IGEA IMPLANT

PRODUCER OF SPECIAL ALLOYS SINCE





The only way to do great work is to love what you do.
If you haven't yet found what's right for you continue to look for it, don't stop, you will know you have found it as soon as you see it in front of you.

"Steve Jobs"



Company Profile	4	IGEA NARROW IMPLANTS	58
Implant Description	8	Narrow Implant	59
Conical Hexagonal Connection	9	Surgical Protocol	60/61
The SLA Implant Surface	11	Drills and Bone taps	62
IGEA REGULAR IMPLANTS	12	Drill - Stops	63
Regular Implant	13	Bone Profiler and Drill Extender	64
Surgical Protocol	14/15	Parallelism pins	65
Surgical Kit	17	<b>Driver, Screwdrivers and Ratchets</b>	66
Surgical Tool Kit	18/19	Implant Drivers	67
Drills and bone taps	20	Prosthetic Screwdrivers	68
Drill - Stops	23	Depth probe	69
Bone Profiler - Drill Extender	24	Ratchets	70
Parallelism pins	25	Pre-Prosthetics	72
<b>Driver, Screwdrivers and Ratchets</b>	26	Healing Screws	73
Implant drivers	27	Impression coping open tray	74
Prosthetic Screwdrivers	28	Impression coping closed tray	75
Depth proble	29	Implant Replica	76
Ratchets	30	Cement-retained prosthesis and	
Pre-Prosthetics	32	Overcastable abutments	78
Healing Screws	33	Titanium Straight Abutments	79
Impression coping open tray	34	Titanium Angled Abutments	80
Impression coping closed tray	35	Titanium Temporary Abutments	81
Implant Replica	36	Titanium Rescue Abutmentes	82
Cement-retained prosthesis and		Cr-Co Overcastable Abutments	83
Overcastable abutments	38	Multi-unit-System	84
Titanium Straight Abutments	39	Multi-Unit Abutments and Cylinder	85
Titanium Angled Abutments	40	Multi-Unit components and Accessories	86
Titanium Temporary Abutments	41	Overdenture	87
Titanium Rescue Abutmentes	42	Equator	88/89
Cr-Co Overcastable Abutments	43	Sphero Block	90
Multi-unit-System	44	Digital libraries	92
Multi-Unit Abutments and Cylinder	45	Ti-Base	93
Multi-Unit components and Accessories	46	Cad/Cam accessories	94
Overdenture	47	Implant Replica and Scan-Abutment	95
Equator	48/49	Igea Narrow Screws	96
Sphero Block	50	Screws and Codes	97
Digital libraries	52	Raw Materials	98/99/100
Ti-Base	53	Packaging	102/103
Cad/Cam accessories	54	Anatomical Criteria	104
Implant Replica and Scan-Abutment	55	Bibliography	105
Igea Regular Screws	56	Warnings and Certifications	106
Screws and Codes	57		



#### **HISTORY**

Mesa Italia S.r.I. is a leading Italian manufacturer of dental alloys since 1975. The strength of the Mesa company is the long family tradition that has allowed, founder Giacomo Sala, to pass on the same creative ambition to his two sons Lorenzo and Valerio, promoting a product, the quality of which is recognized both nationally and internationally.

Business continuity, combined with an enduring drive for research and innovation, has enabled the company to make its product portfolio even more comprehensive by channeling interest into the implantology field.

Several divisions operate within the company:

- Administrative and Commercial
- Technological
- Warehouse
- Scientific



The administrative and commercial division is staffed by highly qualified, client-focused personnel who can provide technical and commercial support in 5 languages so as to facilitate every request on the use of the various commodity products for sale; it is present in Italy with agents, while, in the rest of the world, it is represented by distributors managed by area heads.

The technical department consists of four engineers and skilled technicians who, with the help of high-precision tools, enable the production of high-quality machined products.

The "warehousing" division relies on automated vertical warehouses that not only rationalize space but also allow operators precise preparation of orders to be filled.

The science division is in charge of educational communication and scientific-technical research. Oral maxillofacial surgeons and a team of dental technicians are in charge of theoretical and clinical courses.



#### **INNOVATION**

Mesa Italia bases its "know how" in machining, is well aware of the problems arising from any machining defect and imposes scrupulous evaluation and validation protocols on the devices it produces.

The careful selection of raw materials is a daily effort to maintain an excellent level of quality in the products we market.

The production process is carried out by a staff of highly skilled engineers and operators who conduct daily studies on production technology. Mechanical production is done with state-of-the-art sliding headstock machines.

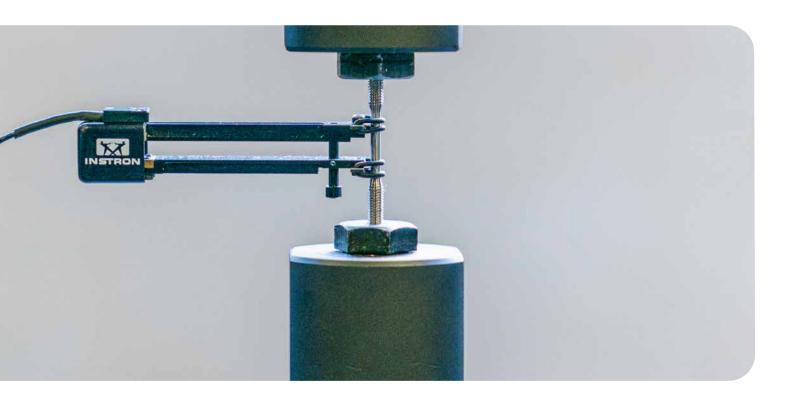
All stages of our production process take place exclusively in Italy and are subject to constant quality control.



#### RESEARCH

Igea Implant System was born from the Mesa company's 50 years of experience in the dental field as well as from constructive discussions with dentists. The research and development team based their knowledge on the latest state of the art and designed a system with a simple and functional systematics.

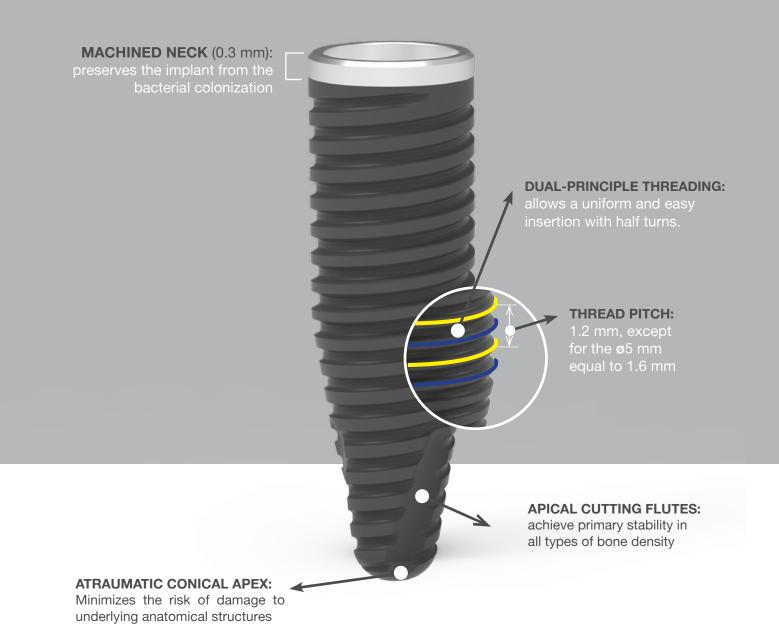




The two terms simple and functional well summarize the dual goal the company is committed to: ensuring innovative solutions that at the same time meet clinicians' expectations. Thanks to collaboration with Italian University Institutions, microleakage tests on our fixture and compatibility studies on the materials of our implant system were carried out. The company has equipped itself with an INSTRON fatigue test system, on which static and dynamic tests were carried out taking ISO 14801:2017 "Dentistry, Implants, Dynamic fatigue test for endo-osseous dental implants" as reference.

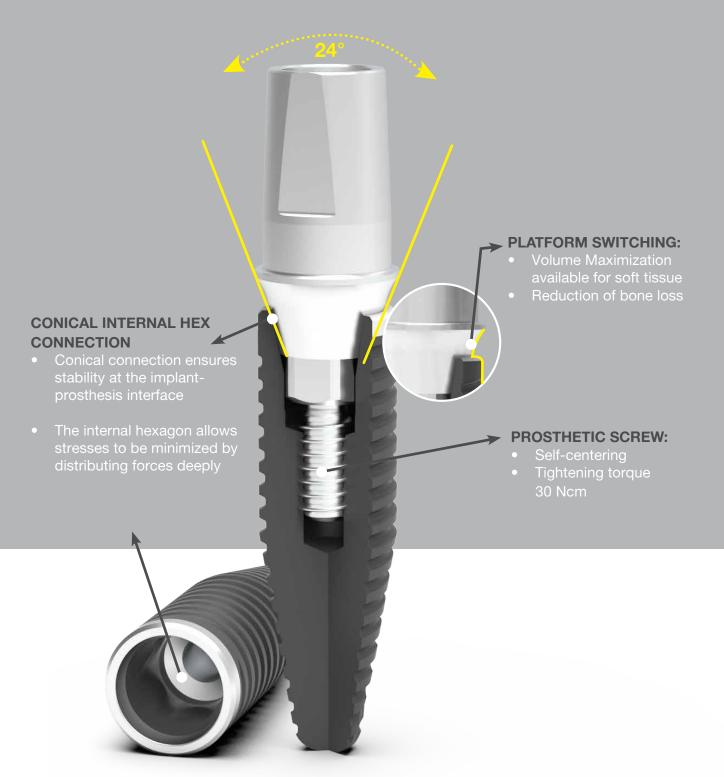


# **IMPLANT DESCRIPTION**



The **CONICAL-CYLINDRICAL** shape of the implant guarantees a optimal and uniform distribution of masticatory load.

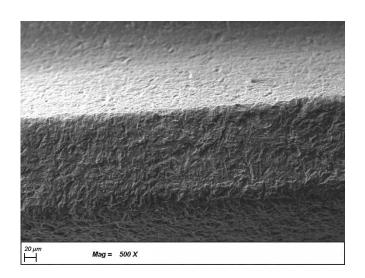
# CONICAL HEXAGONAL CONNECTION



The conical connection with internal hexagon offers the possibility of balancing load forces acting on the prosthetic component preventing even potential unscrewing phenomena.



# THE IMPLANT SURFACE



#### **MATERIAL**

The company uses Grade 4 Titanium to produce its entire line of dental implants. This alloy provides rapid osteointegration, excellent biocompatibility and has the highest mechanical strength among commercially pure Titanium grades.

