



TRI+

Version 2





'PLUG & PLAY' IMPLANT DENTISTRY







Universal interface with leading digital technologies



- + 3D-Planning & Guided Surgery
- + Customized CAD abutments
- + CADCAM Cement-retained crowns and bridges
- + CADCAM Screw-retained bars and bridges



TRI+ Flyer





Guided Surgery Guided Pilot Drilling for TRI[®]-Vent, TRI[®]- Narrow and TRI[®]-Octa Implants

- TRI offers the possibility of guided pilot drilling with or without depth-control!
- With depth-control it is possible for the lengths: 8,10, 11.5 & 13mm!

What is additionally required:

- Compatible Planning Software
- TRI[®] Guide Sleeve for template & TRI[®] Pilot Drill TPD2.3-L
- Currently the following software programs can be used:
 - Dental Wings coDiagnostiX
 - SICAT (Sirona)
 - Swissmeda SMOP
 Materialise Simplant -

TRI Vent & Narrow deposited TRI Vent & Narrow deposited TRI Vent & Narrow deposited Integration pending (with generic implants possible)







TRI+ Guided Surgery Example: Database







coDiagnostiX™ Guided Surgery



A surgical guide (template) can be used together with the long TRI[®] Pilot Drill TPD2.3-L. L 6-8-10-11.5-13-16

Bohrer, lang

Gewindesd

- No need for additional elongated drills or drill guide holder! \geq
- \geq

Bohrer, kurz

Necessary in addition is only the TRI Pilot Drill Sleeve \geq (TPDS) for the template.

TRI+

Guided Surgery Guided Pilot Drilling for TRI[®]-Vent, TRI[®]- Narrow and TRI[®]-Octa Implants

Only for pilot drilling!

No large investment for additional instruments needed!













Guided Surgery Guided Pilot Drilling for TRI®-Vent, TRI®- Narrow and TRI®-Octa Implants

• Only for pilot drilling!

Surgical Guide (template) can be used with the long TRI[®] Pilot Drill TPD2.3-L.

Template with standard drill sleeves - for pilot drilling Template with standard drill sleeves - for guided pilot drilling with depth stop

 Still in the testing phase For just one drilling with depth stop (milling)!

Surgical Guide (template) with long TRI Rocket Drill (trepan drill)

Drilling template with the appropriate drill sleeves for the final hole of the soft bone protocol.





98-10-11.5-13-16

TRI+ Guided Surgery Pilot drilling with depth-stop



- additional drill stop sleeve
- possible for the lengths of 8, 10, 11.5, 13mm
- short pilot drill (TPD2.3-S) can be used if no adequate occlusal space is available (posterior region)











TRI+ Guided Surgery Production the templates

• Manufacture the template by 3D printing



- Sleeves can be pressed by finger force in the template after production
- Products name: TPDS sleeve for TPD2.3-L



TRI+ Guided Surgery Case by Dr. Mehmke/Germany - coDiagnostix DW





TRI+ Guided Surgery Case by Dr. Mehmke/Germany - coDiagnostix DW





inovative





http://www.mysmop.com/en



TRI+



Case by Dr. Biegert/Germany What is: smop – powerde by Swissmeda/Switzerland

The SMOP planning community was created to let dentists and dental technicians plan implant cases using DVT or CT data to produce precise drilling templates to help with implantation. All this, without requiring to make expensive investments or going through complex training.

- no scanning template
- no great ivestment into the software



4 Simple steps to successful implant planning with high-precision drilling templates



Step 1 Perform Cone Beam Scan and open DICOM



SMOP allows dentists and dental technicians to plan implant cases based on Cone Beam or CT data and to obtain precise drilling templates for the use during implant insertion:

Without significant investments and with an easy learning curve:

- no preparation (no scanning template) needed before Cone-Beam / CT Scan
- · data can be transferred with one click
- smop can directly be used as a viewer





TRI+ Case by Dr. Biegert/Germany



Software System: smop – Swissmeda/Switzerland



SMOP allows you to determine the optimal implant position, taking the existing bone as well as the planned prosthetical position into account.

