

Midface Orbita

Portfolio Overview

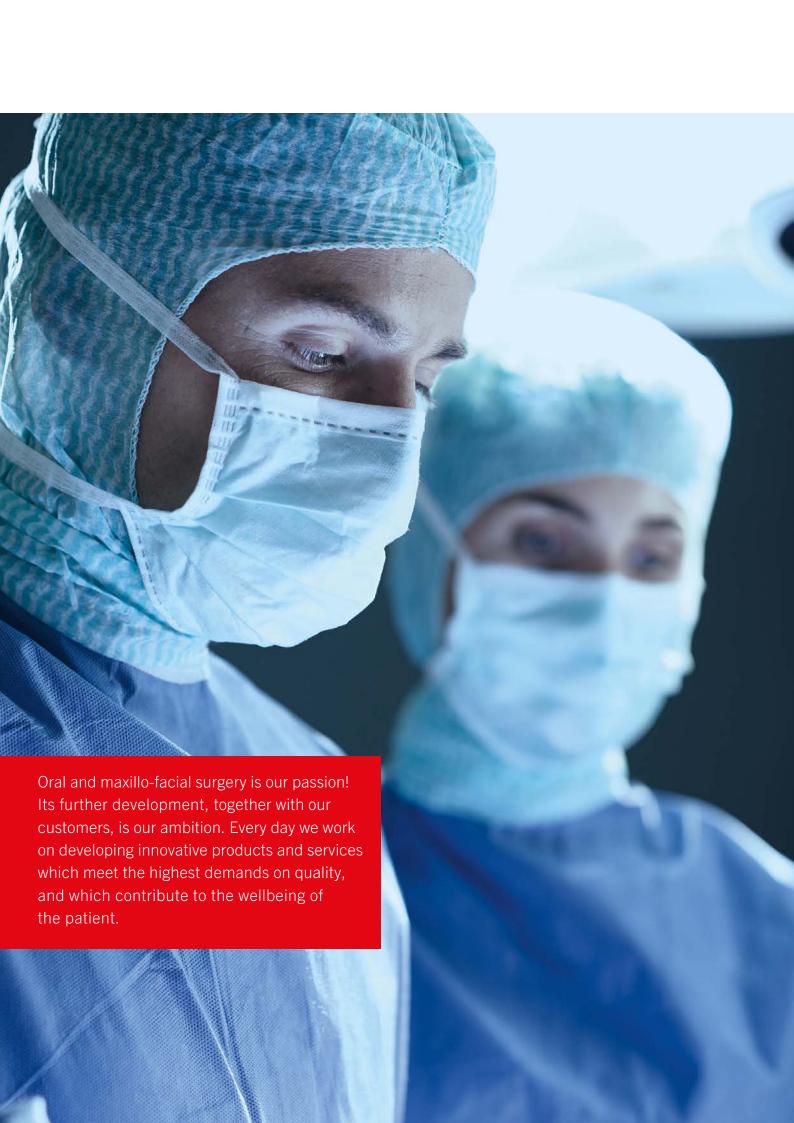
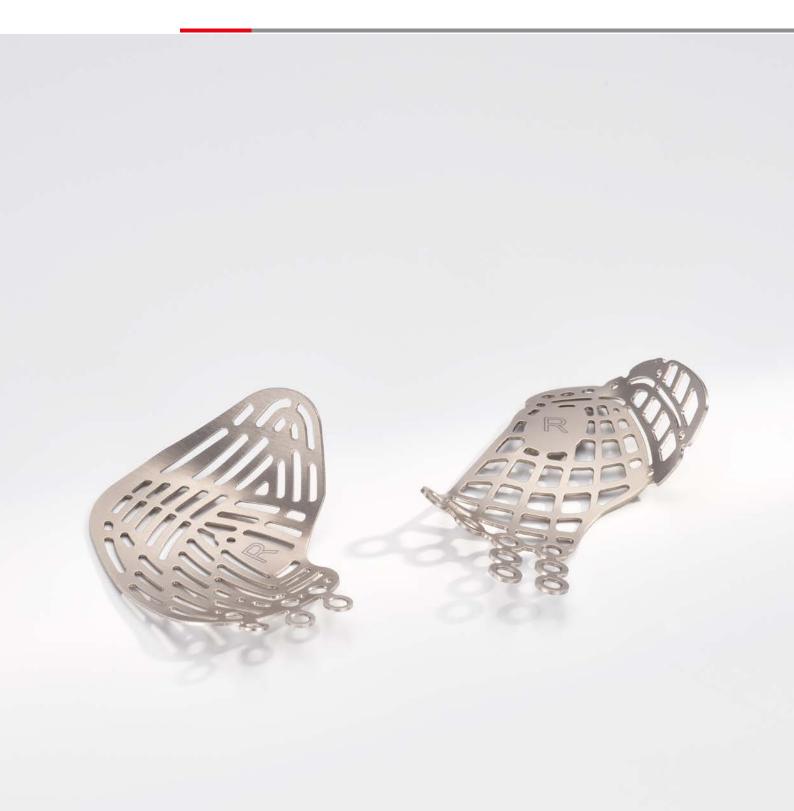


