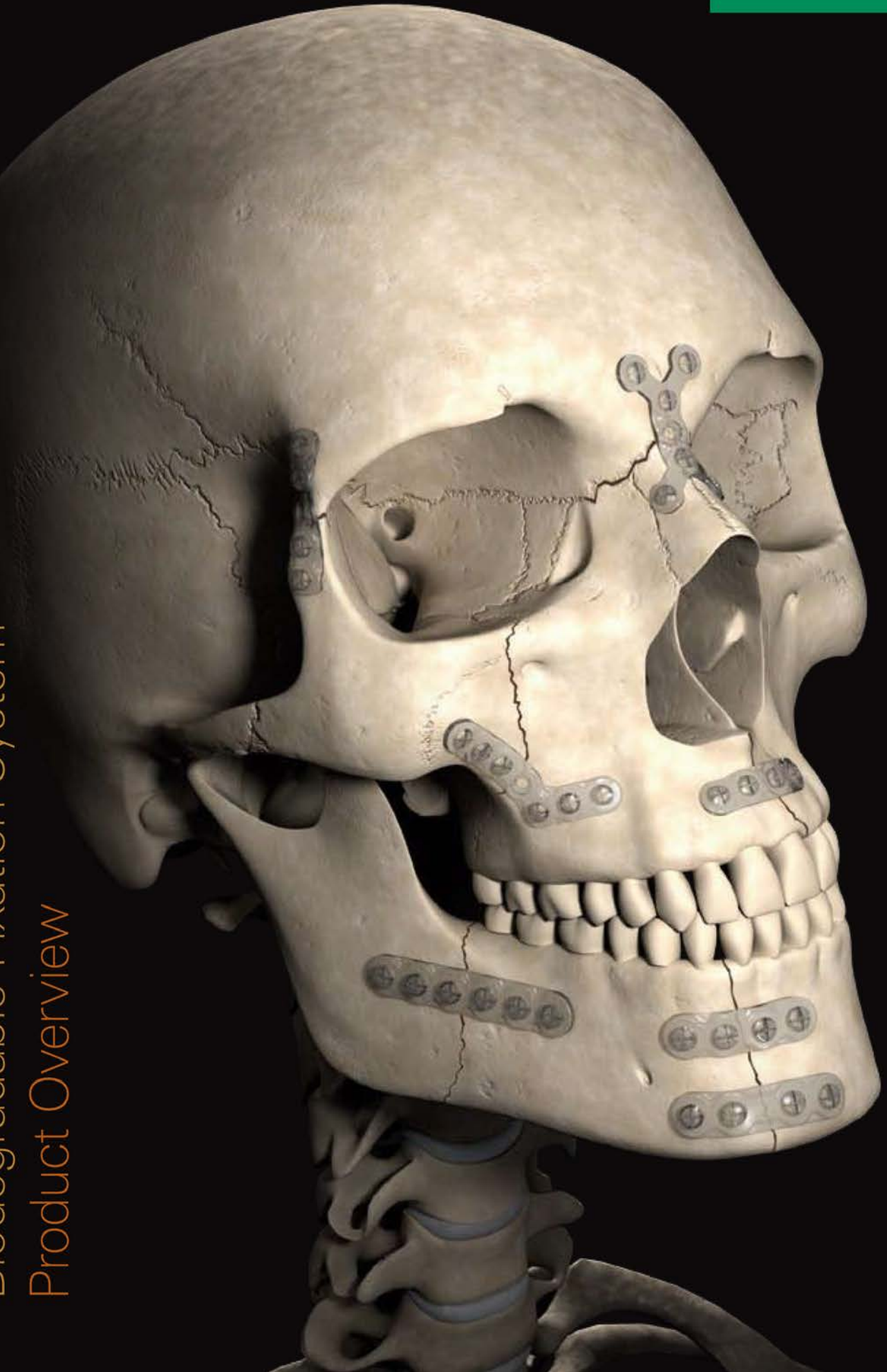


# Inion CPS<sup>®</sup>

**INION**

Biodegradable Fixation System  
Product Overview

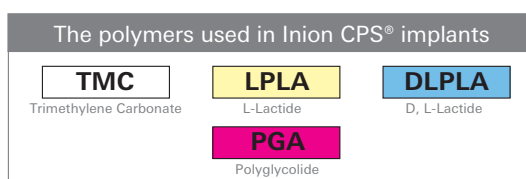


# Material advantage

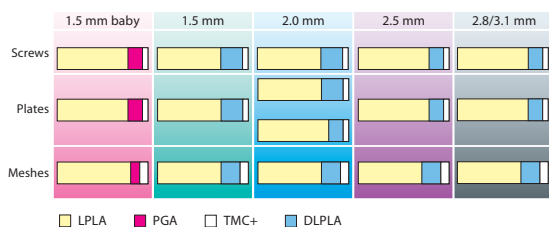
## What are the Inion® biodegradable implants made from?