#### **WASHING**

Mesa Italia operates thorough cleaning processes on all equipment through advanced technologies to remove any traces of dirt from industrial processing.



# $\frac{2\mu m}{\Box}$ Mag = 5.00 K X

#### **SLA**

The surface treatment performed on Mesa Igea implants involves a sandblasting process followed by acid etching in order to increase the contact surface area and promote osteoblastic cell differentiation.

# IGEA REGULAR IMPLANTS





# **REGULAR IMPLANT**









3.8 mm	4.3 mm	

5.0 mm

		D1 mm	D2 mm	L mm	Code
			1.9	8	Ti4-Igea- <b>1006</b>
D1-			1.9	10	Ti4-Igea- <b>1007</b>
		3.8	1.9	11.5	Ti4-Igea- <b>1008</b>
			1.9	13	Ti4-Igea- <b>1009</b>
			1.9	15	Ti4-Igea- <b>1010</b>
			2.2	8	Ti4-Igea- <b>1026</b>
		4.3	2.2	10	Ti4-Igea- <b>1027</b>
D2			2.2	11.5	Ti4-Igea- <b>1028</b>
			2.2	13	Ti4-Igea- <b>1029</b>
			2.2	15	Ti4-Igea- <b>1030</b>
			2.6	8	Ti4-Igea- <b>1021</b>
			2.6	10	Ti4-Igea- <b>1022</b>
		5.0	2.6	11.5	Ti4-Igea- <b>1023</b>
			2.6	13	Ti4-Igea- <b>1024</b>
			2.6	15	Ti4-Igea- <b>1025</b>



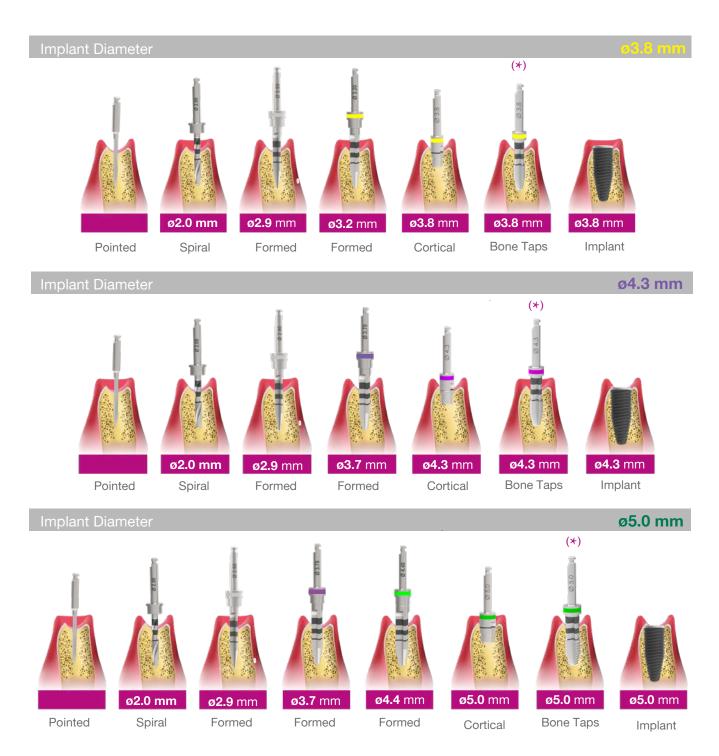
# **COVER SCREW**

Thread	Code	
M2	CPS- <b>1500</b>	- /

# **SURGICAL PROTOCOL**

The plant platform should be placed at the bone crest (crestal placement)

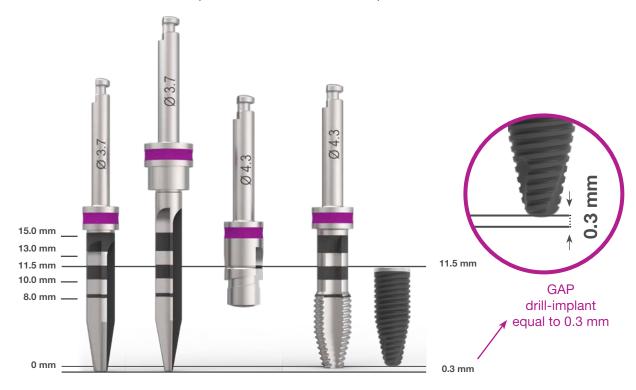
NOTE: Do not exceed a tightening torque of 45 Ncm for implants: excessive torque can damage the implant and can cause bone necrosis.



(\*) In order to maintain the desired insertion torque, in dense bone, it is recommended the use of the bone tap, at the maximum speed of 20 rpm and only with the diameter corresponding to the width of the implant bed.

# SURGICAL PROTOCOL

The surgical protocol of the Igea implant was developed to provide surgeons with the following Guidance on how to choose the most appropriate tools for site preparation implant depending on the type of bone. However, it is the surgeon's job to apply the most appropriate protocol based on one's experience



All drills and tappers are made of stainless steel for medical use.

The line of surgical drills is comprehensive and easy to use.

All diameters of MESA IGEA implants share the formed drills and spiral drill; depending then on the implant diameter, specific formed drills are provided.

#### **FEATURES AND ADVANTAGES:**

 Each formed drill has depth bands highlighted in contrasting colors and is color-coded for better identification.

#### **DRILL SPEED:**

We recommend a speed of drilling between 600-800 rpm.

- The recommended tapping speed is max 20 rpm.
- Perform all drilling with a vertical to-and-fro movement accompanied by copious external irrigation in order to minimize heat production and preserve bone viability.

#### **DURABILITY OF DRILLS:**

• Do not use drills that are damaged, not sharp, or for more than 20 applications to reduce risks of overheating or bone trauma that may compromise the osteointegration process.

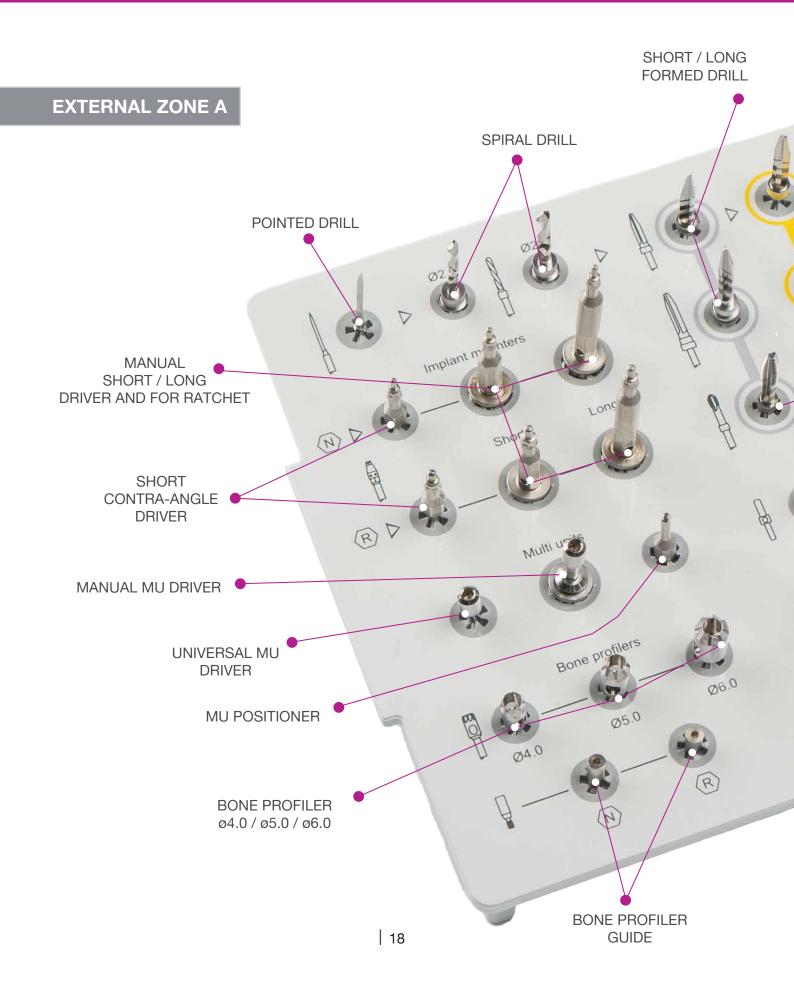


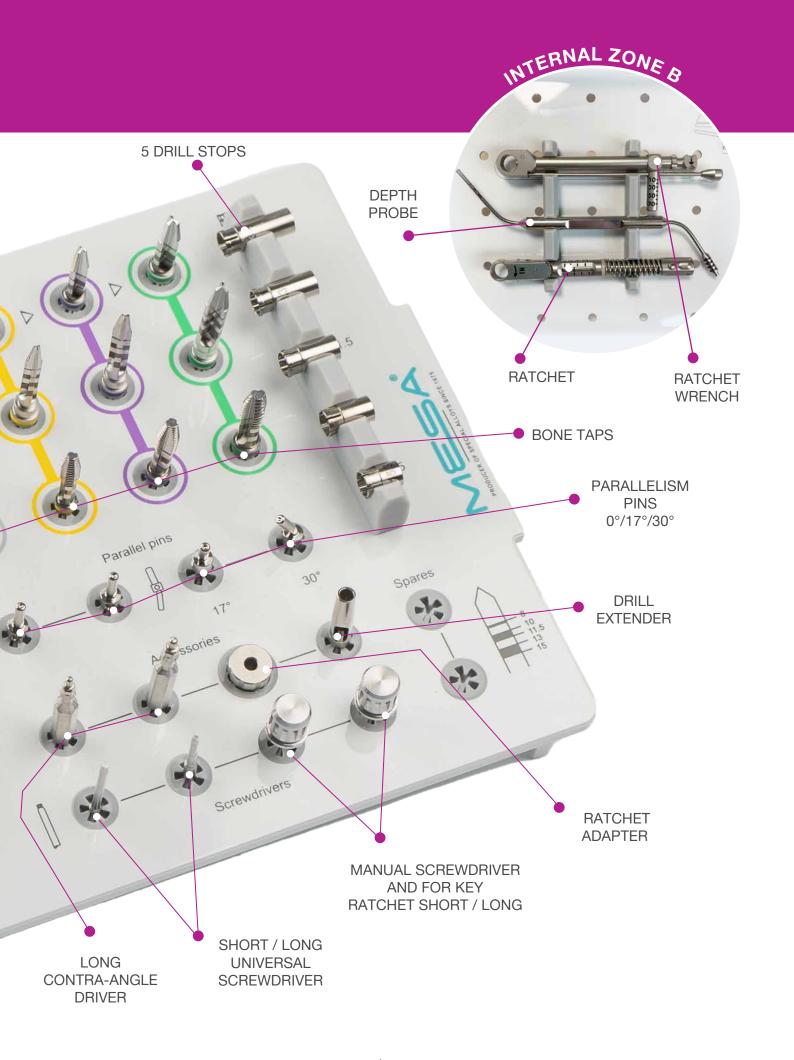
# **SURGICAL KIT**



- AUTOCLAVE BOX: Made of thermo-plastic, impact-resistant, autoclavable material.
- ERGONOMIC KIT: silicone tool holders ensure tightness even during transport and sterilization.
- SIMPLE AND PERSONALIZED: accessories are arranged according to the various steps of the surgical protocol, inserts are color-coded to the implant diameter, laser-written symbols allow for optimal orientation.
- ✓ All instruments, including the box should be cleaned and sterilized before use: refer to the instructions for use for sterilization guidelines.

