

robiCone

Conical Connection

ONE IMPLANT SYSTEM WITH THREE CONCEPTS

tag
DENTAL

Index

Regulation & Quality	4
One implant system with three concepts	5
Conical Connection advantages	6
RobiCone Range	7
Procedure	8
Packaging	13
Conical Connection Restoration Table	14
Restoration Kits	16
Compact Kit	18
Prosthetic Kit	19
Guided RobiCone Surgical Kit	20
Holding Kits	22
Screw Removal Kit	23
Analysis Report	24
Concept	26
Notes	27

Regulation & Quality



TAG Medical Products is an innovator in the field of medical and dental equipment and implants.

Idyllically located in Kibbutz Gaaton, among the rolling hills and avocado groves of Israel's Western Galilee region, TAG Medical Products was established as a subsidiary of the metal machine workshop that was founded on the kibbutz in 1949. By 1992, the company had broadened development and production capabilities, and began blazing the trail towards its current position as a leader in the manufacturing of surgical instruments.



TAG Dental: Offers high quality implantology products, including: Dental implants, Superstructures, instruments, and biological materials.

“Quality is everyone's responsibility at our company, and we invest time and effort to ensure that we consistently deliver high quality products”

TAG is ISO 13485 certified by LNE GMED. All TAG products carry the CE Mark according to Annex II of COUNCIL DIRECTIVE 93/42/EEC. The scope of certification covers the design, development, manufacturing and marketing of Orthopedic and Dental Implants, Disposable and Reusable Surgical Instruments. TAG Dental Implant system products are cleared for marketing in the USA* (K143326).

* Some products may not be available in the USA
Product availability may vary between countries

One implant system with three concepts

1

Implants

Platform Switching in all the implants
Maximum Biological Reaction

2

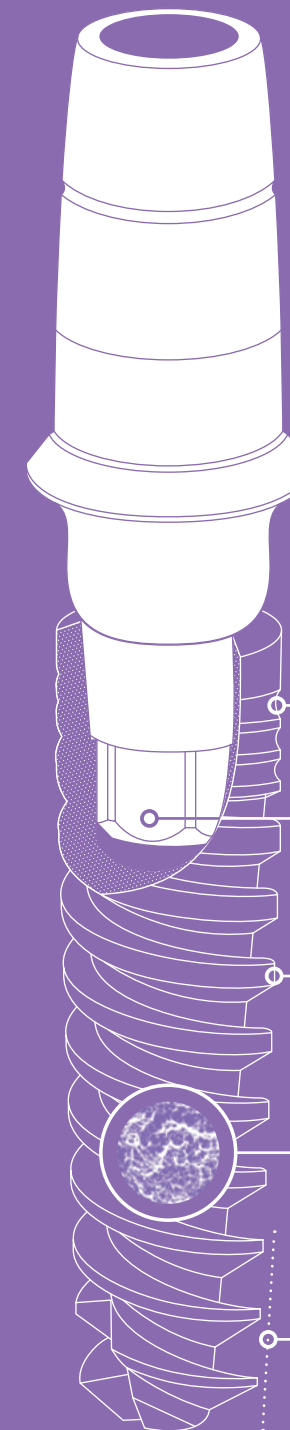
Abutments

Reverse crown Concave Profile Design
High Esthetic Results

3

Connection

Same Conical Connection (3.3mm to 6.0mm)
Total freedom of design for Doctors



Our new conical implant RobiCone with accurate machined conical connection of the implant abutment, joint produces a high level of mechanical stability under all clinical loading conditions.

Rounded Micro thread, 4 starts

8 degree friction connection, Index hexagon

Progressive reverse buttress thread, 2 leads,

Grade 23 Titanium Alloy, SLA surface treatment

Tapered profile, domed apex

Conical Connection

advantages



Attachment

RobiCone with high tolerance between Implant / Abutment minimizes micro movement provide a seal against contamination.



Top

Conical angle of 8° give a greater mechanical retention with good friction that reduce the stresses of the screw. An Hexagon provides positioning indication.



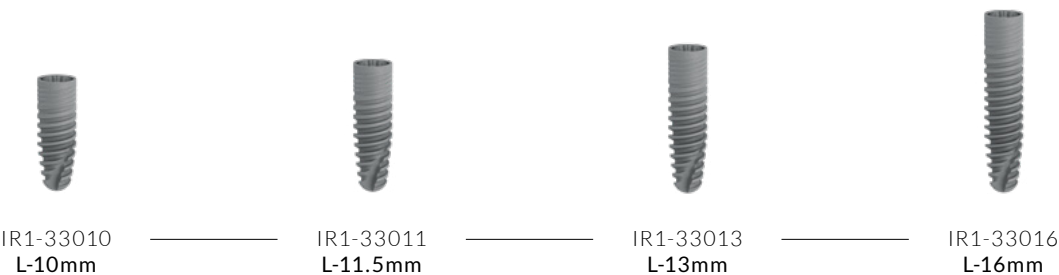
Geometry

Support mechanical stability of system to lateral forces. The strain on the central fixation screw is significantly reduced when the implant-abutment is loaded.