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Midface Orbita

Orbital reconstruction is a persistent challenge for every CMF surgeon as it comes in a multitude of different forms. Usually, it is impossible to accurately reposition every bone fragment, leading to impairment and compromised aesthetic and functional outcomes. Another key question is, which material is better for a given defect?

Certainly, biodegradable implants have an advantage because they give a clear answer on the subject whether or not metallic implants should be removed in the orbits. But do they maintain sufficient support for a stable and parallel position of the eye over time?

On the other hand, titanium as well as all further alloplastic materials also have their disadvantages: Bony overgrowth may result in virtual impossibility to remove the osteosynthesis material. Finetuning of many existing alloplastic implants may lead to sharp crests or edges, which could then lead to complications with the delicate soft tissue structures close by.

This brochure contains a comprehensive overview of our holistic implant portfolio for orbital reconstruction. Additional instruments and tools are presented to aid reconstruction in the operating room.

Feature, Function and Benefit





Our product portfolio for orbital reconstruction includes standard titanium, preformed "smart" plates and resorbable implants. A sophisticated solution in our portfolio, especially for complex cases, are our patient-specific IPS Implants® available in two materials: titanium and PEEK.

All our standard, smart and patient-specific implants can be combined with maxDrive® screws. Resorbable implants are fixed with SonicPins Rx® from our innovative SonicWeld Rx® System.

Due to our broad product range, we can offer suitable solutions for all orbital trauma classes, defect sizes and aesthetic needs — both for primary and secondary orbital reconstruction.

Orbital Implants

Feature and Function

Benefit

Standard Titanium Implants



 Wide range of plates with different designs and profiles Solutions for primary and secondary orbital reconstruction, for all orbital trauma classes and defect sizes

Smart Orbital Implants



- Anatomically pre-shaped implants
- Different plate designs available
- Based on the average surfaces generated from datasets of different genders and ethnicities
- High precision-fit
- Supplements the standard implants
- Unisex plates

Resorbable Implants



- SonicWeld Rx® resorbable implants
- Revolutionary technique for use in maxillofacial osteosynthesis – it combines highly advanced ultrasound technology with resorbable implants
- System provides extremely stable fixation and completely eliminates the need for a removal operation
- Method is clinically certified, validated and patient-friendly

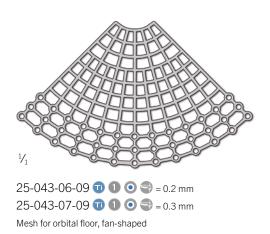
IPS Implants® Midface Orbita

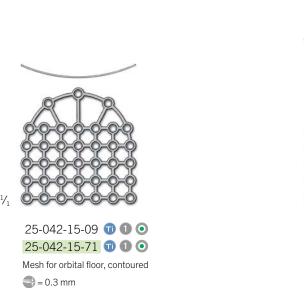


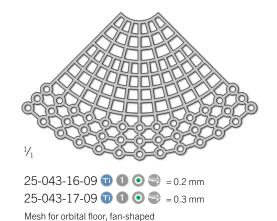
- Patient-specific orbital implants based on the individual CT scan of the patient, already checked for anatomic fit ex-works
- Range of options for planning
 - Mirroring of the intact bones and adaptation to the prevailing anatomical environment
 - Various fixation options
- Planning, fabrication, shipping from a single source

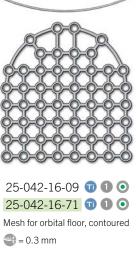
- Best possible three-dimensional precision-fit
- Patient-friendly round edges, as trimming or bending is no longer necessary
- High degree of safety in planning
- Complete service with the requirement for coordinating multiple services eliminated