# **SURGICAL TOOL KIT**





# **DRILLS**



D mm		Description	Code
	1.5	POINTED DRILL  Osteotomy drill to be used to incise cortical bone and make the invitation for subsequent use of the spiral drill.	SST- <b>0031</b>
0250	2.0	SPIRAL DRILL  Drill that allows a calibrated osteotomy to be performed, drilling a minimum diameter	SHORT SST-0107
			SST- <b>0067</b>
	hole in the maxilla or man- dible, with support from the depth notches present.  Drill stops are also available	SHORT SST-0108	
	2.5	for spiral long drills.	LONG SST-0068

	D mm	Description	Color	Code
03.20	3.2	SHORT FORMED DRILLS  The formed drill is a tapered		SST- <b>0077</b>
03.70	3.7	drill made to be used in the final steps of implant seat fabrication. The markings on the body of the drill indicate the depth relative to the bone level. Color-coding helps the operator match drill diameters to implant diameters in the IGEA implant line.		SST- <b>0079</b>
04.40	4.4			SST- <b>0081</b>
02.20	3.2	The formed drill is a tapered drill made to be used in the final steps of implant seat fabrication. The markings on the body of the drill indicate the depth relative to the bone level. Color-coding helps the operator match drill diameters to implant diameters in the IGEA implant line.  The drills can be used in combination with the stops precluding the surgeon's ability to drill into the bone		SST- <b>0071</b>
03.70	3.7			SST- <b>0073</b>
04.40	4.4	beyond the limit indicated by the stop itself.		SST- <b>0075</b>

# **BONE TAPS**



	D mm	Description	Color	Code
03.8	3.8	CORTICAL DRILL		SST- <b>0110</b>
043	4.3	Drill recommended to widen the cortical collar in case of compact bone, in order to facilitate implant insertion. Do not plunge beyond the black line.		SST- <b>0111</b>
250 m	5.0	plunge beyond the black line.		SST- <b>0112</b>
Ø 3.8)	3.8	BONE TAPS  Surgical instrument used to make threads within the bone and assist the self-threading action of the implant.  Its function is to prepare the		SST- <b>0083</b>
© 4.3 [a]	4.3	calibrated implant site for the insertion of the implant for which it is intended.  In case of mechanical tapping do not operate the bone tap at speeds higher than 20 rpm, maintaining cooling		SST- <b>0085</b>
Ø 5.0	5.0	and with plenty of watering. Use is recommended for implant placement in compact bone.	•	SST- <b>0087</b>

# **DRILL-STOPS**





#### **TITANIUM GRADE 23**

The **DRILL STOPS** allow the working length of the drill to be limited to a predetermined height.

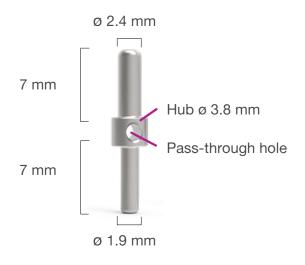
- They come with a laser marking for immediate length identification.
- Available for long formed drills and spiral drills.
- \*The length shown on the Stops indicates the drilling depth including the apical drill increment of 0.3 mm.



	D mm	Description	Code
070	4.0	BONE PROFILER  Surgical instrument made to level	SST- <b>0088</b>
05.00	5.0	the bone ridge around the implant in order to create the necessary space for the prosthetic component to be properly housed.  The maximum recommended speed per contra-angle hand-	SST- <b>0089</b>
0090	6.0	piece is 15 rpm with plenty of irrigation and maintaining cooling.	SST- <b>0090</b>
		BONE PROFILER GUIDE  It is used in combination with the Bone Profiler in order to ensure is optional use.	SST- <b>0064</b>

Description	Code
DRILL EXTENDER  Tool that allows for greater length availability for hand-	SST- <b>0124</b>
 piece instruments.	

Grades	Description	Code
0°	PARALLELISM PINS  The parallelism pin is de-	MST- <b>1401</b>
17°	signed with opposite ends of different diameters: Ø 1.9 and Ø 2.4; this allows the clinician to use the pin early in the drilling sequence to ensure proper implant placement and alignment.	MST- <b>1402</b>
30°		MST- <b>1403</b>



#### **TITANIUM GRADE 23**

# DRIVER, SCREWDRIVERS AND RATCHET



Contra-angle driver is a surgical tool designed to allow the dental implant to be inserted into the bone site.

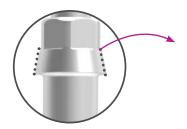
The recommended speed for implant insertion is 15 rpm, not exceeding 25 rpm. Do not irrigate.

# **IMPLANT DRIVERS**

	L	Description	Code
28	SHORT	CONTRA-ANGLE	SST- <b>0133</b>
37	LONG	DRIVER	SST- <b>0136</b>

	L	Description	Code
20 28	SHORT	MANUAL DRIVER AND FOR RATCHET	MST- <b>1203</b>
29	LONG		MST- <b>1204</b>

#### **MEDICAL STAINLESS STEEL**



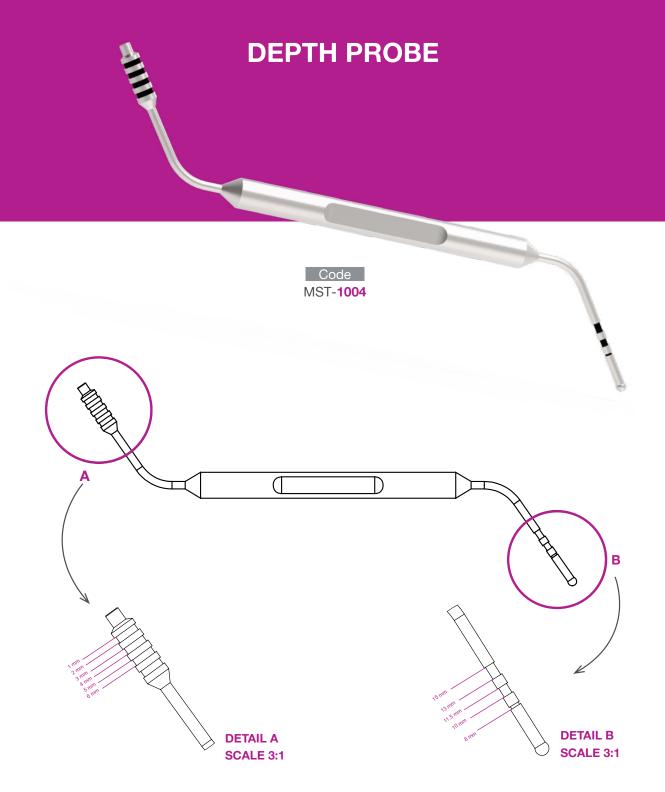
The engage of the Driver is considered completed only when the conical part is no longer visible.

# PROSTHETIC SCREWDRIVERS

	L	Description	Code
13	(1.2) SHORT	MANUAL SCREWDRIVER AND FOR RATCHET	MST- <b>1109</b>
28	(1.2) LONG		MST- <b>1110</b>

	L	Description	Code
22	(1.2) SHORT	UNIVERSAL SCREWDRIVER	MST- <b>0093</b>
30	(1.2) LONG		MST- <b>0094</b>

	Description	Code
DITO	RATCHET ADAPTER	MST- <b>1301</b>



#### **DOUBLE MEASURING TIP**

- Osteotomy depth: measuring the depth of the implant site elevation.
- Gingival height: the height of the gingival tract is examined.

# **RATCHETS**

Description	Code
RATCHET WRENCH	MST- <b>1001</b>
Ratchets for implant insertion and locking of prosthetic screws with torque indicative measures.	
RATCHET	MST- <b>1006</b>





# PRE-PROSTHETIC



Healing screws prepare the site for superstructure insertion and they "shape" the soft tissue surrounding the implant.

The appropriate screw should be chosen according to the thickness of the mucosa.

## **HEALING SCREWS**



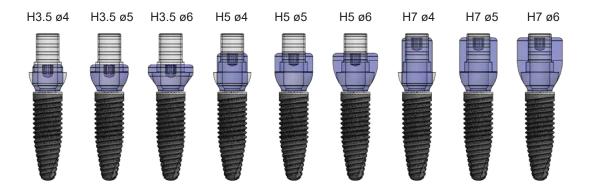
**NON** 

STERILE

ØD

H1





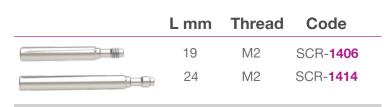


Laser marking for immediate identification of diameter and height

# **IMPRESSION COPING OPEN TRAY**

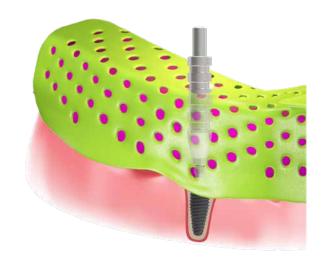


## **OPEN TRAY SCREWS**



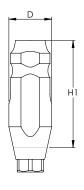


# TITANIUM GRADE 23



For open transfer, the impression should be made with the open tray or individual tray impression technique.

# **IMPRESSION COPING CLOSED TRAY**







# **CLOSED TRAY SCREW**

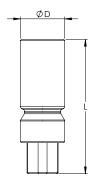
L	mm	Thread	Code	
<u> </u>	16	M2	SCR- <b>1409</b>	10Ncm

#### **TITANIUM GRADE 23**



For closed transfer, the impression should be made with the closed spoon or closed tray technique.

# **IMPLANT REPLICA**







## **REPLICA SCREW**

	L mm	Thread	Code
NAMA.	3.7	M1.6	SCR- <b>1412</b>

#### **MEDICAL STAINLESS STEEL**



The IGEA line replica is suitable for use in **both plaster models Both in 3D printed models.** For the use of plaster models, the screw should be tightened on the body of the replica to create an undercut to prevent its axial movements.