- intuitive planning software, learning by doing easy exchange of your planning data via the Internet with colleagues, the dental lab or other service providers
- open interfaces to CAD/CAM
- short processing times







Laboratory scanning of the blaster model (STL-file).



Laboratory scanning of the blaster model with wax-up (STL-file).

TRI S

Assemblage the bone situation with the prosthetical information





Step 3 Design and print the surgical template



After the treatment strategy is clear and all implants are planned, the dentist can order the drilling template by clicking on an order button.

Swissmeda, a local service center or the dentist himself can now use a special software that allows to design the drilling templates based on the individual needs, following the individual treatment strategy.

After this digital template is validated by the dentist via the software, the surgical stent will be printed by a 3D printing center of your choice.

- · the drilling template can be designed digitally
- a new 3D printing process to manufacture the drilling templates is used
- short processing times

























Step 4 Surgery – using the template



Through the new special design the printed templates fit very well to the stone models and teeth. The light construction results in a good overview for the surgeon. Furthermore the templates do not disturb cooling procedures. In some cases it can make sense to prepare a provisional restoration using the template beforehand.

- the template fits very well and precise, gives good overview and allows cooling
- it is individually adapted on your needs, and adapted to your treatment strategy
- it is open all available guided kits of all implant systems can be used



TRI+ Development Project TRI Rocket Drill – Fastest Implant Placement

Description

- Stepped trephine drill in combination with surgical template allows for one-step surgical protocol
- Trephine drill allows for collection of bone and usage as mucosa punch for minimally invasive surgery

Timelines

- Clinical testing until end Q4/2014
- Launch: beginning Q1/ 2015





3D Printed Guide

Only one drill with depth stop

Hollow Trephine Drill

- Fist drilling is the final implant bed.
- Collect maximum amount of bone.

Reverse for mucosa punch

TRI+ **Development Project TRI Rocket Drill – Fastest Implant Placement**



Case by Dr. Marius Steigmann





TRI+ CAD CAM - Products

- What is CAD CAM?
 - CAD Computer Aided Design!
- CAM Computer Aided Milling
- What is needed?

Scanner (laboratory or intra-oral scanner) Design Software Milling Machine

• What needs to provide TRI:

Compatibility to Desingsoftware Scan Abumtent (Body) for precise detection of the interface Suitable Abutments STL-Files for these products & implant replica



TRI+ CAD CAM - Products Titanium Bonding Base

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Titanium bonding base for TRI-Vent: available in two gingiva heights:

TV70-07-F

Titanium bonding base, 0.7 mm gingiva, including RS-TV10

TV70-20-F

Titanium bonding base, 2mm gingiva, including RS-TV10





The TRI[®] titanium bonding bases are intermediate parts which have to the implant side the TRI[®]-Vent implants interface and abutment towards a standardized connector.

TV70-07-F in STL-format

TRI+ **CAD CAM - Products Titanium Bonding Base**

The TRI® titanium bonding base for TRI-Octa implants is available with a gingiva height of 0,7mm.

For all TRI titanium bonding bases stl-files available for:







exocad

зshаре⊳

dental wings



TRI+ CAD CAM - Products Scanbody



11,8n













TRI+ CAD CAM - Products Copatible Desing Software

The STL records of TRI CAD CAM products are compaibel with the design of the software companies:





• scanned data is transmitted to the CAD station.



• digital coping design abutment.

TRI+ CAD CAM - Products Example: Dental Wings Database





CADCAM A	BUTMENT – INCLUDES SCREW RS-TV10					
Catalog Numb	er	ø	GH	Material	Qty	
TV70-07-F	Titanium Bonding-Base with TRI®-Friction	4.5 mm	0.7 mm	Ti-6Al-4V	1	
TV70-20-F	Titanium Bonding-Base with TRI®-Friction	4.5 mm	2 mm	Ti-6Al-4V	1	
TV70-SCAN	Scanbody for Laboratory and Intraoral Scanner			PEEK	1	
RS-TV10	Replacement Retaining Screw			Ti-6Al-4V	1	
RS-TV10-Lab	Replacement Retaining Screw – Lab Use – Green			Ti-6AI-4V	1	