All Inion CPS® implants are based on Inion® biodegradable polymer blends and have excellent handling properties, and strength and degradation characteristics that support a more natural healing process.

The Inion® biodegradable co-polymers used for the Inion CPS® Fixation Systems are composed of L-Lactide, D,L-Lactide, Polyglycolide and TMC (Trimethylene Carbonate). These polymers have long histories of safe clinical use.



The proportion of each polymer is varied according to the intended application of the specific implant, so that the strength, malleability and degradation profile best suits the clinical requirements.



## The degradation profile

Inion® biodegradable polymers are amorphous, degrade in vivo by hydrolysis and are metabolised by the body into CO<sub>2</sub> and water. The degradation profiles have been tailored to provide initial stability and then progressively transfer the load to bone to aid bone regeneration. Mass loss occurs thereafter.

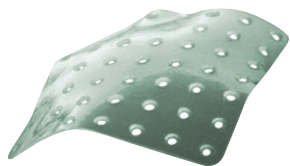
Inion CPS® Baby implants, specifically designed for pediatric patients, retain minimum of 70 % of their initial strength 6 weeks after implantation. Bioresorption takes place within two to three years.

Inion CPS® implants retain minimum of 70 % of their initial strength 9 weeks after implantation. Bioresorption takes place within two to four years.

## Inion® biodegradable polymer advantage

- Inion CPS® implants are biodegradable. No permanent metal implant left in the body reducing risk of implant migration and stress shielding
- Inion CPS® Baby implants reduce risk of growth restriction in children
- Predictable degradation progressively loads the bone to aid bone regeneration
- Addresses patient concerns about implant permanence, palpability and temperature sensitivity
- No interference with postoperative imaging (X-ray, CT, MRI) which might be required for future diagnosis, as the implants are non-metallic
- Implants are supplied sterile and single packed, solving concerns about possible decontamination of implants which may cause cross-infection
- Easy and precise anatomical contouring of plates after simply heating in the Inion Thermo™ water bath

# Inion CPS® - a complete system for CMF fixation



1.5 mm CPS BABY SYSTEM  
For paediatric craniofacial procedures (similar use to titanium 1.0 - 1.2 mm)  
Strength retention is minimum 6 weeks



1.5 mm CPS SYSTEM  
For cranial and midface fixation (similar use to titanium 1.0 - 1.2 mm)  
Strength retention is minimum 9 weeks

## Inion CPS® systems



2.0 mm CPS SYSTEM  
For midface and orthognathic fixation (similar use to titanium 1.5 - 1.7 mm)  
Strength retention is minimum 9 weeks



2.5 mm CPS SYSTEM  
For mandibular fixation (similar use to titanium 2.0 - 2.4 mm)  
Strength retention is minimum 9 weeks\*\*

### Key elements

The Inion CPS® system comprises of three key elements developed to provide a total solution for craniomaxillofacial surgery:

Each product has been specifically designed to encompass the particular biomechanical requirements of each facial skeleton area.

Tailoring the polymer selections, manufacturing processes and product designs provides each product with optimal strength, malleability and resorption profiles to meet their specific clinical requirements.

Inion CPS® is the only biodegradable CMF system with applications for all areas of the facial skeleton, and comprises a range of biodegradable plates, screws and mesh for use in children and adults.

### Clinical advantages

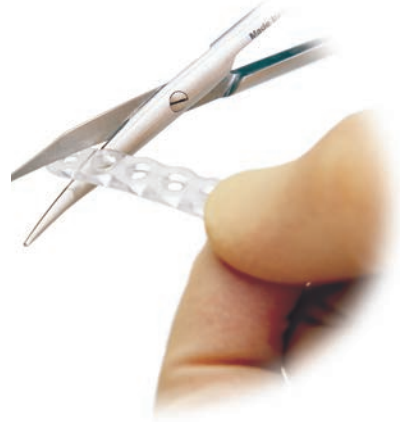
Since their introduction in 2001, the Inion CPS® implants have been used successfully in more than 55 000 operations by an increasing number of physicians.