RobiCone Range

Length (mm)	6	8	10	11.5	13	16
Ø 3.3			IR1-33010	IR1-33011	IR1-33013	IR1-33016
						
Ø 3.75		IR1-37508	IR1-37510	IR1-37511	IR1-37513	IR1-37516
						
Ø 4.2	IR1-42006	IR1-42008	IR1-42010	IR1-42011	IR1-42013	IR1-42016
						
Ø 5.0	IR1-50006	IR1-50008	IR1-50010	IR1-50011	IR1-50013	
						
Ø 6.0	IR1-60006	IR1-60008	IR1-60010	IR1-60011	IR1-60013	
						

Procedure



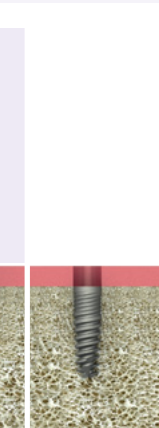
Ø 3.3mm Implant Procedure

Soft Bone		Dense Bone		
				
1200-1500	900-1200	700-900	500-700	
Ø1.90	Ø2.0	Ø2.5	Ø2.8	
Drill Speed (RPM)				
Diameter				

* Do not exceed torque of 80 Ncm during implant insertion
This procedure does not replace the professional judgment of the surgeon

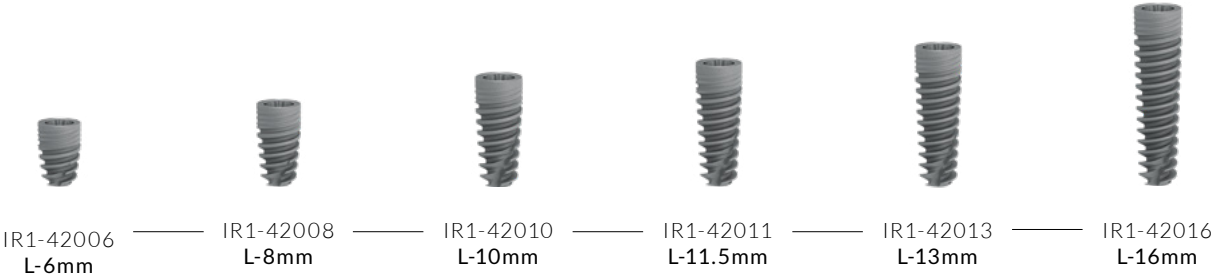
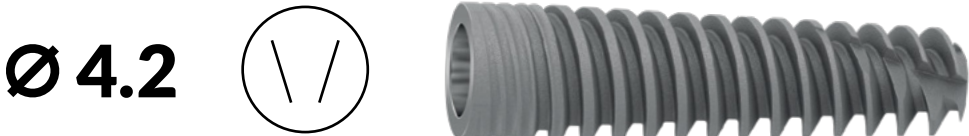


Ø 3.75mm Implant Procedure

Soft Bone		Dense Bone			
					
1200-1500	900-1200	500-700	400-700	200-400	
Ø1.90	Ø2.0	Ø2.8	C 3.2	3.75 / 4.2	
Drill Speed (RPM)					
Diameter					

This procedure does not replace the professional judgment of the surgeon

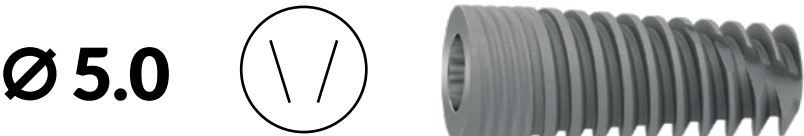
Procedure



Ø 4.2mm Implant Procedure

Soft Bone				Dense Bone		
1200-1500	900-1200	500-700	400-700	400-600	200-400	
Ø1.90	Ø2.0	Ø2.8	C 3.2	C 3.8	3.75 / 4.2	
						Drill Speed (RPM)
						Diameter