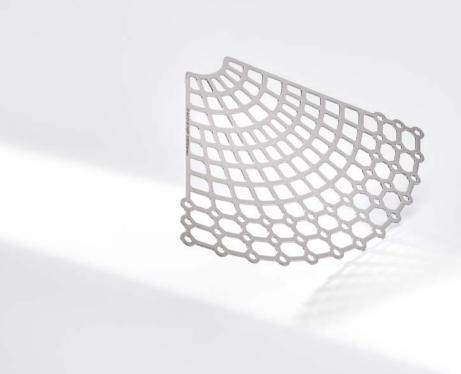
Standard Titanium Implants











Explanation of icons:

Titanium

1 Packaging unit

Plate profile

Screw diameter 1.2 mm

Screw diameter 1.5 mm

STERILE R Sterile packaged implants



25-043-01-09 **11 1 0 25-043-01-71 11 1 0**

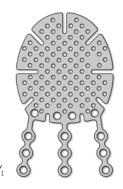
 $= 0.3 \, \text{mm}$



25-043-02-09 🕡 🛈 💿

25-043-02-71 🕡 🛈 💿

 $= 0.5 \, \text{mm}$



25-043-09-09 🕡 🛈 🧿

25-043-09-71 1 1 0

 $= 0.3 \, \text{mm}$

Mesh for orbital floor

Standard Titanium Implants

Orbital Groove Plate

While being easy to insert, the Groove Plate offers a considerable support to the eye globe. Various cutting options allow you to start with a full-size implant, then remove sections easily. On page 11 you will find some of the possible modifications which correspond to variation of the orbital trauma encountered.

The implant can be applied on both sides of the orbit. In cases with lacking bony support, the central medial bar can be seated posteriorly in order to additionally stabilize the position of the eye.



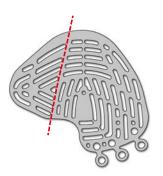
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Orbital Plate, Groove non-preshaped, symmetrical

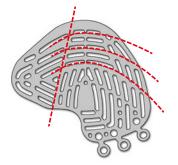
= 0.3 mm



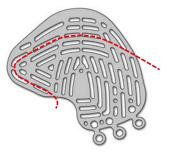
Cutting Options



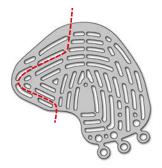
Complete reduction of the medial wing



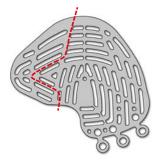
Cutting options of the posterior segment



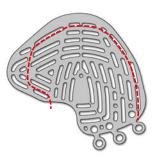
Partial cutting back of the medial wall and the posterior segment



Partial reduction of the medial wing



Partial reduction of the medial wing



Lateral, medial and posterior reduction

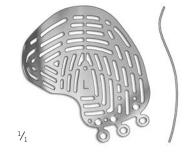
Smart Orbital Floor Plates Anatomically pre-shaped Implants

Smart Orbital Groove Plate

Smart Implants bear the name smart as they have a preformed shape based on a scientific background whereas conventional standard implants have a simple flat shape.

The shape and geometry of the **Smart Groove** Plate was created in close collaboration with the University of Amsterdam using a compilation of 174 adult CT scans to develop the best possible average fit.

Page 11 also shows the cutting options for the Smart Groove Plate.



25-044-32-09 🕡 🛈 💿

25-044-32-71 11 11 10

Smart Orbital Plate, Groove 3D-preshaped, for patient's left side

= 0.4 mm



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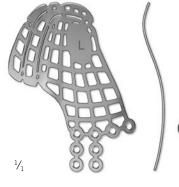
25-044-33-71 🕡 🛈 💿

Smart Orbital Plate, Groove 3D-preshaped, for patient's right side

 $= 0.4 \, \text{mm}$



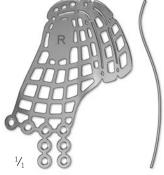
Smart Orbital Grid Plate



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Smart Orbital Plate, Grid, size S 3D-preshaped, for patient's left side

 $= 0.5 \, \text{mm}$

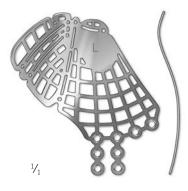


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25-045-36-71 11 11 10

Smart Orbital Plate, Grid, size S 3D-preshaped, for patient's right side

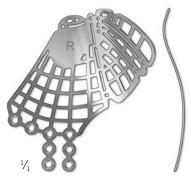
 $= 0.5 \, \text{mm}$



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Smart Orbital Plate, Grid, size L 3D-preshaped, for patient's left side