- Most comprehensive biodegradable plating system available - the only one comparable to titanium in its scope of use
- Quick and easy to use
- Avoidance of removal surgery reducing patient trauma and cost
- Unlike other biodegradables it has implants suited for all CMF areas, including:
  - paediatric craniofacial trauma and reconstruction
  - fractures and reconstructive procedures of the cranium
  - orthognathic surgery and trauma of the mid-face and maxilla
  - fractures and osteotomies of the mandible\*\*

\*\* in conjunction with appropriate maxillomandibular fixation

## Innovative plate design

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### Plate characteristics

- Optimised strength / material ratio
- Minimised screw hole deformation during bending
- Low plate / screw profile for reduced palpability

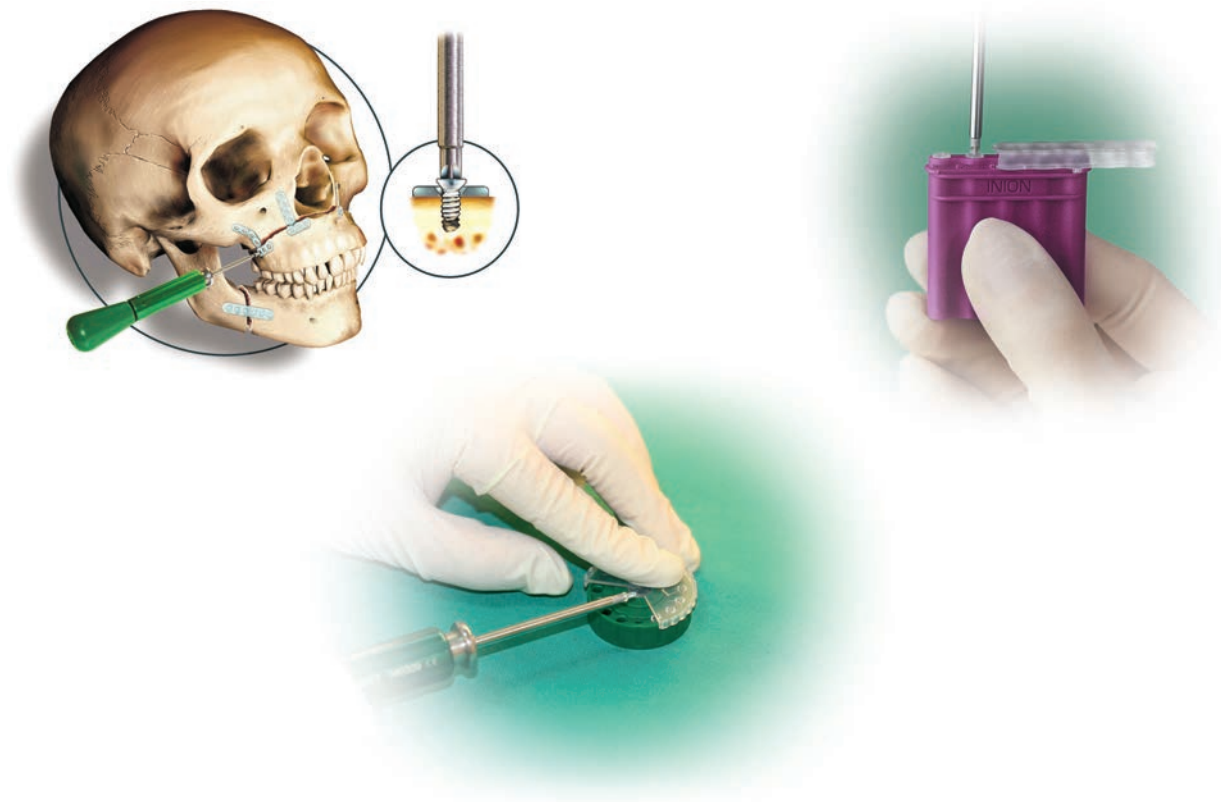
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### Handling advantage

- Plates are malleable after activation in the Inion Thermo™ water bath (55°C).
- After water bath treatment, plates are most malleable for 10-15 seconds for easy adaptation to the bone.
- They can also be re-heated up to three times for further contouring. Maximum heating time is 30 minutes.
- Plates can be easily cut with scissors.