# CEMENT-RETAINED PROSTHESIS AND OVERCASTABLE ABUTMENTS



In the study and design of prosthetic components, Mesa has paid special attention to offering optimal solutions to the clinician in order to make the fabrication of prosthetic elements simple and flexible.

The utmost precision of each of our components helps ensure long-term restoration success.

# **TITANIUM STRAIGHT ABUTMENTS**







# **ABUTMENT SCREW**

Thread	Code	
M2	SCR- <b>1401</b>	/ (30Ncm.)

### **TITANIUM GRADE 23**

The abutments are screwed directly onto the implant using the connection screw.

They are used to support both single crowns and bridges.

They are available in non-rotating and rotating versions.

# **TITANIUM ANGLED ABUTMENTS**



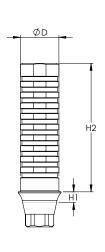
# **ABUTMENT SCREW**



### **TITANIUM GRADE 23**



# **TITANIUM TEMPORARY ABUTMENTS**



	H1 mm	H2 mm	D mm	Туре	Code
	12	3.6	hexed	CEM- <b>1140</b>	
₽	Ċ	12	3.6	non- hexed	CEM- <b>1141</b>



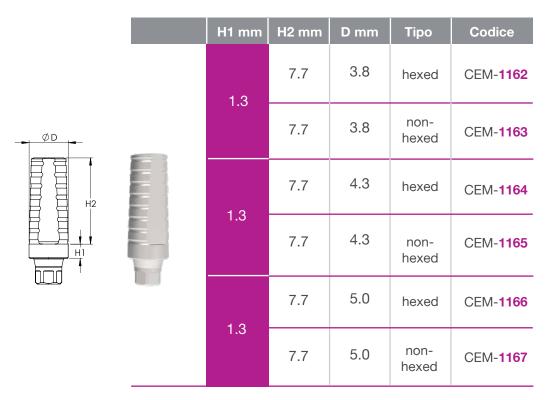
# **ABUTMENT SCREW**



### **TITANIUM GRADE 23**



# **TITANIUM RESCUE ABUTMENTS**







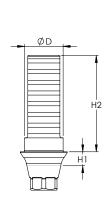
# **ABUTMENT SCREW**

Thread	Code	
M2	SCR-1401	/ (30Ncm,

### **TITANIUM GRADE 23**

Rescue abutment is designed for implant that are placed supra gengival.

# **CR-CO OVERCASTABLE ABUTMENTS**



	H1 mm	H2 mm	D mm	Туре	Code
		9	3.6	hexed	OCA- <b>1149</b>
		9	3.6	non- hexed	OCA- <b>1151</b>
	0.5	9	3.6	hexed	OCA- <b>1157</b>
	2.5	9	3.6	non- hexed	OCA- <b>1159</b>





# **ABUTMENT SCREW**

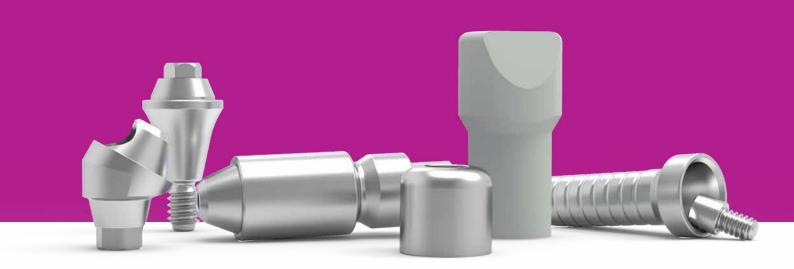
Thread	Code	
M2	SCR- <b>1401</b>	30Ncm,

### **CHROME-COBALT**

### They can be used for a variety of solutions:

- Superfusion: with lost-wax modeling or by digital modeling
- Soldering
- Bonding of drilled or melting structure

# **MULTI-UNIT SYSTEM**

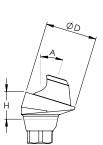


A modern multiprosthetic system, to make screw-retained bridges, screw-retained bars, "toronto bridge", "all on four", and "all on six".

The variety, precision, and pliability of IGEA's screw-retained prosthetic components enable simple, immediate, and effective correction of the disparallelism between implants for tension-free (passive-fit) insertion of the prosthesis.

# **MULTI-UNIT ABUTMENTS**









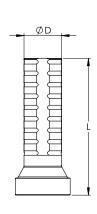
**TITANIUM GRADE 23** 

# **MULTI-UNIT ABUTMENT SCREW**

 Thread	Code
M2	SCR- <b>1403</b>



# **MULTI-UNIT CYLINDER**



L mm	D mm	Material	Code
12	3.3	TITANIUM	CEM- <b>1206</b>
12	3.3	CR-CO	OCA- <b>1207</b>





# **MULTI-UNIT CYLINDER SCREW**

Thread	Code
M1.4	SCR- <b>1404</b>



# **MULTI-UNIT COMPONENTS**



# **ACCESSORIES**

	Descrizione	Codice
-	UNIVERSAL MU MOUNTER	MST- <b>0092</b>
	MANUAL MU MOUNTER	MST- <b>1205</b>
	MU POSITIONER	MST- <b>1206</b>
	RATCHET ADAPTER	MST-1301

# **OVERDENTURE**













### OT EQUATOR IGEA REGULAR KIT

H mm	Code*
1.0	130IGR1
2.0	130IGR2
3.0	130IGR3
4.0	130IGR4
5.0	130IGR5
6.0	130IGR6
7.0	130IGR7



### Complete package including:

- 1 Ot Equator custom abutment in different lenghts in titanium with TIN coating
- 1 black cap (for laboratory use)
- 4 Yellow Retentive Caps: 1 Yellow (extra soft), 1 Pink (Soft), 1 White (standard), 1 Purple (rigid)
- 1 Protective disc

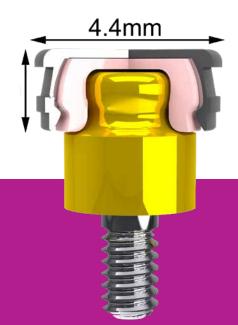


### OT EQUATOR + SMART BOX IGEA REGULAR KIT

Complete package including:

- 1 Ot Equator custom Ttitanium abutment in different lenghts\*
- 4 Retentive caps (different retention)
- 1 Cap self-parallelizing container
- 1 Protective disc

H mm	Code*
1.0	131IGR1
2.0	131IGR2
3.0	131IGR3
4.0	131IGR4
5.0	131IGR5
6.0	131IGR6
7.0	131IGR7



EQUATOR SECTION COMPLETE

### **RETENTIVE CAP ASSORTMENT KIT**

### KIT-192ECE

- 1 stainless steel cap container, Container
- 1 Black Cap (for laboratory use)
- 4 Yellow Retentive Caps: 1 Yellow (extra soft), 1 Pink (Soft), 1 White (standard), 1 Purple (rigid)
- 1 Protective disc



### **PURPLE CAP (4 pcs)**

Rigid seal (2.5 Kg)

**140CEV** 



### **BLACK CAP** (4 pcs)

From the laboratory

**140CEN** 



### WHITE CAP (4 pcs)

Standard seal (1.8 Kg)

**140CET** 



### STAINLESS STEEL CAP CONTAINER

(2 pcs)

**141CAE** 



### PINK CAP (4 pcs)

Soft seal (1.2 Kg)

140CER



### **IMPRESSION COPING CLOSED TRANSFER**

STRAPPING (2 pcs)

044CAIN



### YELLOW CAP (4 pcs)

Extra soft seal (0.6 Kg)

**140CEG** 



### LABORATORY ANALOG

(2 pcs)

**144AE** 



### **SMARTBOX CONTAINER WITH BLACK CAP** FOR DIVERGENCES UP TO 50° 330SBE

### **EQUATOR KEY FOR RATCHET**

**774CHE** 



### **INSERTER/EXTRACTOR FOR CAPS**

(OT EQUATOR - NORMO)

487ICE



**760CE** 



## DRIVER FOR DYNAMOMETRIC HANDPIECE



### **SPHERO BLOCK NORMO**



H mm	Code*
1.0	002IGR1
2.0	002IGR2
3.0	002IGR3
4.0	002IGR4
5.0	002IGR5
6.0	002IGR6
7.0	002IGR7

Complete package including:

- 1 Customized spherical abutment
- 3 Retentive caps (different retention)
- 1 Cap container
- 3 Directional rings
- 1 Protective disc



### TRANSPARENT CAP

STANDARD RETENTION **040CRN** 



### **BLACK CAP FROM THE LABORATORY** 043CLN



### **PINK CAP**

**SOFT RETENTION** 040CRNSN



### STAINLESS STEEL CONTAINER 041CAN



### **YELLOW CAP**

**EXTRASOFT RETENTION** 060CRNAY



### SPHERO BLOCK KEY FOR RATCHET **771CEF**



### **INSERTER/EXTRACTOR FOR CAPS**

(OT EQUATOR - NORMO)

**485ICE** 



### CONNECTOR FOR DYNAMOMETRIC HANDPIECE

**760CE** 



### REVERSIBLE DYNAMOMETRIC RATCHET

For tightening of Shero-Block and Ot Equator Values of torque from 15 to 35 Ncm - Max 50 Ncm, suggested torque 25 Ncm

**760CRD-US** 





# DIGITAL LIBRARIES AND CAD/CAM ACCESSORIES



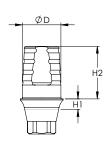
Our libraries are available for the following software: Exocad and 3Shape and can be downloaded from the website www.mesaitalia.it



Before installation, the associated digitising components and accessories must be identified.

Ti-Base, Scan-Abutment and Analog allow our implant line to have a wide range of restorative products allowing dentists and laboratories to embrace the digitization to design and create aesthetic and long-lasting restorations.

# **Ti-BASE**



	H1 mm	H2 mm	D mm	Tipo	Code
	1	5	3.6	hexed	CEM- <b>1104</b>
		5	3.6	non- hexed	CEM- <b>1105</b>
	2.5	5	3.6	hexed	CEM- <b>1112</b>
		5	3.6	non- hexed	CEM- <b>1113</b>





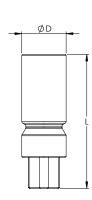
### **TITANIUM GRADE 23**

# **Ti-BASE SCREW**

	Thread	Code	
- Nillion	M2	SCR- <b>1401</b>	30Ncm

The components of the Igea system that can be downloaded in the digital libraries, are marked with the symbol pext to the reference table.