= 0.5 mm



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25-045-41-71 🛈 🛈 💿

Smart Orbital Plate, Grid, size L 3D-preshaped, for patient's right side

 $= 0.5 \, \text{mm}$

SonicWeld Rx®

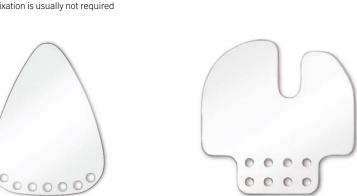
Resorbable Orbital Implants







Inferior support of the globe in cases of a small defect, round edge geometry, fixation is usually not required



52-306-24-04 🕔 🛈 🧿 Ø = 30 mm = 0.6 mm



 $= 0.6 \, \text{mm}$

52-306-23-04 🗷 🛈 🧿 $\emptyset = 23 \text{ mm}$



52-306-40-04 0 1 0 40 x 40 mm $= 0.6 \, \text{mm}$



52-306-19-04 🗷 🛈 🧿 23 x 19 mm

 $= 0.3 \, \text{mm}$

Tip in order to protect the posterior optic nerve. Fixation by SonicPins Rx®



52-306-30-04 🕠 🛈 🧿

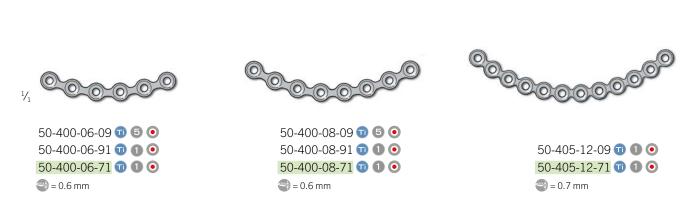
Ø = 30 mm

 $= 0.6 \, \text{mm}$

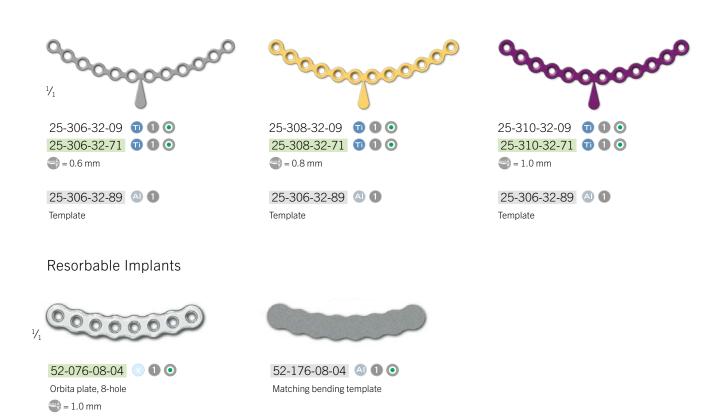
Orbital Rim Plates

Titanium Implants









IPS Implants® Midface Orbita Patient-specific Implants

IPS® - Individual Patient Solutions

The use of modern technologies opens up further options in the treatment of complex defect situations. With the development of preoperative virtual planning as well as patient-specific implants, another possibility to re-establish the orbital volume and shape has emerged.

With IPS® we offer matched solutions for the computer-based planning of surgical procedures, the efficient design of customized treatment concepts and the realization of these concepts in the operating theater with functionalized implants.

IPS® orbital implants are available in two materials: titanium and PEEK.



Case Studies



Fixation to the infraorbital rim with standard screws 1.2 mm.



Orbital reconstruction with additively manufactured titanium implant. Orbital reconstruction with additively manufactured titanium implant including zygoma mesh. Fixation with standard screws 1.5 mm.



Orbital reconstruction with two-part additively manufactured titanium implant. Fixation to the infraorbital rim with standard screws 1.5 mm.



Orbital reconstruction with PEEK implant. Fixation to the infraorbital rim with standard screws 1.5 mm.



For further information please refer to our separate brochure.