This procedure does not replace the professional judgment of the surgeon

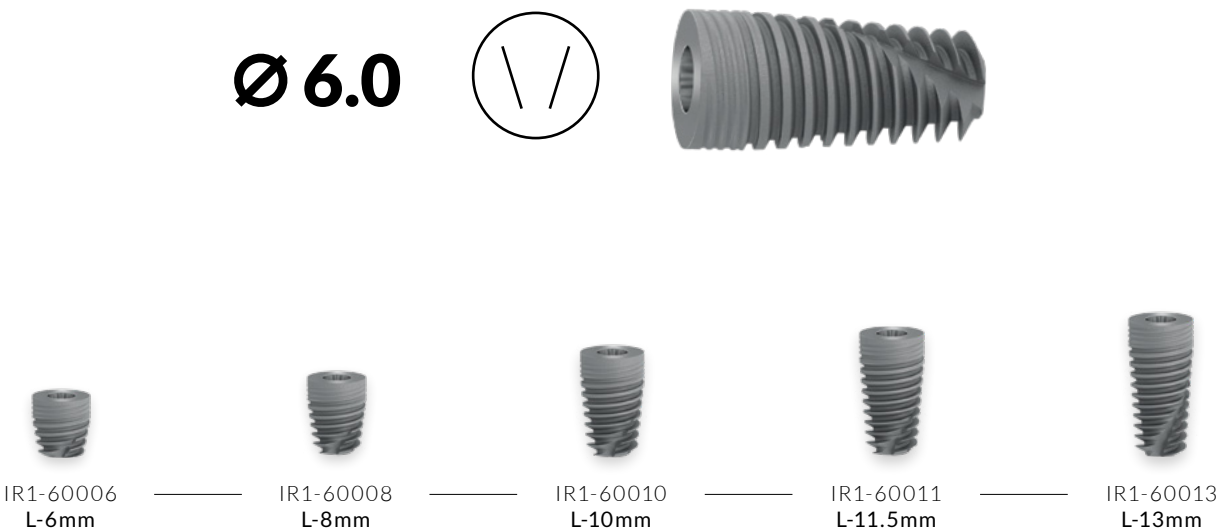


Ø 5.0mm Implant Procedure

Soft Bone					Dense Bone	
1200-1500	900-1200	500-700	400-700	400-600	300-500	200-400
Ø1.90	Ø2.0	Ø2.8	C 3.2	C 3.8	C 4.5	5 / 6
						Drill Speed (RPM)
						Diameter

This procedure does not replace the professional judgment of the surgeon

Procedure



Ø 6.0mm Implant Procedure

Soft Bone						Dense Bone		
						*Optional		
1200-1500	900-1200	500-700	400-700	400-600	300-500	250-450	200-400	
Ø1.90	Ø2.0	Ø2.8	C 3.2	C 3.8	C 4.5	C 5.5	5 / 6	
								Drill Speed (RPM)
								Diameter

This procedure does not replace the professional judgment of the surgeon

Packaging

Visual identification of implant diameter by cap color.

Implant length and diameter are labeled upon the cap.

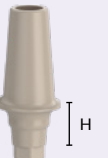
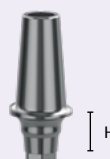
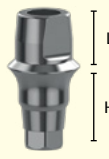
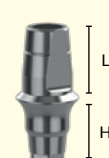
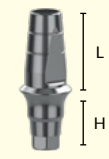
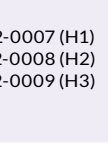
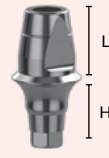
Each implant is packed in a sealed sterile tube and closed within a shrink sleeve for absolute impermeability.

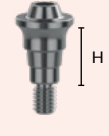
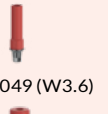
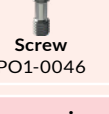
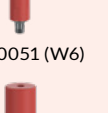
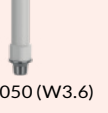
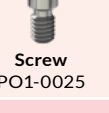
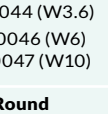
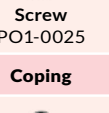
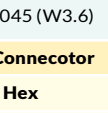
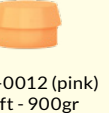
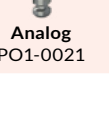
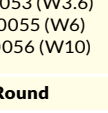
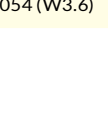
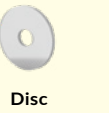


Colored cap as indication for immediate identification of implant diameter. A label affixed to the cap indicating implant length and diameter.