# **IMPLANT REPLICA**







# **REPLICA SCREW**

	L mm	Thread	Code
4000	3.7	M1.6	SCR- <b>1412</b>

### **MEDICAL STAINLESS STEEL**

The analogue of the IGEA line is suitable for use both for plaster models and **for 3D printed models** 

# **SCAN-ABUTMENT LARGE**





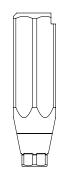


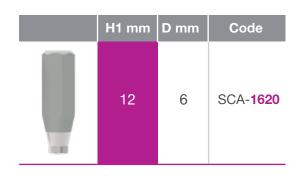
**TITANIUM GRADE 23** 

## **SCAN ABUTMENT SCREW**

Thread	Code	
M2	SCR- <b>1401</b>	15Ncm

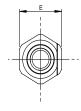
# **SCAN-ABUTMENT SMALL**







**TITANIUM GRADE 23** 



# **SCAN ABUTMENT SCREW**

Thread	Code	
M2	SCR- <b>1401</b>	/ 15Ncm

# **IGEA REGULAR SCREWS**



IGEA screws allow for high-quality implant-abutment fixation, thus to eliminate unscrewing that could cause damage to the finished work

# **SCREWS AND CODES**

	Description	Thread	Code
E>	ABUTMENT SCREW		
e e e e e e e e e e e e e e e e e e e	Ti-BASE SCREW	M2	SCR- <b>1401</b>
	SCAN-ABUTMENT SCREW		
E 1111	MU ABUTMENT SCREW	M2	SCR- <b>1403</b>
	MU SCAN-ABUTMENT SCREW		
MODE	CYLINDER SCREW	M1.4	SCR- <b>1404</b>
	HEALING CAP SCREW		
	CLOSED TRAY SCREW	M2	SCR- <b>1409</b>
	MU CLOSED TRAY	M1.4	SCR-1411
——————————————————————————————————————	OPEN TRAY SCREW L19	M2	SCR- <b>1406</b>
=	OPEN TRAY SCREW L 24		SCR- <b>1414</b>
14444	MU OPEN TRAY SCREW L19	M1.4	SCR-1407
	MU OPEN TRAY SCREW L 24		SCR- <b>1415</b>
	REPLICA SCREW	M1.6	SCR- <b>1412</b>
7000	MU REPLICA SCREW		00H-1412
1000	COVER SCREW	M2	SCR- <b>1500</b>

# IGEA IMPLANTS NARROW



The use in posterior areas is not reccomended for Igea Narrow Implants

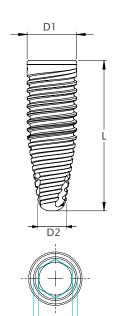


# **NARROW IMPLANT**



### COLOR CODE

3.5 mm



	D1 mm	D2 mm	L mm	Code
	3.5	1.6	8	Ti4-Igea- <b>1003</b>
		1.6	10	Ti4-Igea- <b>1002</b>
		1.6	11.5	Ti4-Igea- <b>1001</b>
		1.6	13	Ti4-Igea- <b>1004</b>
		1.6	15	Ti4-Igea- <b>1005</b>



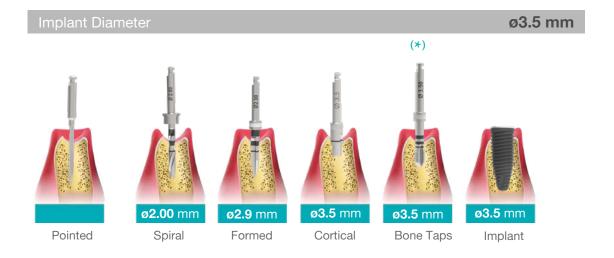
# **COVER SCREW**

Thread	Code	
M1.6	CPS- <b>1501</b>	10Ncm

# **SURGICAL PROTOCOL**

The plant platform should be placed at the bone crest (crestal placement)

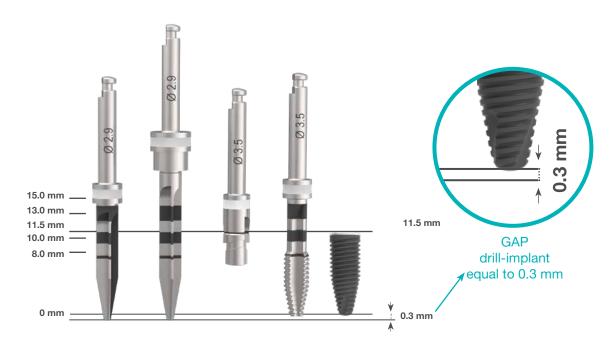
NOTE: Do not exceed a tightening torque of 45 Ncm for implants: excessive torque can damage the implant and can cause bone necrosis.



(\*) In order to maintain the desired insertion torque, in dense bone, it is recommended the use of the bone tap, at the maximum speed of 20 rpm and only with the diameter corresponding to the width of the implant bed.

# **SURGICAL PROTOCOL**

The surgical protocol of the Igea implant was developed to provide surgeons with the following guidance on how to choose the most appropriate instruments for implant site preparation depending on the type of bone. However, it is up to the surgeon to apply the most appropriate protocol based on his or her experience



All drills and tappers are made of stainless steel for medical use.

The line of surgical drills is comprehensive and easy to use.

All diameters of MESA IGEA implants share the formed drills and spiral drill; depending then on the implant diameter, specific formed drills are provided.

### **FEATURES AND ADVANTAGES:**

 Each formed drill has depth bands highlighted in contrasting colors and is color-coded for better identification.

### **DRILL SPEED:**

We recommend a speed of drilling between 600-800 rpm.

- The recommended tapping speed is max 20 rpm.
- Perform all drilling with a vertical to-and-fro movement accompanied by copious external irrigation in order to minimize heat production and preserve bone viability.

### **DURABILITY OF DRILLS:**

 Do not use drills that are damaged, not sharp, or for more than 20 applications to reduce risks of overheating or bone trauma that may compromise the osteointegration process.

# **DRILLS AND BONE TAP**

	D mm	Description	Code
		POINTED DRILL	
		Osteotomy drill to be used to incise cortical bone and make the invitation for subsequent use of the spiral drill.	SST-0031
		SPIRAL DRILL	SHORT
		Drill that allows a calibrated osteotomy to be performed, drilling a minimum diameter hole	SST- <b>0107</b>
Ø 2.00 Ø 2.00	2.0	in the maxilla or mandible, with support from the depth notches present. Drill stops are also available for long spiral drills.	LONG SST-0067
		FORMED DRILL	
Ø2.90	2.9	The formed drill is a tapered drill made to be used in the final steps of implant seat fabrication. The markings on the body of the drill indicate the depth relative to the bone level. Color coding helps the operator associate the diameters of the drills to the diameters of the IGEA implant line implants.  Drill stop can be mounted on the long formed drill.	SHORT SST-0076
0290			LONG SST-0070
		CORTICAL DRILL	
Ø 3.5	3.5	Drill recommended to widen the cortical collar in case of compact bone, in order to facilitate implant insertion. Do not plunge beyond the black line.	SST- <b>0109</b>
		BONE TAP	
Ø 3.5	3.5	Surgical instrument used to make threads within the bone and assist the self-threading action of the implant. Its function is to prepare the calibrated implant site for the insertion of the implant for which it is intended. In case of mechanical tapping do not operate the tapping machine at speeds higher than 20 rpm, maintaining cooling and with plenty of watering.  Use is recommended for implant placement in compact bone.	SST- <b>0082</b>
		MEDICAL STAINLESS STEEL	





### **TITANIUM GRADE 23**

The **DRILL STOPS** allow the working length of the drill to be limited to a predetermined height.

- They come with a laser marking for immediate length identification.
- Available for long formed drills and spiral drills.
- \*The length shown on the Stops indicates the drilling depth including the apical drill increment of 0.3 mm.

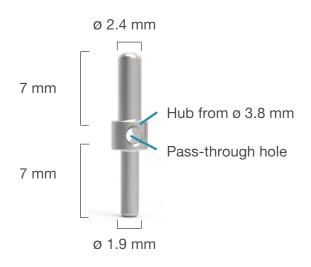


	D mm	Description	Code
0700	4.0	BONE PROFILER  Surgical instrument made to level the bone ridge around the implant in order to create the necessary space for the prosthetic component to be properly housed.  The maximum recommended speed per contra-angle hand-piece is 15 rpm with plenty of irrigation and maintaining cooling.	SST- <b>0088</b>
0800	5.0		SST-0089
0090	6.0		SST- <b>0090</b>
		BONE PROFILER GUIDE  It is used in combination with the Bone Profiler in order to ensure is optional use.	SST- <b>0064</b>

Description	Code
DRILL EXTENDER (DRILL EXTENDER)	
Tool that allows for greater length availability for hand-piece instruments.	SST- <b>0124</b>

### **MEDICAL STAINLESS STEEL**

Grades	Description	Code
0°	PARALLELISM PINS  The parallelism pin is designed with opposite ends of different diameters.  Ø 1.9 and Ø 2.4; this allows the clinician to use the pin early in the drilling sequence to ensure proper implant placement and alignment.	MST- <b>1401</b>
17°		MST- <b>1402</b>
30°		MST- <b>1403</b>



### **TITANIUM GRADE 23**

# DRIVER, SCREWDRIVERS AND RATCHETS



Contra-angle driver is a surgical tool designed to allow the dental implant to be inserted into the bone site.

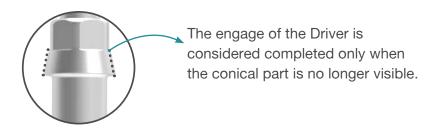
The recommended speed for implant insertion is 15 rpm, not exceeding 25 rpm. Do not irrigate.