Components for Screw-Retained Restorations

SCREW-RETAINED	MIILTIIINIT	ABUTMENT STRAIGHT	
	MODII ONII	neo imenti, o incinditi	

Catalog Num	ber	ø	Cuff Height	Material	Qty	Sterile
TV40-01	Screw-Retained Abutment, Straight	4.5 mm	1 mm	Ti-6Al-4V	1	R
TV40-02	Screw-Retained Abutment, Straight	4.5 mm	2 mm	Ti-6Al-4V	1	R
TV40-04	Screw-Retained Abutment, Straight	4.5 mm	4 mm	Ti-6Al-4V	1	R
TV40-06	Screw-Retained Abutment, Straight	4.5 mm	6 mm	Ti-6Al-4V	1	\mathbf{R}
HC-SRAS	Healing Cap for Screw-Retained Abutment, Straight			Ti-6Al-4V	1	R



TV70-07-F



TRI+ CAD CAM - Products Compatible Design Software



Body Scan: digitally recorded!

CAD software defined by these data, the exact position of the implant platform & axis.



TRI+ CAD CAM - Products Compatible Design Software





CAD software places the titanium bonding base for a two-piece abutment, according to the defined implant platform. Virtual model of the individual abutments, according to the gingiva with a defined screw channel.



TRI+ CAD CAM - Products Compatible Design Software



Digital Design of individual coping, in crosssection!



TRI+ CAD CAM - Products Milling Procedure

TRI+ CAD CAM - Products





Scan data is transmitted to CAM-station





Milling of individual coping.



TRI+ CAD CAM - Products Customized Abutment



Milled Individual Coping

&

Titanium Bonding Base



TRI+ CAD CAM - Products Customized Abutment

Applying a suitable attachment-adhesive &

then joining both components

to a two-part customized abutment.



TRI+ CAD CAM - Products Screw Retained Bridge on TV40







TV40-01 in STL-format

TRI+ CAD CAM - Products Milled Bar on TV40 (straight) & TV50 (angled)





TV40-01 in STL-Format



TRI+ CAD CAM - Products Advantages



TV50-30

TV50-17

+ 'All-on-TRI' treatment protocol

Immediate stability with a proven protocol in minimum bone volume.

+ One size fits all All existing impression posts, temporary and final components t!

+ Superior Design Features

Including the proven TRI® Friction and TRI® Soft Tissue Concept.

+ Supported by TRI+

Plan, place and restore your "Allon-TRI" case via the TRI+ interface with your preferred digital technology.



TF

dental implants

Full compatibility with TV40 components.

TRI+ CAD CAM - Products Advantages

- The dimensions of the abutment are optimized in a way that it fits for anatomical conditions of all patients.
- This offers **MAXIMUM SIMPLICITY** by adding only one single component to the portfolio and therefore making the life of the practitioner easier.
- Compared to the straight screw-retained abutments, the height of the TV50-30 corresponds to a gingiva height (GH) of 2.9 mm.



TRI+ **CAD CAM - Products Advantages**





www.tri-implants.com

TRI+ CAD CAM - Products Helpful Insertion Part TV50-30 & TV50-17



dental implants

TRI+ CAD CAM - Products Important Instructons for use - TV50-30 & TV50-17

- The internal hexagon of the TRI Vent implant has to be oriented with the flat towards distal (not towards bucal like other angulated abutments).
- This is contrary compared to normal angulated abutments as the abutment angulation for "All-on-TRI" restorations is inclined towards mesial, while normal angulated abutments are inclined towards lingual.





Screw Retained Prosthetic

Components for Screw Retained Universal - Abutments

Straight:TRI®-Vent, TRI®-Narrow & TRI®-OctaAngled:TRI®-Vent

Flow Chart



TRI+ **CAD CAM - Products Traditional Approach**

• Flow-Chart



Direct or Indirect Impression on Implant Level.