Conical Connection Restoration Table

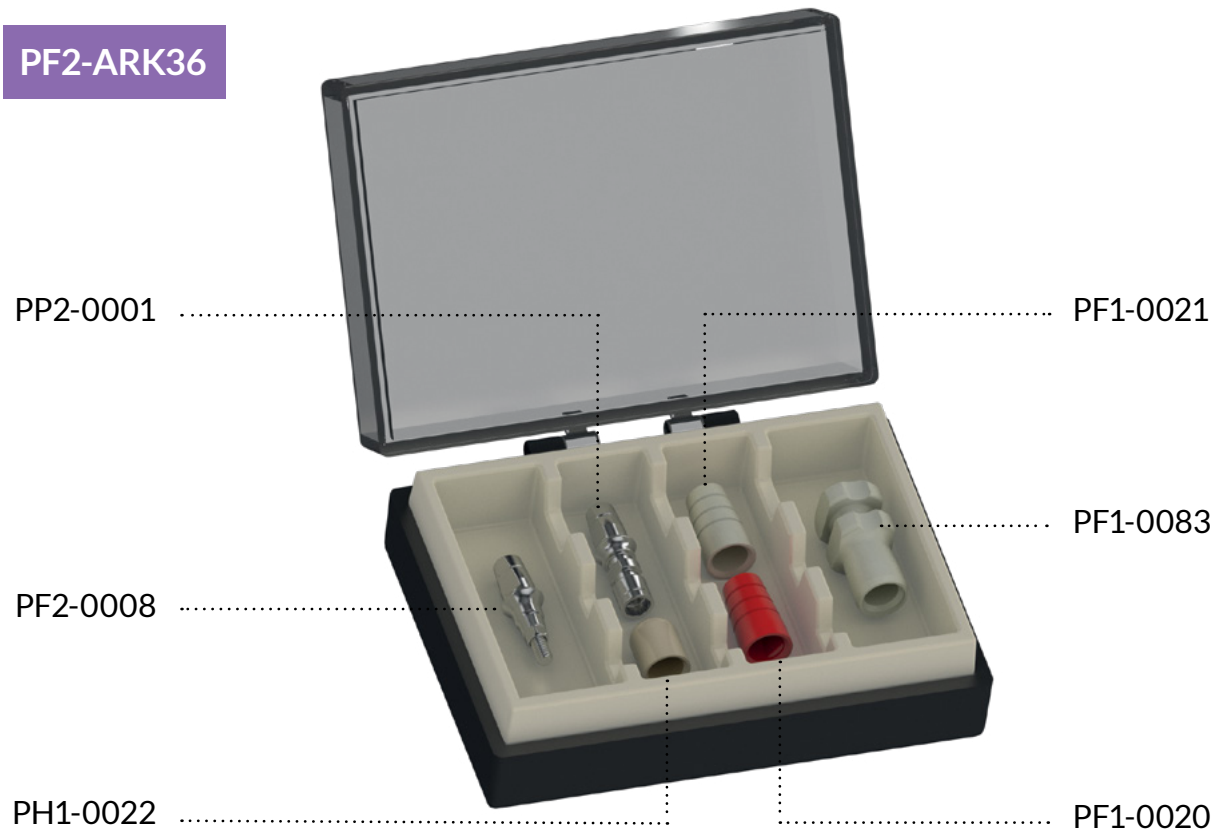
Pre Restoration		Temporary Restoration	Final Restoration		
HEALING CAPS	COPING	PEEK ESTHETIC	TI ABUTMENTS		ANATOMIC
Anatomic ø5	Implant Analogs	Straight	Universal	Esthetic	L4
 PH1-0017 (H2) PH1-0006 (H3) PH1-0007 (H4) PH1-0008 (H5) PH1-0009 (H6)	 PP2-0001 (L6) PP2-0002 (L4) PP2-0003 (L8)		 PF2-0037 (H0)  PF2-0038 (H2)  Wide PF2-0039 (H2)	 PF2-0022 (H1) PF2-0023 (H2) PF2-0024 (H3)	 PF2-0001 (H1) PF2-0002 (H2) PF2-0003 (H3) PF2-0004 (H4) PF2-0005 (H5)
Anatomic ø5.8	Transfers	15°	Narrow	15°	L6
 PH1-0018 (H2) PH1-0013 (H3) PH1-0014 (H4) PH1-0015 (H5) PH1-0019 (H6)	 Close Tray PP2-0004 (H2) PP2-0009 (H5)		 Solid PF2-0020 (H0)  Straight PF2-0021 (H0)	 PF2-0027 (H1) PF2-0028 (H2) PF2-0029 (H3)	 PF2-0006 (H1) PF2-0007 (H2) PF2-0008 (H3) PF2-0009 (H4) PF2-0010 (H5)
Straight ø4				25°	L8
 PH1-0016 (H2) PH1-0002 (H3) PH1-0003 (H4) PH1-0004 (H5) PH1-0005 (H6)			 Narrow PF2-0025 (H0)	 PF2-0033 (H1) PF2-0034 (H2) PF2-0035 (H3)	
Straight ø5		25°	25°	15° Wide	L6 Wide
 PH1-0029 (H2) PH1-0030 (H3) PH1-0031 (H4) PH1-0032 (H5) PH1-0033 (H6)	 Open Tray PP2-0005 (H3) PP2-0008 (H5)		 Narrow PF2-0031 (H0)	 PF2-0030 (H2)	 PF2-0011 (H1) PF2-0012 (H2) PF2-0013 (H3) PF2-0014 (H4) PF2-0015 (H5)
Straight ø5.8			Angulated	25° Wide	
 PH1-0024 (H2) PH1-0025 (H3) PH1-0026 (H4) PH1-0027 (H5) PH1-0028 (H6)	 Press Fit PP2-0007 (H3) PP2-0006 (H5)		 Angulated PF2-0026 (H2)  Angulated PF2-0032 (H2)	 PF2-0036 (H2)	 PF2-0016 (H2) PF2-0017 (H3) PF2-0018 (H4) PF2-0019 (H5)