## Versatile screw insertion methods

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### Fast and easy to use techniques

- Manual tap method
- Self-drilling bone tap method (self-drilling tap for 1.5 mm and 2.0 mm screws)
- Self-tapping screws (1.5/2.0 mm screws for thin monocortical applications)

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### Innovative screw solutions

- Fine screw threads provide maximum engagement in cortical bone
- Monocortical screws are packaged in a convenient screw ring (5 + 1 emergency screw included in 1.5 / 2.0 mm screw ring)
- Bicortical screws (2.0 / 2.5 / 2.8 mm) are packaged in an easy to use dispenser
- Universal screwdriver blade used for all Inion CPS® screw sizes
- Simple and secure push-fit screw pick-up





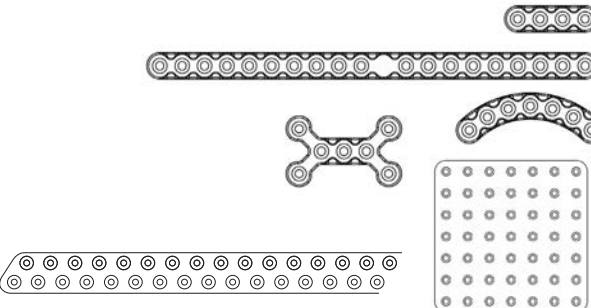


# Inion CPS® implants

## Inion CPS® Baby 1.5 mm System

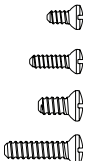
For paediatric procedures, similar use to titanium 1.0-1.2 mm

Art. No.	Description
PLT-1000	4 hole plate
PLT-1001	20 hole plate (reinforced centre hole)
PLT-1002	C-plate, 7 holes
PLT-1003	X-plate, 7 holes
PLT-1028	Mesh plate, 7 x 7 holes
PLT-1029	Mesh plate, 14 x 14 holes
PLT-1059	64 hole plate



### Screws

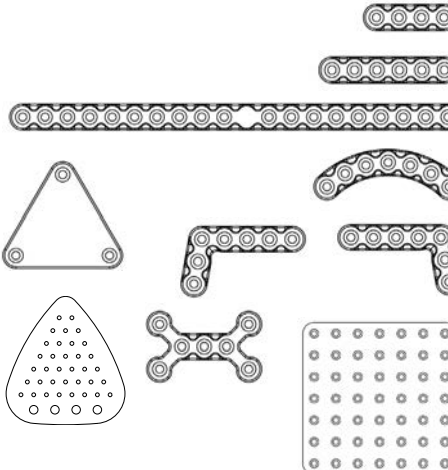
Art. No.	Description
SCR-1220	1.5 x 4 mm Screw Ring 5pcs (+ one 2.0 x 5 mm emerg.)
SCR-1221	1.5 x 6 mm Screw Ring 5pcs (+ one 2.0 x 7 mm emerg.)
SCR-1210	2.0 x 5 mm Screw Ring 5pcs
SCR-1211	2.0 x 7 mm Screw Ring 5pcs



## Inion CPS® 1.5 mm System


For cranial and mid face fixation, similar use to titanium 1.0-1.2 mm

Art. No.	Description
PLT-1005	4 hole plate
PLT-1006	6 hole plate
PLT-1007	20 hole plate (reinforced centre hole)
PLT-1008	C-plate, 7 holes
PLT-1009	L-plate, right, 7 holes (on the left)
PLT-1010	L-plate, left, 7 holes (on the right)
PLT-1011	Burrhole plate
PLT-1012	X-plate, 7 holes
PLT-1030	Mesh plate, 7 x 7 holes
PLT-1031	Mesh plate, 14 x 14 holes
PLT-1081	Orbital plate, 25 x 24mm
PLT-1083	Orbital plate, 30 x 28mm



### Screws

Art. No.	Description
SCR-1222	1.5 x 4 mm Screw Ring 5pcs (+ one 2.0 x 5 mm emerg.)
SCR-1223	1.5 x 6 mm Screw Ring 5pcs (+ one 2.0 x 7 mm emerg.)