Screws, Screwdrivers and Blades







Micro screws Ø 1.2 mm self-retaining						
	Øxl	(mm)	maxDrive [®]	STERILE R		
	1.2 x	3 mm	25-870-03-61	25-870-03-71		
	1.2 x	4 mm	25-870-04-61	25-870-04-71		
#	1.2 x	5 mm	25-870-05-61	25-870-05-71		
=	1.2 x	6 mm	25-870-06-61	25-870-06-71		
	1.2 x	9 mm	25-870-09-61	25-870-09-71		















25-438-97-07 8 cm / 3 % " Screwdriver blade maxDrive® 1.5 mm





maxDrive® 🌐 🕡 🧿







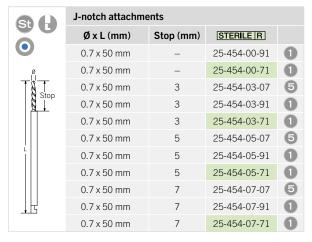
Micro screws Ø 1.5 mm self-retaining						
	ØxL(mm)	maxDrive [®] 5	maxDrive [®] ①	STERILE R 5	STERILE R 1	
	1.5 x 3.5 mm	25-875-03-09	25-875-03-61	25-875-03-75	25-875-03-71	
1	1.5 x 4 mm	25-875-04-09	25-875-04-61	25-875-04-75	25-875-04-71	
	1.5 x 5 mm	25-875-05-09	25-875-05-61	25-875-05-75	25-875-05-71	
	1.5 x 6 mm	25-875-06-09	25-875-06-61	25-875-06-75	25-875-06-71	
	1.5 x 7 mm	25-875-07-09	25-875-07-61	25-875-07-75	25-875-07-71	

Emergency screws Ø 1.8 mm self-retaining					
	ØxL(mm)	maxDrive [®] 5	maxDrive [®] 1	STERILE R 5	STERILE R 1
	1.8 x 3.5 mm	25-876-03-09	25-876-03-61	25-876-03-75	25-876-03-71
哥	1.8 x 4 mm	25-876-04-09	25-876-04-61		
1	1.8 x 5 mm	25-876-05-09	25-876-05-61	25-876-05-75	25-876-05-71
6	1.8 x 7 mm	25-876-07-09	25-876-07-61	25-876-07-75	25-876-07-71

	Drill-free screws Ø 1.5 mm self-retaining						
	ØxL(mm)	maxDrive® 5	maxDrive [®]	STERILE R 5	STERILE R 1		
	1.5 x 3.5 mm	25-878-03-09	25-878-03-61		25-878-03-71		
	1.5 x 4 mm	25-878-04-09	25-878-04-61	25-878-04-75	25-878-04-71		
	1.5 x 5 mm	25-878-05-09	25-878-05-61	25-878-05-75	25-878-05-71		
-	1.5 x 6 mm	25-878-06-09	25-878-06-61	25-878-06-75	25-878-06-71		
	1.5 x 7 mm	25-878-07-09	25-878-07-61	25-878-07-75	25-878-07-71		

Twist Drills

Twist drills for micro screws Ø 1.2 mm



for dense bone			
0.8 x 50 mm	5	25-457-05-07	6
0.8 x 50 mm	5	25-457-05-91	0
0.8 x 50 mm	5	25-457-05-71	0
0.8 x 50 mm	7	25-457-07-91	0
0.8 x 50 mm	7	25-457-07-71	0





Twist drills for micro screws Ø 1.5 mm

St (J-notch attachme	ent		
0 6	Ø x L (mm)	Stop (mm)	STERILE R	
•	1.1 x 50 mm	-	25-452-00-07	6
	1.1 x 50 mm	-	25-452-00-91	0
Stop	1.1 x 50 mm	-	25-452-00-71	0
	1.1 x 50 mm	3.5	25-452-03-07	6
	1.1 x 50 mm	3.5	25-452-03-91	0
	1.1 x 50 mm	5	25-452-05-07	6
	1.1 x 50 mm	5	25-452-05-91	0
	1.1 x 50 mm	5	25-452-05-71	0
	1.1 x 50 mm	7	25-452-07-07	6
	1.1 x 50 mm	7	25-452-07-91	0
	1.1 x 50 mm	7	25-452-07-71	0
	1.1 x 105 mm	3.5	50-511-35-07	0
	1.1 x 105 mm	3.5	50-511-35-71	0
	1.1 x 105 mm	5	50-511-05-07	0
	1.1 x 105 mm	5	50-511-05-71	0
	1.1 x 105 mm	7	25-452-57-07	0
	1.1 x 105 mm	7	25-452-57-71	0

	Dental attachment				
	ØxL(mm)	Stop (mm)			
•	1.1 x 45 mm	5	25-458-05-07	0	
	1.1 x 45 mm	7	25-458-07-07	0	
	1.1 x 45 mm	7	25-458-07-07	0	