Final Restoration				CadCam	
UCLA	OVERDENTURE			IMPLANT LEVEL	MU LEVEL
Plastic	Ball	Multi-Unit	Equator	Scanbody	Scanbody
Hex	 PO2-0001 (H1) PO2-0002 (H2) PO2-0003 (H3) PO2-0004 (H4) PO2-0005 (H5)	 PO2-0022 (H1) PO2-0023 (H2) PO2-0024 (H3) PO2-0025 (H4) PO2-0026 (H5)	 PO2-0017 (H1) PO2-0018 (H2) PO2-0019 (H3) PO2-0020 (H4) PO2-0021 (H5)	 CCA-0045	 CCA-0015
PF2-0040 (W3.6)					
PF2-0042 (W6)					
PF2-0043 (W10)					
Round	BAA	MUA	Accessories	Analog	Analog
 PF2-0041 (W3.6)	 PO2-0006 (17° H2) PO2-0007 (17° H3) PO2-0008 (17° H4) PO2-0009 (30° H2) PO2-0010 (30° H3) PO2-0011 (30° H4)	 PO2-0027 (17° H2) PO2-0028 (17° H3) PO2-0029 (17° H4) PO2-0030 (30° H2) PO2-0031 (30° H3) PO2-0032 (30° H4)	 Metal Housing PO1-0062  PO1-0066 (Yellow) Extra Soft - 600gr PO1-0064 (Pink) Soft - 1200gr PO1-0063 (Clear) Standard - 1800gr PO1-0067 (Violet) Strong - 2700gr PO1-0065 (Black) Laboratory	 CCA-0046	 CCA-0017
CoCr					
Hex				TI Base	TI Base
 PF2-0049 (W3.6)		 Screw PO1-0046		 CCA-0033 (H0) CCA-0036 (H1) CCA-0035 (H2) CCA-0034 (H3)	 CCA-0010
 PF2-0051 (W6)	 Screw PO1-0046				
 PF2-0052 (W10)					
Round	Accessories	Accessories	Accessories	Round	Temporary
 PF2-0050 (W3.6)	 Metal Housing PO1-0009	 Temporary Ti PO1-0028  Healing Cap PO1-0024	 Cap Insertion Tool TK1-0035	 CCA-0038 (H0) CCA-0037 (H1) CCA-0039 (H2) CCA-0040 (H3)	 CCA-0028 (PEEK L11.8)
Ti Connector					
Hex				Temporary	
 PF2-0044 (W3.6) PF2-0046 (W6) PF2-0047 (W10)		 Screw PO1-0025	 Transfer Single Use PO1-0068	 CCA-0041 (Ti)	 CCA-0030 (Ti L11.8)
Round				Round	
 PF2-0045 (W3.6)	 PO1-0012 (pink) Soft - 900gr PO1-0013 (clear) Standard - 1300gr	 Open Tray PO1-0031  Close Tray PO1-0033  Analog PO1-0021	 Transfer Multi Use PO1-0069  Analog PO1-0061	 CCA-0042 (PEEK)	 CCA-0031 (Ti L7)
Gold Connector					
Hex					
 PF2-0053 (W3.6) PF2-0055 (W6) PF2-0056 (W10)					
Round					
 PF2-0054 (W3.6)	 Disc PO1-0014				

Restoration Kit

Ark

PF2-ARK36



4 mm	PF2-ARK14 CC Anatomic Restoration Kit H1mm L4mm	PF2-ARK24 CC Anatomic Restoration Kit H2mm L4mm	PF2-ARK34 CC Anatomic Restoration Kit H3mm L4mm	PF2-ARK44 CC Anatomic Restoration Kit H4mm L4mm	PF2-ARK54 CC Anatomic Restoration Kit H5mm L4mm
6 mm	PF2-ARK16 CC Anatomic Restoration Kit H1mm L6mm	PF2-ARK26 CC Anatomic Restoration Kit H2mm L6mm	PF2-ARK36 CC Anatomic Restoration Kit H3mm L6mm	PF2-ARK46 CC Anatomic Restoration Kit H4mm L6mm	PF2-ARK56 CC Anatomic Restoration Kit H5mm L6mm
8 mm	PF2-ARK18 CC Anatomic Restoration Kit H1mm L8mm	PF2-ARK28 CC Anatomic Restoration Kit H2mm L8mm	PF2-ARK38 CC Anatomic Restoration Kit H3mm L8mm	PF2-ARK48 CC Anatomic Restoration Kit H4mm L8mm	PF2-ARK58 CC Anatomic Restoration Kit H5mm L8mm

Restoration Kit

Equator

PO2-0014



PO2-0012	PO2-0013	PO2-0014	PO2-0015	PO2-0016
CC Equator Attachment H1mm	CC Equator Attachment H2mm	CC Equator Attachment H3mm	CC Equator Attachment H4mm	CC Equator Attachment H5mm

Compact Kit



KT2-0001

Drills				
TD1-0002 Marking Drill ø1.90mm	TD1-0003 Pilot Drill ø2mm External Irrigation	TD1-0004 Drill ø2.50mm External Irrigation	TD1-0005 Drill ø2.80mm External Irrigation	TD1-0021 Conical Drill for implant ø3.75mm
TD1-0022 Conical Drill for implant ø4.20mm	TD1-0023 Conical Drill for implant ø5mm	TD1-0024 Conical Drill for implant ø6mm		
Insert Tools				
TK1-0020 Abutment Extractor Key	TD1-0030 Drill Extender	TK1-0002 Key 1.28mm Long	TK2-0002 CC Key 2.42 Long	TKG-0017 CC Guided Implant Driver Short
TK2-0018 CC Motor key 2.42 Long	TK1-0015 Ratchet			
Countersinks		Parallel pins	Implant Indicators	
TD1-0019 Countersink 3.75mm/4.20mm	TD1-0020 Countersink 5mm/6mm	TK1-0012 Parallel pin	TK2-0005 CC Implant Indicator	

Prosthetic Kit



KT2-0002

Abutment Planning				
TK2-0014 CC Mock Abutment Analog	TK2-0015 CC Mock Abutment Analog 15°	TK2-0016 CC Mock Abutment Analog 25°		
1.28 Driver				
TK1-0007 Motor key 1.28 Short	TK1-0008 Motor key 1.28 Long	TK1-0006 Screw Driver 1.28mm Long	TK1-0001 Key 1.28mm Short	TK1-0002 Key 1.28mm Long
Accessories				
TK1-0033 Key for Angulated M.U & Balls	TK1-0020 Abutment Extractor Key	TK2-0005 CC Implant Indicator	TK1-0016 Torque Ratchet	
TAG offers a surgical kit to provide a complete procedure up to implant 6.0mm diameter.			Tools must be cleaned, disinfected and sterilized before use.	

