split osteotomy of the mandible, IMF, osteosynthesis with 2 open sagittal split plates



Postoperative result

Case 4 - Low-high oblique osteotomy



The low-high piezoelectric osteotomy developed on the basis of the Schlössmann high-oblique osteotomy (Schlössmann & Perthes in 1924) is performed from lateral caudal to lingual cranial. An osteotomy is performed from lateral inferior to medial superior above the inferior alveolar nerve, visualized lingually with the Cottle rasp, thus preserving the nerve. The fragments diverge spontaneously due to muscle tension (pterygoid muscles and temporal muscle) after complete piezoelectric osteotomy.



The intact nerve is then evident to the lingual side entering the tooth-bearing segment.



After ultrasound or manual adjustment of the joint-bearing segment, provisional fixation is performed using 4 screws near to the osteotomy split, the intermaxillary fixation is released, and the occlusion is checked.



Postoperative 3D CT position check after complete osteosynthesis.



Case 5 - Genioplasty



Preoperative X-ray



Forward displacement of the tip of the chin by 5 mm



Postoperative result

Clinical cases by kind permission:

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