# **IMPLANT DRIVER**

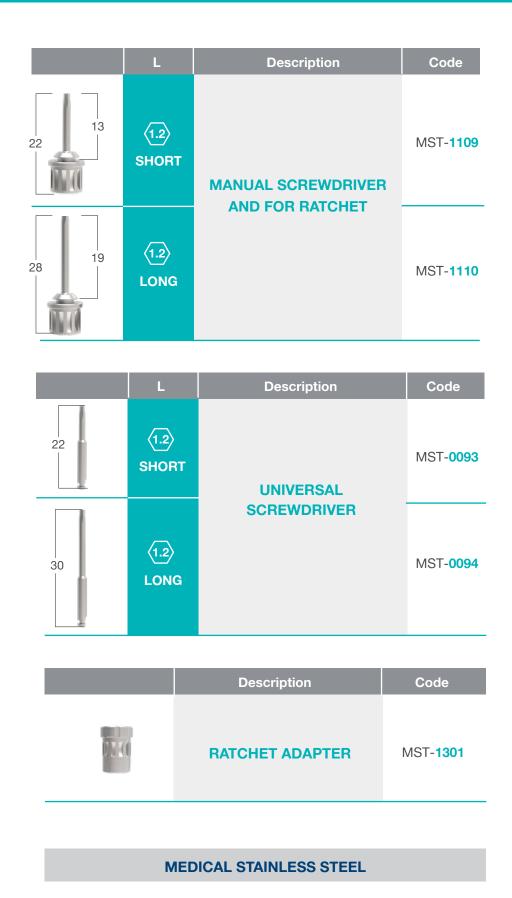
	L	Description	Code
28	SHORT	CONTRA - ANGLE DRIVER	SST- <b>0132</b>
37	LONG		SST- <b>0135</b>

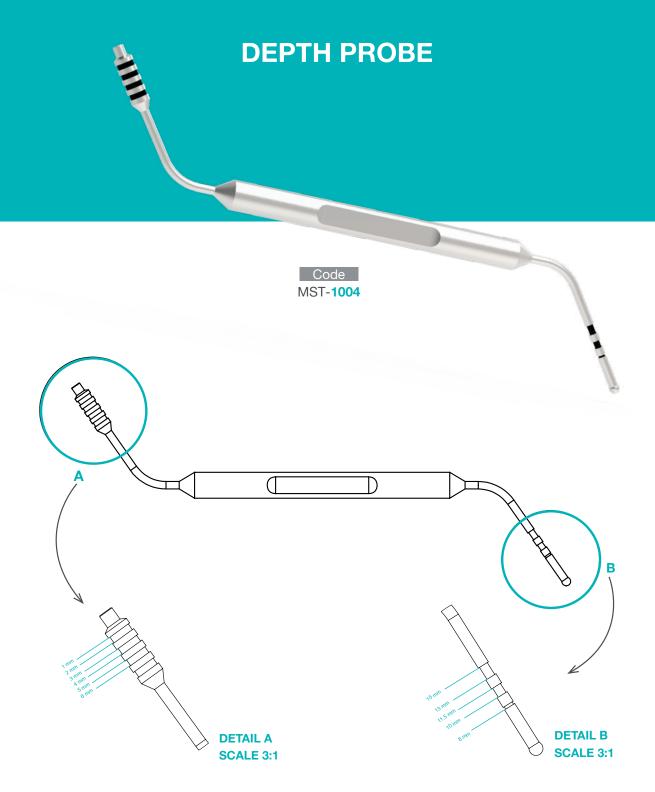
	L	Description	Code
28 20	SHORT	MANUAL DRIVER AND FOR RATCHET	MST- <b>1207</b>
29	LONG		MST- <b>1208</b>

### **MEDICAL STAINLESS STEEL**



# **PROSTHETIC SCREWDRIVERS**





### **DOUBLE MEASURING TIP**

- Osteotomy depth: measuring the depth of the implant site elevation.
- Gingival height: the height of the gingival tract is examined.

### **MEDICAL STAINLESS STEEL**

# **RATCHETS**

Description	Code
RATCHET WRENCH	MST- <b>1001</b>
Ratchets for implant insertion and locking of prosthetic screws with torque indicative measures.	
RATCHET	MST- <b>1006</b>

### **MEDICAL STAINLESS STEEL**





# PRE-PROSTETHIC



Healing screws prepare the site for superstructure insertion and "shape" the soft tissue surrounding the implant.

The appropriate screw should be chosen according to the thickness of the mucosa.

# **HEALING SCREWS**



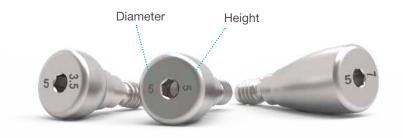
ØD





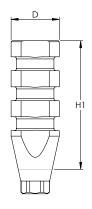
### **TITANIUM GRADE 23**

H3.5 Ø3.7 H3.5 Ø5 H5 Ø3.7 H5 Ø5 H7 Ø3.7 H7 Ø5



Laser marking for immediate identification of diameter and height

# **IMPRESSION COPING OPEN TRAY**







# **OPEN TRAY SCREWS**

L	. mm	Thread	Code
	19	M1.6	SCR- <b>1405</b>
	24	M1.6	SCR-1413

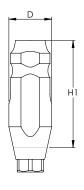


### **TITANIUM GRADE 23**



For open transfer, the impression should be made with the open tray or individual tray impression technique.

# **IMPRESSION COPING CLOSED TRAY**







# **CLOSED TRAY SCREW**

 _ mm	Thread	Code	
16	M1.6	SCR-1408	/

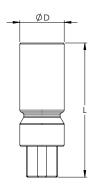


### **TITANIUM GRADE 23**



For closed transfer, the impression should be made with the closed spoon or closed tray technique.

# **IMPLANT REPLICA**







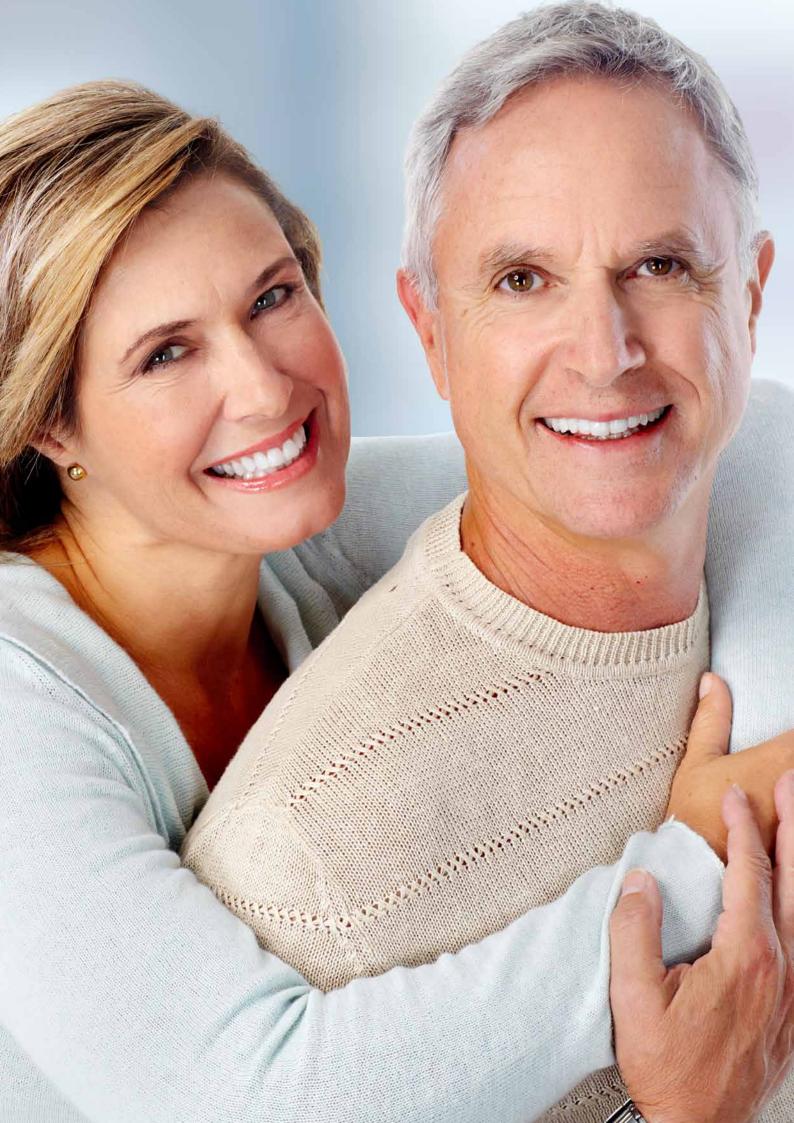
# **REPLICA SCREW**

	L mm	Thread	Code
70000	3.7	M1.6	SCR-1412

### **MEDICAL STAINLESS STEEL**



The IGEA line replica is suitable for use in **both plaster models Both in 3D printed models.** For the use of plaster models, the screw should be tightened on the body of the replica to create an undercut to prevent its axial movements.



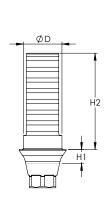
# CEMENT-RETAINED PROSTHESIS AND OVERCASTABLE ABUTMENTS



In the study and design of prosthetic components, Mesa has paid special attention to offering optimal solutions to the clinician in order to make the fabrication of prosthetic elements simple and flexible.

The utmost precision of each of our components helps ensure long-term restoration success.

# **TITANIUM STRAIGHT ABUTMENTS**



	H1 mm	H2 mm	D mm	Туре	Code
	1	9	3.3	hexed	CEM- <b>1144</b>
		9	3.3	non- hexed	CEM- <b>1146</b>
	2.5	9	3.3	hexed	CEM- <b>1152</b>
		9	3.3	non- hexed	CEM- <b>1154</b>



# **ABUTMENT SCREW**

 Thread	Code	
M1.6	SCR-1400	30Ncm

### **TITANIUM GRADE 23**

The abutments are screwed directly onto the implant using the connection screw.

They are used to support both single crowns and bridges.

They are available in non-rotating and rotating versions.

# **TITANIUM ANGLED ABUTMENTS**



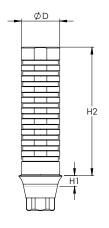
# **ABUTMENT SCREW**

 Thread	Code	30Ncm.
M1.6	SCR- <b>1400</b>	Solden

### **TITANIUM GRADE 23**



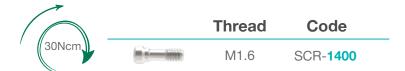
# TITANIUM TEMPORARY ABUTMENTS



	H1 mm	H2 mm	D mm	Туре	Code
1	12	3.3	hexed	CEM- <b>1138</b>	
	12	3.3	non- hexed	CEM- <b>1139</b>	



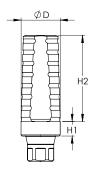
# **ABUTMENT SCREW**



### **TITANIUM GRADE 23**



# **TITANIUM RESCUE ABUTMENTS**



	H1 mm	H2 mm	D mm	Туре	Code
1.3	7.7	3.5	hexed	CEM- <b>1160</b>	
		7.7	3.5	non- hexed	CEM- <b>1161</b>





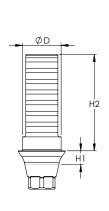
# **ABUTMENT SCREW**

Thread	Code	30Ncm.
M1.6	SCR-1400	Solveni

### **TITANIUM GRADE 23**

Rescue abutment is designed for implant that are placed supra gengival.