Guided RobiCone Surgical Kit



KTG-0002

Drivers

- 

TK1-0006
Screw Driver
1.28mm Long
- 

TKG-0020
CC Guided Implant
Driver Motor
- 

TKG-0019
CC Guided Implant
Driver Ratchet
- 

TKG-0017
CC Guided Implant
Driver Short
- 

TKG-0018
CC Guided Implant
Driver Long

Accessories

- 

TD1-0030
Drill Extender
- 

TKG-0009
Guided Implant Driver
- Extractor Long
- 

TKG-0015
Guided Implant Driver -
Extractor Short
- 

TDG-0001
Guided Pilot Drill
Ø2
- 

TKG-0004
Guided Lateral
Fixation Screw
- 

TKG-0005
Guided Anchoring
Screw
- 

TKG-0016
Guided Soft Bone
Anchoring Screw
- 

TKG-0010
Guided drill
Template
- 

TK1-0015
Ratchet

Drills

- 

TKG-0001
Guided Tissue
Punch Ø3.3
- 

TKG-0002
Guided Tissue
Punch Ø3.75
- 

TKG-0003
Guided Tissue
Punch Ø4.2
- 

TDG-0002
Guided Starter drill
- 

TDG-0003
Guided Bone Mill
Ø3.3
- 

TDG-0004
Guided Bone
Mill Ø3.75
- 

TDG-0005
Guided Bone
Mill Ø4.2
- 

TDG-0006
Guided Pilot Drill
Ø2.4 L8
- 

TDG-0007
Guided Pilot Drill
Ø2.4 L10
- 

TDG-0008
Guided Pilot Drill
Ø2.4 L11.5
- 

TDG-0009
Guided Pilot Drill
Ø2.4 L13
- 

TDG-0010
Guided Drill for
Ø3.3 L8 Implant
- 

TDG-0011
Guided Drill for
Ø3.3 L10 Implant
- 

TDG-0012
Guided Drill for
Ø3.3 L11.5 Implant
- 

TDG-0013
Guided Drill for
Ø3.3 L13 Implant
- 

TDG-0014
Guided Drill for
Ø3.75 L8 Implant
- 

TDG-0015
Guided Drill for
Ø3.75 L10 Implant
- 

TDG-0016
Guided Drill for
Ø3.75 L11.5 Implant
- 

TDG-0017
Guided Drill for
Ø3.75 L13 Implant
- 

TDG-0018
Guided Drill for
Ø4.2 L8 Implant
- 

TDG-0019
Guided Drill for
Ø4.2 L10 Implant
- 

TDG-0020
Guided Drill for
Ø4.2 L11.5 Implant
- 

TDG-0021
Guided Drill for
Ø4.2 L13 Implant
- 

TDG-0026
Guided Countersink
for Ø3.3
- 

TDG-0027
Guided Countersink
for Ø3.75
- 

TDG-0028
Guided Countersink
for Ø4.2

TAG Guided RobiCone kit provides a complete procedure up to implant 4.2 mm in diameter



Tools must be cleaned, disinfected and sterilized before use.

Holding Kits

Universal Holder Kit

KT1-0004



TK1-0034	TK1-0027	TK1-0024	TK1-0028	TK2-0011
				
1/4" Holder & Collet Set	Holder Key 1.28mm	Extention for 1/4" Holder	Holder Key 2.42mm	CC Handle Key 2.42mm

Technician Holder Kit

KT1-0005



TK1-0034	TK1-0023	TK1-0025	TK2-0010
			
1/4" Holder & Collet Set	1.28 Kit Screwdriver	1/4" Abutment Fixture Long	CC 1/4" Abutment Fixture Long

Screw Removal Kit



KT1-0009

TK2-0012	TK1-0037	TK1-0038
		
CC Screw Removal Burr Guide	1-72 UNF Tap	Screw Removal Burr

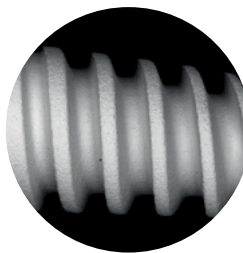
Analysis Report

XPS Atomic Concentration (%) RobiCone

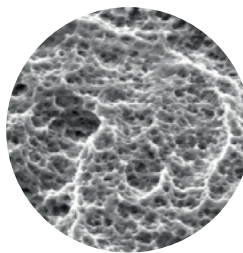
Sample	Area	C	Ti	O	Al	V	N	Si	P	Ca	F	S	Zn
IR1 37508 Lot 19C01	Flat	24.1	19.9	52.8	1.8	0.9	0.4	0.1	-	-	-	-	-
	Top	35.7	16.1	46.0	1.1	0.7	0.3	0.2	-	-	-	-	-
IR1 42008 Lot 19C03	Flat	32.6	15.2	47.0	1.8	0.5	-	-	-	0.1	-	-	-
	Top	37.5	13.4	43.3	1.9	0.8	0.4	-	-	0.2	-	-	-

Implants show a high level of cleanliness.