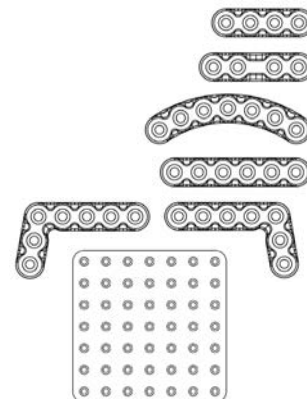
# Inion CPS® implants

## Inion CPS® 2.0 mm System

For midface and orthognathic fixation, similar use to titanium 1.5-1.7 mm

Art. No. Description

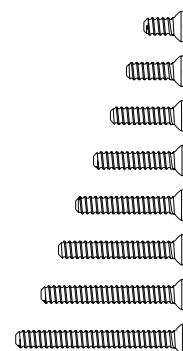
<b>PLT-1013</b>	4 hole plate
<b>PLT-1014</b>	4 hole plate, extended
<b>PLT-1017</b>	C-plate, 7 holes
<b>PLT-1038</b>	Orthognathic 6 hole plate
<b>PLT-1039</b>	Orthognathic L-plate, right, 7 holes (on the left)
<b>PLT-1040</b>	Orthognathic L-plate, left, 7 holes (on the right)
<b>PLT-1032</b>	Mesh plate, 7 x 7 holes



## Screws

Art. No. Description


<b>SCR-1224</b>	2.0 x 5 mm Screw Ring 5pcs (+ one 2.5 x 6 mm emerg.)
<b>SCR-1225</b>	2.0 x 7 mm Screw Ring 5pcs (+ one 2.5 x 8 mm emerg.)
<b>SCR-1284</b>	2.0 x 9 mm 2 Screws / box
<b>SCR-1285</b>	2.0 x 11 mm 2 Screws / box
<b>SCR-1286</b>	2.0 x 13 mm 2 Screws / box
<b>SCR-1287</b>	2.0 x 15 mm 2 Screws / box
<b>SCR-1288</b>	2.0 x 17 mm 2 Screws / box
<b>SCR-1289</b>	2.0 x 20 mm 2 Screws / box





## Inion CPS® 2.5 mm System

For mandibular fixation, similar use to titanium 2.0-2.4 mm

Art. No.	Description	
PLT-1023	4 hole plate	
PLT-1024	4 hole plate, extended	
PLT-1041	4 hole plate, extended long	
PLT-1025	6 hole plate	
PLT-1026	6 hole plate, extended	
PLT-1036	10 hole plate	


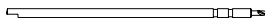
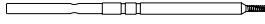
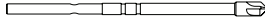

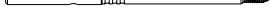
## Screws

Art. No.	Description	
SCR-1206	2.5 x 6 mm Screw Ring 5pcs	
SCR-1207	2.5 x 8 mm Screw Ring 5pcs	
SCR-1290	2.5 x 10 mm 2 Screws / box	
SCR-1291	2.5 x 12 mm 2 Screws / box	
SCR-1292	2.5 x 14 mm 2 Screws / box	
SCR-1293	2.5 x 16 mm 2 Screws / box	
SCR-1294	2.5 x 18 mm 2 Screws / box	
SCR-1208	2.5 x 23 mm 1 Screw / box	
SCR-1297	2.8 x 10 mm 2 Screws / box	
SCR-1298	2.8 x 12 mm 2 Screws / box	
SCR-1299	2.8 x 14 mm 2 Screws / box	
SCR-1300	2.8 x 16 mm 2 Screws / box	
SCR-1301	2.8 x 18 mm 2 Screws / box	
SCR-1209	2.8 x 23 mm 1 Screw / box	
SCR-1226	3.1 x 10 mm 1 Screw / box	
SCR-1227	3.1 x 12 mm 1 Screw / box	
SCR-1228	3.1 x 14 mm 1 Screw / box	
SCR-1229	3.1 x 16 mm 1 Screw / box	
SCR-1230	3.1 x 18 mm 1 Screw / box	

# Inion CPS® instruments



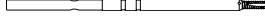

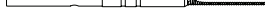
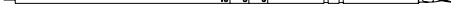