SonicWeld Rx®

SonicPins and Twist Drills

1.6-mm SonicPins Rx®

		Pin length	Item No.	Item No.	Item No.
\times \bullet		4 mm	52-516-24-04 2	52-516-54-04 5	52-616-24-04 20
		5 mm	52-516-25-04 2	52-516-55-04 5	52-616-25-04 20
		6 mm	52-516-26-04 2	52-516-56-04 5	
		7 mm	52-516-27-04 2	52-516-57-04 5	
1/1 2 3/	1				

1.6-mm Micro SonicPins Rx®

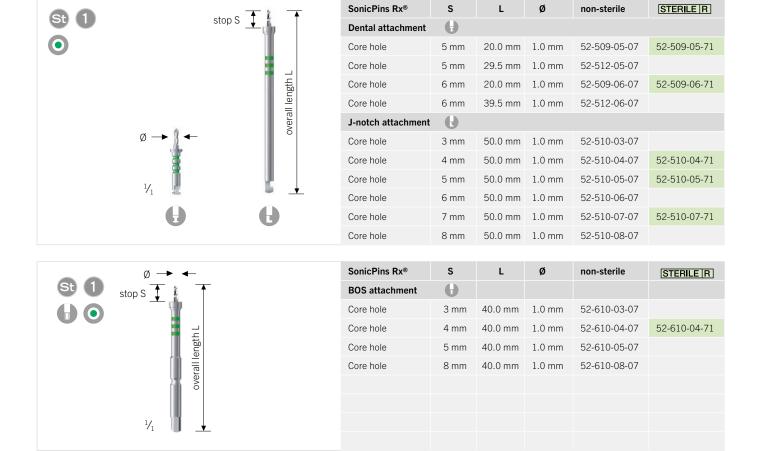
			Pin length	Item No.	Item No.
X O			5 mm	52-519-25-04 2	52-519-45-04 4
C C					
1/1	3/1	1			



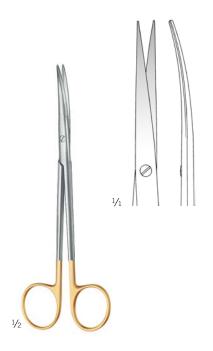
For further information please refer to our separate brochure.



Twist drills for 1.6-mm SonicPins Rx®



Instruments

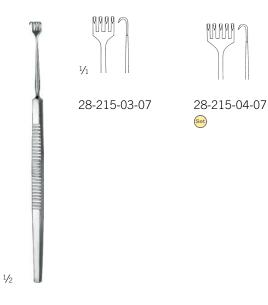


Metzenbaum-Lahey 11-965-14-07 14.5 cm / 5 %" slender pattern









Kaye 28-215-03-07 -28-215-04-07 13 cm / 5 1/8"













15-091-08-07 8 mm



15-091-12-07





15-091-16-07





15-091-10-07 10 mm



15-091-14-07





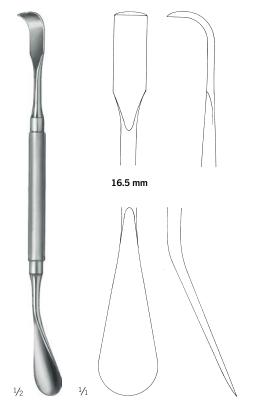
15-091-18-07

18 mm

Instruments



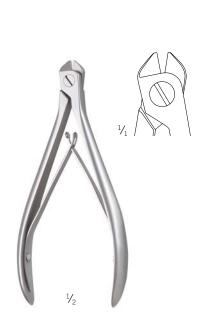












25-050-13-07 13 cm / 5 1/8" Cutter







25-052-13-07 12.5 cm / 4 %" Mesh cutter





Instruments



25-407-04-04

Screwdriver handle

11 cm / 4 %"

St 1 Set

Byrd

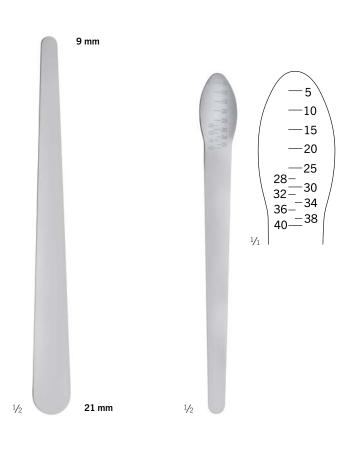
10 cm / 4"