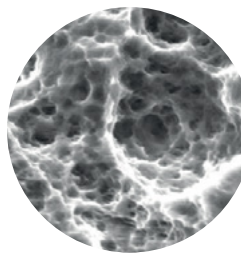
SEM Results



General view



Surface morphology
X2000



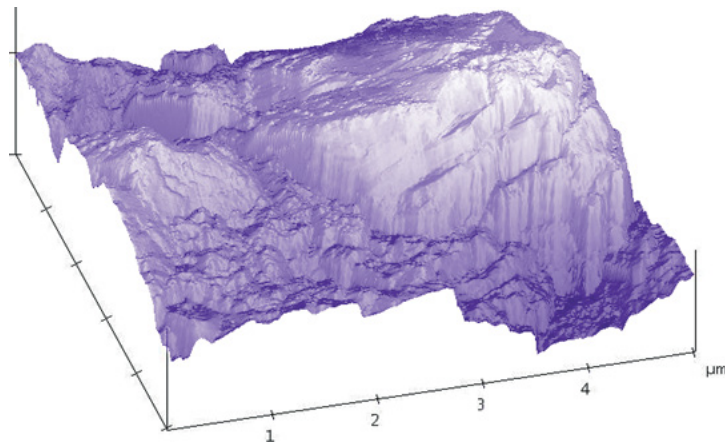
Surface morphology
X5000

High-level surface morphology with small dimples with large cavities.

Roughness

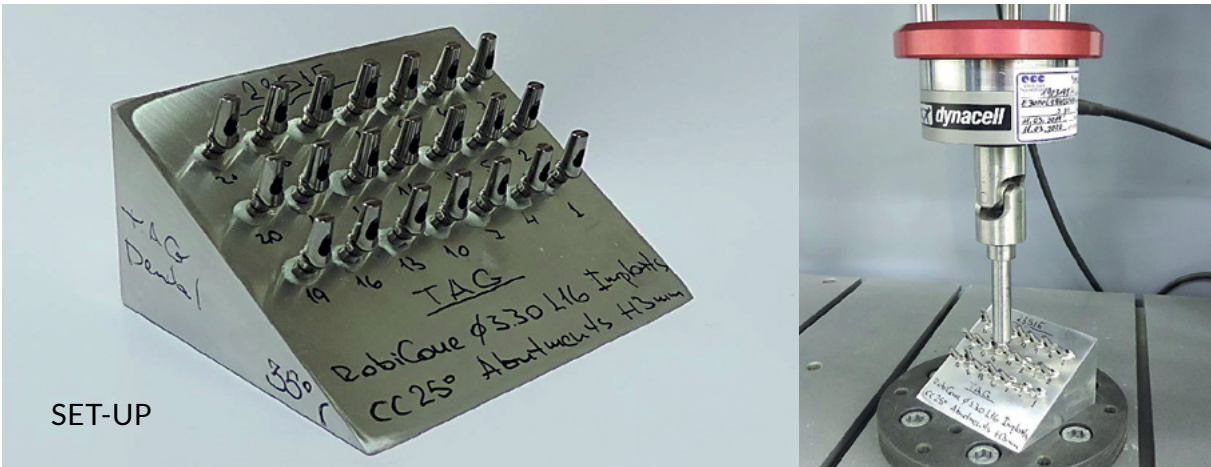
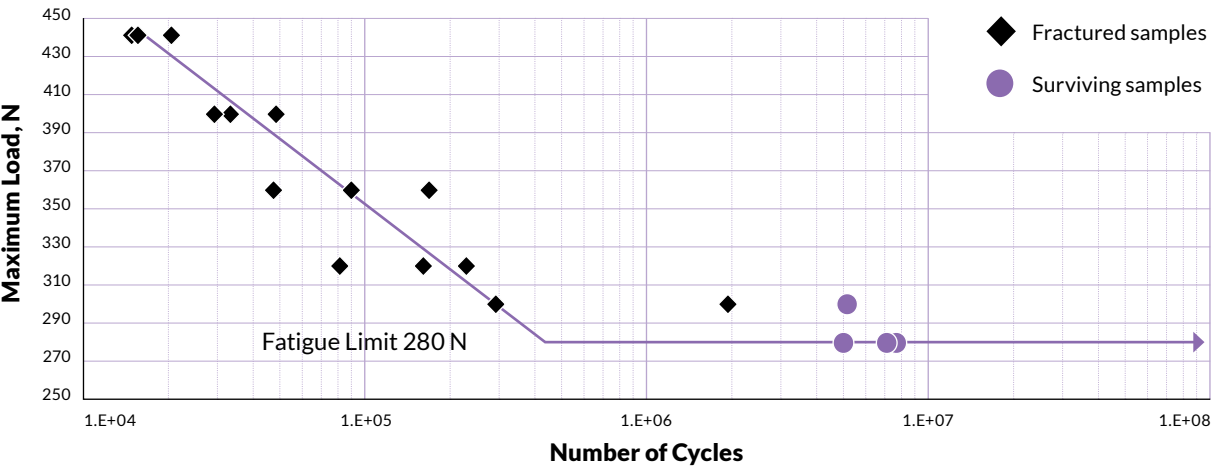
Atomic Force Microscopy (AFM)