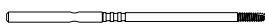

## 1.5 mm Instruments

Colour Code 

Art. No.	Description	Length (mm)	Coupling	
INS-9116	1.2 mm drill bit short	50	J-latch	
INS-9002	1.2 mm drill bit with 5 mm stop	70	J-latch	
INS-9027	1.5 mm bone tap	70	Manual	
INS-9047	Countersink 1.5/2.0 mm	70	Manual	
INS-9261	1.5 mm self-drilling bone tap	70	Pentagonal	
INS-9263	1.5 mm self-drilling bone tap	70	Manual	



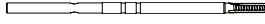
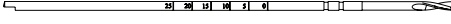
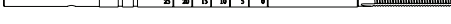

## 2.0 mm Instruments

Colour Code 

Art. No.	Description	Length (mm)	Coupling	
INS-9117	1.75 mm drill bit short	50	J-latch	
INS-9010	1.75 mm drill bit with 6 mm stop	70	J-latch	
INS-9030	2.0 mm bone tap	70	Manual	
INS-9055	1.75 mm drill bit with 22 mm stop	70	J-latch	
INS-9060	2.0 mm bone tap with 22 mm stop	70	Manual	
INS-9106	1.7 mm drill bit long with 10 mm stop	120	J-latch	
INS-9107	2.0 mm bone tap long with 10 mm stop	120	Manual	
INS-9047	Countersink 1.5/2.0 mm	70	Manual	
INS-9262	2.0 mm self-drilling bone tap	70	Pentagonal	
INS-9264	2.0 mm self-drilling bone tap	70	Manual	

## 2.5/2.8/3.1mm Instruments

Colour Code 

Art. No.	Description	Length (mm)	Coupling	
INS-9118	2.25 mm drill bit short	50	J-latch	
INS-9015	2.25 mm drill bit with 7 mm stop	70	J-latch	
INS-9103	2.5 mm bone tap with 10 mm stop	70	Manual	
INS-9017	2.25 mm drill bit long	120	J-latch	
INS-9033	2.5 mm bone tap long	120	Manual	
INS-9048	Countersink 2.5/2.8/3.1 mm	105	Manual	

Colour Code 

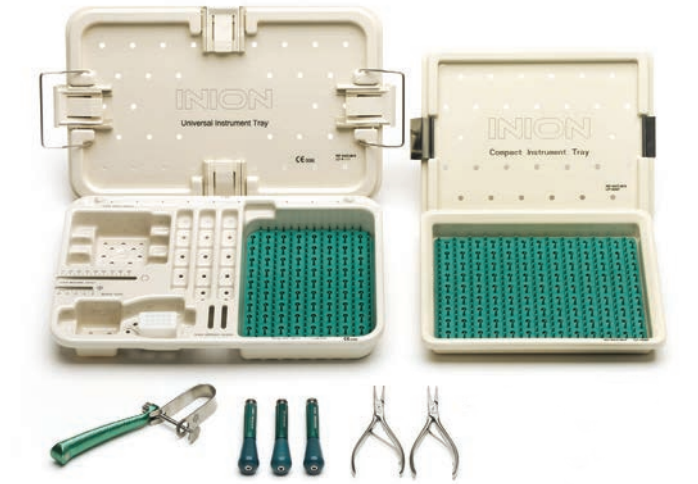
INS-9022	2.5 mm drill bit long	120	J-latch	
INS-9034	2.8 mm bone tap long	120	Manual	

Colour Code 

INS-9050	2.8 mm drill bit long	120	J-latch	
INS-9032	3.1 mm bone tap long	120	Manual	

## Universal Instruments

Art. No.	Description	Length (mm)	Coupling
<b>INS-9029</b>	Universal screwdriver blade	70	Manual
<b>INS-9040</b>	Universal screwdriver blade long	120	Manual
<b>INS-9007</b>	Universal screwdriver handle		
<b>INS-9024</b>	Plate bending pliers		
<b>INS-9046</b>	Transbuccal trocar set complete		
<b>ACC-9801</b>	Inion Thermo™ (water bath 230v)		
<b>ACC-9804</b>	Inion Thermo™ (water bath 110v)		
<b>ACC-9802</b>	Inion Thermo™ drape		
<b>ACC-9813</b>	Inion universal instrument tray		
<b>ACC-9818</b>	Inion compact instrument tray		
<b>INS-9109</b>	Screw cutting pliers		
<b>INS-9110</b>	Scale 1.5 mm-3.1 mm		





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