# **CR-CO OVERCASTABLE ABUTMENTS**



	H1 mm	H2 mm	D mm	Туре	Code
	1	9	3.6	hexed	OCA- <b>1145</b>
		9	3.6	non- hexed	OCA- <b>1147</b>
	2.5	9	3.6	hexed	OCA- <b>1153</b>
		9	3.6	non- hexed	OCA- <b>1155</b>



# **ABUTMENT SCREW**

 Thread	Code	
M1.6	SCR-1400	30Ncm,

### **CHROME-COBALT**

### They can be used for a variety of solutions:

- Superfusion: with lost-wax modeling or by digital modeling
- Soldering
- Bonding of drilled or melting structure

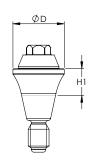
# **MULTI-UNIT-SYSTEM**

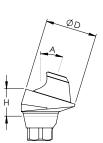


A modern multiprosthetic system, to make screw-retained bridges, screw-retained bars, "toronto bridge", "all on four", and "all on six".

The variety, precision, and pliability of IGEA's screw-retained prosthetic components enable simple, immediate, and effective correction of the disparallelism between implants for tension-free (passive-fit) insertion of the prosthesis.

# **MULTI-UNIT ABUTMENTS**









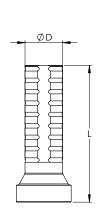
**TITANIUM GRADE 23** 

# **MULTI-UNIT ABUTMENT SCREW**

	Thread	Code
E - 1111	M1.6	SCR- <b>1402</b>



# **MULTI-UNIT CYLINDER**



L mm	D mm	Material	Code
12	3.3	TITANIUM	CEM- <b>1206</b>
12	3.3	CR-CO	OCA- <b>1207</b>



# **MULTI-UNIT CYLINDER SCREW**

Thread	Code
M1.4	SCR-1404



# **MULTI-UNIT COMPONENTS**



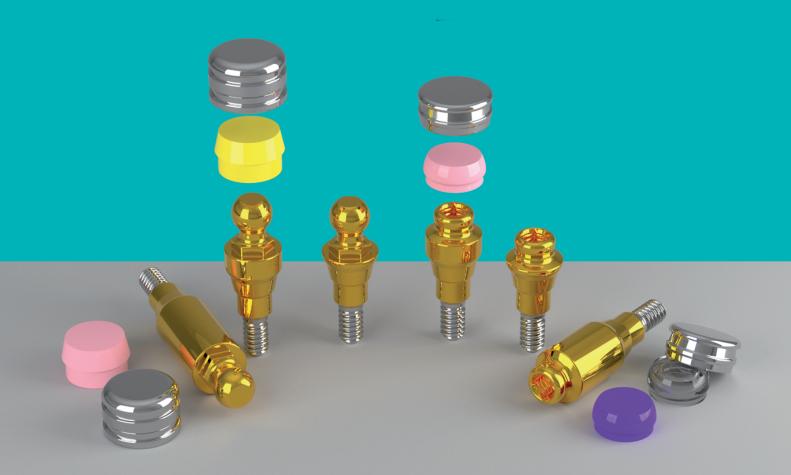
# **ACCESSORIES**

	Descrizione	Codice
-	UNIVERSAL MU MOUNTER	MST- <b>0092</b>
	MANUAL MU MOUNTER	MST-1205
-	MU POSITIONER	MST- <b>1206</b>
Š	RATCHET ADAPTER	MST- <b>1301</b>

# **OVERDENTURE**













### OT EQUATOR IGEA REGULAR KIT

H mm	Code*
1.0	130IGR1
2.0	130IGR2
3.0	130IGR3
4.0	130IGR4
5.0	130IGR5
6.0	130IGR6



Complete package including:

- 1 Ot Equator custom abutment in different lenghts in titanium with TIN coating
- 1 black cap (for laboratory use)
- 4 Yellow Retentive Caps: 1 Yellow (extra soft), 1 Pink (Soft), 1 White (standard), 1 Purple (rigid)
- 1 Protective disc

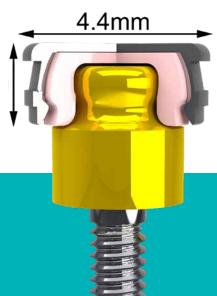


### OT EQUATOR + SMART BOX IGEA NARROW KIT

Complete package including:

- 1 Ot Equator custom Ttitanium abutment in different lenghts
- 4 Retentive caps (different retention)
- 1 Cap self-parallelizing container
- 1 Protective disc

H mm	Code*
1.0	131IGN1
2.0	131IGN2
3.0	131IGN3
4.0	131IGN4
5.0	131IGN5
6.0	131IGN6



EQUATOR SECTION COMPLETE

### RETENTIVE CAP ASSORTMENT KIT

### KIT-192ECE

- 1 stainless steel cap container, Container
- 1 Black Cap (for laboratory use)
- 4 Yellow Retentive Caps: 1 Yellow (extra soft), 1 Pink (Soft), 1 White (standard), 1 Purple (rigid)
- 1 Protective disc



### PURPLE CAP (4 pcs)

Rigid seal (2.5 Kg)

**140CEV** 



**BLACK CAP** (4 pcs)

From the laboratory

**140CEN** 



WHITE CAP (4 pcs)

Standard seal (1.8 Kg)

**140CET** 



STAINLESS STEEL CAP CONTAINER

(2 pcs)

**141CAE** 



PINK CAP (4 pcs)

Soft seal (1.2 Kg)

**140CER** 



STRAPPING (2 pcs)

044CAIN



YELLOW CAP (4 pcs)

Extra soft seal (0.6 Kg)

**140CEG** 



**LABORATORY ANALOG** 

(2 pcs)

144AE



# SMARTBOX CONTAINER WITH BLACK CAP FOR DIVERGENCES UP TO 50°

330SBE



774CHE



### **INSERTER/EXTRACTOR FOR CAPS**

(OT EQUATOR - NORMO)

487ICE



### DRIVER FOR DYNAMOMETRIC HANDPIECE

**760CE** 







### SPHERO BLOCK NORMO



H mm	Code*
1.0	002IGR1
2.0	002IGR2
3.0	002IGR3
4.0	002IGR4
5.0	002IGR5
6.0	002IGR6
7.0	002IGR7

Complete package including:

- 1 Customized spherical abutment
- 3 Retentive caps (different retention)
- 1 Cap container
- 3 Directional rings
- 1 Protective disc



### TRANSPARENT CAP

STANDARD RETENTION 040CRN



# **BLACK CAP FROM THE LABORATORY**

043CLN



### **PINK CAP**

**SOFT RETENTION** 040CRNSN



# STAINLESS STEEL CONTAINER

041CAN



### **YELLOW CAP**

**EXTRASOFT RETENTION** 060CRNAY



# SPHERO BLOCK KEY FOR RATCHET

**771CEF** 



### **INSERTER/EXTRACTOR FOR CAPS**

(OT EQUATOR - NORMO) **485ICE** 



### CONNECTOR FOR DYNAMOMETRIC HANDPIECE

**760CE** 



### REVERSIBLE DYNAMOMETRIC RATCHET

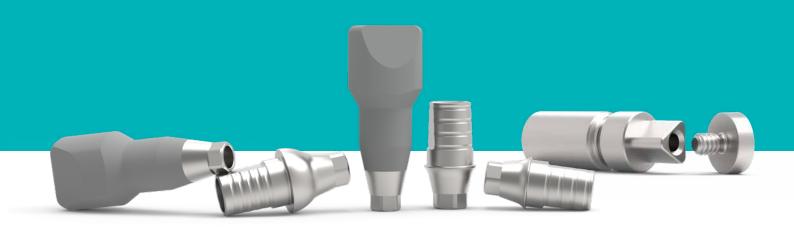
For tightening of Shero-Block and Ot Equator Values of torque from 15 to 35 Ncm - Max 50 Ncm, suggested torque 25 Ncm



**760CRD-US** 



# DIGITAL LIBRARIES AND CAD/CAM ACCESSORIES



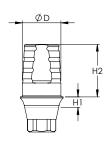
Our libraries are available for the following software: Exocad and 3Shape and can be downloaded from the website www.mesaitalia.it

# зshape ► exocad

Before installation, the associated digitising components and accessories must be identified.

Ti-Base, Scan-Abutment and Analog allow our implant line to have a wide range of restorative products allowing dentists and laboratories to embrace the digitization to design and create aesthetic and long-lasting restorations.

# **Ti-BASE**









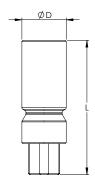
### **TITANIUM GRADE 23**

# **Ti-BASE SCREW**

 Thread	Code	
M1.6	SCR- <b>1400</b>	30Ncm

The components of the Igea system that can be downloaded in the digital libraries, are marked with the symbol next to the reference table.

# **IMPLANT REPLICA**





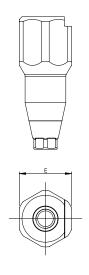


# **REPLICA SCREW**

	L mm	Thread	Code
NAMA	3.7	M1.6	SCR- <b>1412</b>

**MEDICAL STAINLESS STEEL** 

# **SCAN-ABUTMENT LARGE**





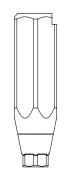


**TITANIUM GRADE 23** 

### **SCAN-ABUTMENT SCREW**

 Thread	Code
M1.6	SCR- <b>1400</b>

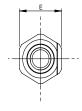
# **SCAN-ABUTMENT SMALL**







**TITANIUM GRADE 23** 



# **SCAN-ABUTMENT SCREW**

	Thread	Code	
<b>-2</b>	M1.6	SCR- <b>1400</b>	

# **IGEA NARROW SCREWS**



IGEA screws allow for high quality abutment implant fixation
To avoid unscrewing that could result in damage to the finished work

# **SCREWS AND CODES**

	Description	Thread	Code
E>	ABUTMENT SCREW		
- HIME	Ti-BASE SCREW	M1.6	SCR- <b>1400</b>
	SCAN-ABUTMENT SCREW		
£	MU ABUTMENT SCREW	M1.6	SCR-1402
	MU SCAN-ABUTMENT SCREW		
MARKE	CYLINDER SCREW	M1.4	SCR- <b>1404</b>
	HEALING CAP SCREW		
	CLOSED TRAY SCREW	M1.6	SCR-1408
	MU CLOSED TRAY	M1.4	SCR-1411
3 4220	OPEN TRAY SCREW L19	M1.6	SCR-1405
	OPEN TRAY SCREW L 24	1411.0	SCR-1413
attenuals.	MU OPEN TRAY SCREW L19	M1.4	SCR-1407
	MU OPEN TRAY SCREW L 24		SCR-1415
11110	REPLICA SCREW	N44 0	SCR-1412
	MU REPLICA SCREW	MU REPLICA SCREW	
1000	COVER SCREW	M1.6	SCR-1501

# **RAW MATERIALS**

Mesa Italia has always been careful to select the best raw materials on the market.