St 1 Set

38-709-03-07

Zygoma reduction screw









38-697-01-07

2 different working ends

20 cm / 7 %" Spatula, orbital, straight, malleable,







18 cm / 7 1/8" Spatula, orbital, straight, malleable

38-697-02-07



St 1 Set

38-695-21-07

20 cm / 7 %"

Left spatula, orbital, contoured, malleable, small and large working end



38-696-21-07

 $20\,\mbox{cm}\,/\,7\,\mbox{\%}"$

Right spatula, orbital, contoured, malleable, small and large working end





Midface Orbita Set



Suggestion for the Set Configuration

Description	Item No.	Qty
Kaye face-lift hooklet, 13 cm / 5 1/8", 5-pronged	28-215-04-07	1
Desmarres saddle hook, 12 mm, 16 cm / 6 1/8"	15-091-12-07	1
Desmarres saddle hook, 14 mm, 16 cm / 6 1/8"	15-091-14-07	1
Desmarres saddle hook, 16 mm, 16 cm / 6 1/8"	15-091-16-07	1
Metzenbaum-Lahey dissecting scissors	11-965-14-07	1
Donavan orbital rim retractor, 19.5 cm/ 7 %"	38-694-20-07	1
Cutter, 13 cm / 5 1/8"	25-050-13-07	1
Mesh Cutter, 13 cm / 5 1/8"	25-052-13-07	1
Orbita retractor, straight, malleable, 2 different working ends	38-697-01-07	2
Orbita retractor, straight, malleable	38-697-02-07	1
Byrd zygoma reduction screw	38-709-03-07	1



Storage Proposal

Description	Item No.	Qty
Storage tray for miniSet container 277 x 171 x 54 mm	55-804-15-01	1
Silicone mat for miniSet container	55-009-08-04	1
Microstop® miniSet container 310 x 189 x 90 mm	55-861-70-04	1
Logistic Frame red for container	55-864-12-04	1
Coding Label w/o hole for the lid - to be marked "Orbita Trauma" -	55-864-01-04	1
Coding label for the front - to be marked "Orbita Trauma" -	55-864-05-04	1

In addition	
Storage solution for 1.0 mm micro, 1.5 mm micro, 2.0 mm mini and/or SonicWeld® implants	

^{*}according to components selected

CMF Surgery

It is the face that makes humans unique and unmistakable — "There is nothing that more closely reflects the life of an individual than the human face."*

Our objective is to simplify craniofacial surgery with specially designed implant systems that ensure optimum satisfaction for both surgeon and patient. Together with renowned users we translate new ideas into innovative products and are constantly enhancing them.

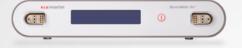
Our range of products includes everything necessary for modern craniofacial surgery. We not only set standards but we also go beyond to take advantage of modern technology in the development of solutions customized for the individual patient.

KLS Martin – your competent and reliable partner for both everyday challenges and special challenges.

SonicWeld Rx®

Resorbable implants for use in craniomaxillofacial osteosynthesis

- Resorb x®
- Resorb xG





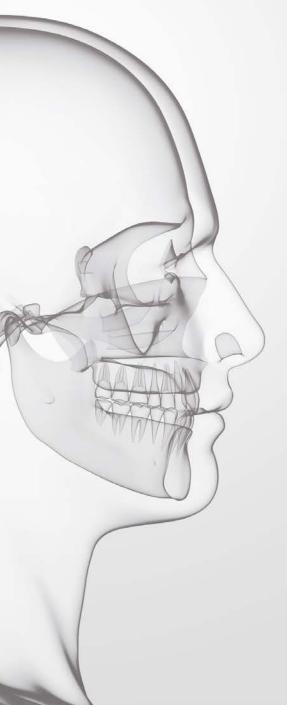
^{* ©} Kurt Haberstich (*1948)

Distractors

Devices for use in correction of malformations

- Cranial distraction
- Midface distraction
- Mandibular distraction





Individual Patient Solutions

Patient-specific solutions for use in craniomaxillofacial surgery

- IPS Implants®
- IPS CaseDesigner®
- IPS Gate®



LevelOne Fixation

Titanium implants and instruments for use in craniomaxillofacial osteosynthesis

- Traumatology
- Reconstruction
- Orthognatic surgery





App for CMF products

All important information about the CMF portfolio at one glance.





KLS Martin Group

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