Ra=2.0µm Al oxide blasted /acid-etched



Dynamic Loading Test of "RobiCone"

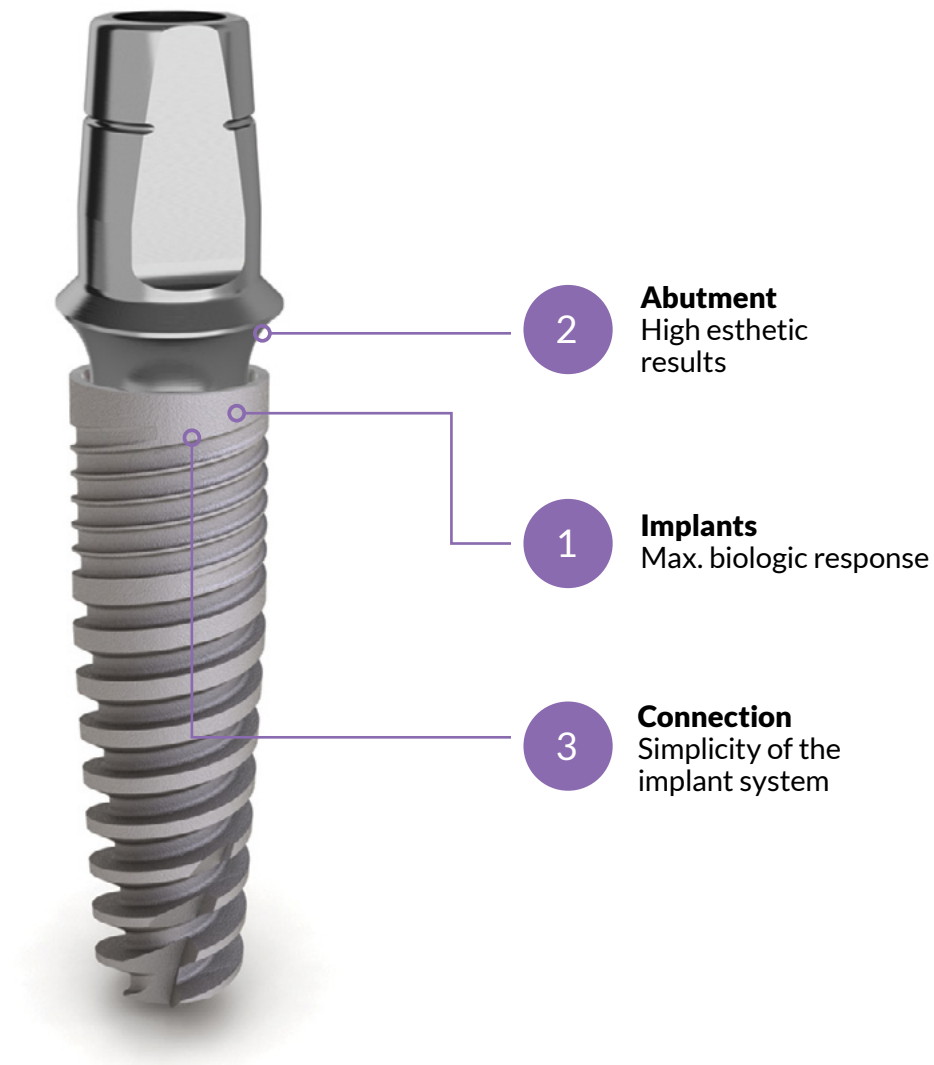
3.30 L16 Implants and CC 25° Angled Abutments



Fatigue test results			
Fatigue test results	Number of cycles	Max. bending moment, Nmm	Failure mode
280	7632174	1036	run-out
280	7165827	1036	run-out
280	5038328	1036	run-out

The fatigue limit of the tested implants is 280 N.

Concept _____



Notes



Surface Quality

Made of biocompatible Titanium Alloy Ti 6AL 4V ELI is compliant with ASTM F136. The surface quality is evaluated using XPS and SEM showing typical chemical elements (without unexpected elements). The entire implant surface is treated by Blasting and Acid Etching with roughness (Ra) from 1.8 to 2.2 μ and morphology remains in a range of holes from 2 to 40 μ .



EXPERIENCE THE **DIFFERENCE**

TAG Medical Products Corporation Ltd
Kibbutz Gaaton 2513000 Israel Tel: +972 (0)4 9858400
tagdental.tag-med.com

TAG is ISO 13485 certified by LNE GMED.
TAG products are CE Marked in accordance with
COUNCIL DIRECTIVE 93/42/EEC.

DA-CTLRE Rev.A