**Commercially pure Grade 4 Titanium** is used for the production of the **implant**, which in addition to ensuring rapid osterointegration has the highest mechanical strength among commercially pure Titanium grades.

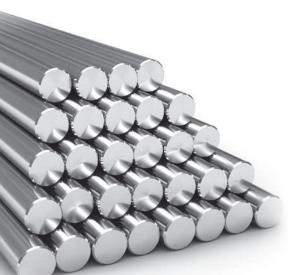
### MEDICAL GRADE 4 TITANIUM TECHNICAL SPECIFICATIONS

CHEMICAL COMPOSITION	CONCENTRATION (% m/m)
Nitrogen (N)	< 0.05
Carbon (C)	< 0.08
Hydrogen (H)	< 0.015
Iron (Fe)	< 0.50
Oxygen (O)	< 0.40
Titanium (Ti)	Remaining

MECHANICAL PROPER	TIES MINIMUM VALUES
Breaking load	> 550 MPa
Yield strength (0.2%)	> 483 MPa
Elongation	> 15%

Our implants conform to the specifications expressed in current regulations for the use of Grade 4 Titanium in implantology:

 ASTM F67: Standard Specification for unalloyed titanium, for surgical impant applications



# **RAW MATERIALS**

The prosthetic components is made from Grade 23 Titanium alloy, the higher purity version of Grade 5, which provides not only excellent biocompatibility but also high fracture resistance, making it suitable for the fabrication of prostheses.

### **SPECIFICATIONS TITANIUM GRADE 23 (TI6 AL-4V ELI)**

CHEMICAL COMPOSITION	CONCENTRATION (%)
Nitrogen (N)	< 0.05
Carbon (C)	< 0.08
Hydrogen (H)	< 0.012
Iron (Fe)	< 0.25
Oxygen (O)	< 0.13
Aluminum (Al)	5.50-6.50
Vanadium (V)	3.50-4.50
Titanium (Ti)	Remaining

MECHANICAL PROPER	TIES MINIMUM VALUES
Breaking load	> 860 MPa
Yield strength (0.2%)	> 795 MPa
Elongation	> 10%

Our components comply with the specifications expressed in current regulations for the use of Grade 23 Titanium in implantology:

 ASTM F136: Standard Specification for wrought Titanium-6Aluminium-4Vanadium ELI (Extra low Interstitial) Alloy for surgical implant applications;

ISO 5832-3: Surgical implants - Metallic materials - Part 3: Alloy Titanium 6 - Aluminum 4 - vanadium



# **RAW MATERIALS**

MESA's overcasts are produced with Magnum Splendidum Chromium-Cobalt alloy, the company's historic alloy that has excellent characteristics and is also ideal for overcasting.

Overcasting with Magnum Lucens alloy, which is equally known for its peculiar oxidation resistance and lower solidus/liquidus temperature (1253-1304°C) than standard Cr/Co alloys, is recommended.

Displayed in the tables below, are data on the chemical composition and physical-mechanical properties of the alloys just described.

### CHEMICAL COMPOSITION OF CHROME-COBALT ALLOYS:

	CO(%)	CR(%)	<b>W</b> (%)	MO (%)	NB (%)	OTHER COMPONENTS
Magnum Splendidum	60	28	9	0	0.0	3 (Si)
Magnum Lucens	63	28	3	0	4.0	2 (Mn, Fe)

### PHYSICAL-MECHANICAL PROPERTIES OF CHROME-COBALT ALLOYS:

	CET (25-500°)	FUSION TEMPERATURE
Magnum Splendidum	14.2x10-6K-1	1440°C
Magnum Lucens	14.1x10-6K-1	1360°C



Mesa Discs - Magnum Splendidum



# IMPLANT PACKAGING

Mesa implants come in sterile packaging that guarantees, if intact and well preserved, the sterility of the same.



### **CARDBOARD BOX**

which adequately preserves the product, allows for easy storage and enables immediate visual identification due to the well-presented color code on the outer label.



Ti4 - IGEA - 1002 - Box2 - MD
Ø3.5xL10mm

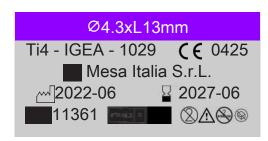
LOT 11585

REF 41450002A

Mesa Italia S.r.L.

Inside the box there are also:

- Three adhesive labels showing code and lot identifying the implant that must be applied to and to the implant passport.
- Applied to the implant passport and to the medical record.
- The paper instruction for use.



Production date

Manufacturer

To be used within

Batch Code

Sterilized by irradiation

Not reusable

Do not resterilize

Danger

Sterile packaging.
Do not use the blister is open or damaged

### **IMPLANT SAMPLING**

The implant is picked up directly inside the Titanium container, by the operator by means of the contra-angle, without disrupting the sterile chain.

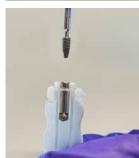




Rotate the cap backwards.



Pick up the implant with the contra-angle Mounter motorized.







### **IMPLANT PACKAGING**

### • Ease of use:

easy opening to allow convenient access to the implant and screw cap

 Titanium holder that serves as a support for the implant.

# ANATOMICAL CRITERIA

Before any implant surgery, a thorough patient history must be taken (clinical and radiographic analysis are necessary) and all possible risks must be evaluated. The patient's expectations must also be well outlined. Close communication between the patient, dentist, surgeon, and dental technician is critical to achieving the desired prosthetic result.

Design, quantity, diameter, and length of implants to be placed will depend on the type of restoration planned and the quality and quantity of bone available.

Only by respecting the minimum distances between elements can the restoration be designed so that the necessary oral hygiene measures can be performed. Inappropriate choice of implant size can lead to hard- and soft-tissue complications, even to implant surgery failure.

The location of the plant can be considered in 3 dimensions:

### Mesio-distal

The presence of mesio-distal bone is an important factor in the choice of implant diameter as well as inter-implant distances in the case of multiple implants.

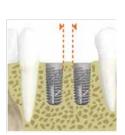
Therefore, stick to the following minimum measures:

- Minimum distance 2 mm between implant emergence and contiguous tooth (mesial and distal) at the level of the bone crest;
- Minimum distance 3 mm between two adjacent implant emergences (mesial and distal).

### Minimum 2 mm



### Minimum 3 mm



**NOTE:** suggested measurements are indicative, the greater the distance the lower the risk of post-surgical issues.

### Lingual vestibule

The minimum requirement for restoration contours equals 1.0 mm on both sides of the platform diameter. In anterior areas, it is desirable to have at least 2 mm vestibular cortical area.





### Vertical anatomical boundaries

It is recommended to maintain a distance of 1.0 to 2.0 mm between the maximum depth of the osteotomy and the upper limit of the mandibular canal to avoid injuring the neuro-vascular bundle.

# **BIBLIOGRAPHY**

BarfeieA, Wilson J, Rees: «Implant surface characteristic and their effect on osseointegration.» British Dent J (2015): 218:1-9.

CM, Abraham. «A Brief Historical Perspective on Dental Implants, Their Surface Coatings.» Open Dent J (2014; 8:50-55).

Ferreira Lemos, Lopez-Jarana, Falcao, Carrasco, Gil, Ríos-Santos and Herrero-Climent. «Effects of Different Undersizing Site Preparations on Implant Stability.» Int J Environ Res Public Health. (2020 Dec;): 17(23): 8965.

Ikar M., Grobeckere-Karl M., Steiner C., «Mechanical stress during implant surgery and its effects on marginal bone: a literature review.» Quintessence Int (2020): 51,142-150.

Larsson C., Wexell P. Thomsen B. Aronsson O, Tengvall P, Rodahl P.,. «Bone Response to Surface-Modified Titanium Implants:.» International Journal of Biomaterials (Volume 2013,): Article ID 412482, 10 pages.

Lutering, Gerd and James C. Williams. Commercially pure (CP) titanium and alpha alloys. Berlin: Springer, 2003. p. 175-176., 2003.

OE, Ogle. «Implant surface material, design and osseointegration.» Dent Clin North Am (2015): 59:505-520.

Palmquist A., Esposito M, Lausmaa J, Thomsen P. «Titanium oral implants: surface characteristics, interface biology and clinical outcome.» J R Soc Interface (2010 Oct): Suppl 5(Suppl 5):S515-27.

Roccuzzo M., Roccuzzo A., Ramanuskaite A. «Papilla height in relation to the distance between bone crest and interproximal contact point at single-tooth implants: A.» Clinical Orla Implant Research (2018;): 29(Suppl. 15):50–61.

Velasco-Ortega E, Jiminez-Guerra et al. «Long-Term Clinical Outcomes of Treatment with Dental Implants with Acid Etched Surface.» Materials (2020): 13,1553.

Velasco-Ortega E, Ortiz-Garcia I et al-. «Osseointegration of Sandblasted and Acid-Etched Implant Surfaces. A Histological and Histomorphometric Study in the rabbit.» Int. J. Mol. Sci. (2021,): 22, 8507.

Wennerberg A., Albrektsson T., Chrcanovic B. «Long-term clinical outcome of implants with different surface modifications.» Eur J Oral Implantol (2018;): 11 Suppl 1:S123-S136.

# WARNINGS AND CERTIFICATIONS

### **INSTRUCTIONS FOR USE**

The information contained in this manual, supplements, without replacing, the instructions for use that accompany each Igea Implant System device and should not be construed as an alternative to the training and professional experience of the user.

Before using each product, it is recommended that you carefully read the instructions for use, which can also be found at www.mesaitalia.it.

Mesa Italia accepts no liability in the event of failure to comply with these instructions.

### CASE DOCUMENTATION AND TRACEABILITY

It is recommended that clinical, radiological, photographic and statistical documentation be recorded for each patient.

Each implant and prosthetic components should be tracked using the part number and lot number, which are on the respective labels accompanying the dental implant: implant labels should be attached to the patient card to facilitate traceability

### **DISCLAIMER**

The "IGEA" dental implant is intended only for professional use by licensed dental surgeons with extensive knowledge of dental prosthetics and should be inserted using only instruments and components supplied by the manufacturer.

The use of devices produced by third party companies, entails the forfeiture of the warranty and the cancellation of any obligation, expressed or implied, of the company Mesa Italia S.r.l.

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### **CERTIFICATION**

Our brand is a guarantee of quality, the company is certified in accordance with **UNI EN ISO 9001 and UNI EN ISO 13485** standards and has obtained **CE marking** for medical devices in accordance with Directive 93/42/EEC as amended. (MDD)and EU Regulation 2017 / 745 as amended. (MDR).

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