TRI+ CAD CAM - Products Example: Scanbody TV70-Scan & TV50-30 (Exocad)







TRI+ CAD CAM - Products Example: Framework on TV40 & TV50-30 (Exocad)





TRI+ CAD CAM - Products Example: Scan direct on TV40 &TV50-30 (only with Exocad)





TRI+
CAD CAM - ProductsTRI
cental implantsExample: Scan direct on TV40 &TV50-30 (only with Exocad)



TRI+
CAD CAM - ProductsTRI
Cental implantsExample: Scan direct on TV40 &TV50-30 (only with Exocad)Final Restoration



Screw Retained Prosthetics

Universal Screw Retained Abutment – Straight & Angled Product Catalog: TRI[®] -Vent, TRI[®] -Narrow & TRI[®]-Octa

40-02

Components for Screw-Retained Restorations

Catalog Number			CH	Material	Qty	Sterile		
TV40-01	Screw-Retained Abutment, Straight	4.5 mm	1.0 mm	Ti-6AI-4V	1	R	- U.	110
TV40-02	Screw-Retained Abutment, Straight	4.5 mm	2.0 mm	Ti-6AI-4V	1	R	- ¥	
TV40-04	Screw-Retained Abutment, Straight	4.5 mm	4.0 mm	Ti-6Al-4V	1	R		12
TV40-06	Screw-Retained Abutment, Straight	4.5 mm	6.0 mm	Ti-6AI-4V	1	R	TV40-02	TV50-30
TV50-17	Screw Retained Abutment, 17° angled	4.5 mm	2.0 mm	Ti-6AI-4V	1	R	d	1
TV50-30	Screw Retained Abutment 30" Angled	4.5 mm	3.0 mm	Ti-6AI-4V	1	R	6	£
HC-SRAS	Healing Cap for Screw-Retained Abutment, Straight			Ti-6AI-4V	1	R	71.7	

Catalog Number		ø	CH	Material	Qty	Sterile	
TN40-02	Screw-Retained Abutment, Straight	4,5 mm	2,0 mm	Ti-6Al-4V	1	R	
TN40-04	Screw-Retained Abutment, Straight	4,5 mm	40 mm	Ti-6Al-4V	1	R	
HC-SRAS	Healing Cap for Screw-Retained Abutment			Ti-6Al-4V	1	R	,

SCREW-RETAINED, MULTI UNIT ABUTMENT, STRAIGHT

Catalog Number			GH	Material	Qty	Sterile		
TO40-16	Screw-Retained Abutment, Straight	4,5 mm	1,6 mm	Ti-6AI-4V	1	R	4443	L (Q)
TO40-30	Screw-Retained Abutment, Straight	4,5 mm	3,0 mm	Ti-6AI-4V	1	R	T	T
HGSRAS	HGSRAS Healing Cap for Screw-Retained Abutment, Straight			Ti-6AI-4V		R	T040-16	T040-30
ATT	Titanium Temporary Abutment ind. screw RS-TTA			Ti-6AI-4V	1			
RS-TTA	Replacement Retaining Screw for TTA			Ti-6AI-4V	1			
RS-TTAL	Replacement Retaining Screw Long for TTA			Ti-6AI-4V	1			
DTC-SRA	Direct Trasfer Component for Screw-Retained Abutment in	d. DTRS		Ti-6AI-4V	1		TTA	PCC
DTRS-SRA	Direct Transfer Retaining Screw			Ti-6AI-4V	1			
IA-SRA	Tapered Abutment Replica			Ti-6AI-4V	1			- YE
PCC	Plastic Castable Coping incl. screw RS-PCC			POM	1		- 19	
RS-PCC	Replacement Retaining Screw for PCC			Ti-6AI-4V	1		- till) -	1
RS-PCC-Lab	Replacement Retaining Screw - Lab Use - Blue			Ti-6AI-4V	1		DTC-SRA	IA-SRA
CH=CuffHeight								





TRI+ CAD CAM - Products STL data records





TRI+ CAD CAM - Brochure 3shape



Anmerkung

TRI+ stellt die Schnittstelle zwischen dem TRI[®] Dental Implant System und dem 3Shape CADCAM System dar. Die folgenden Anweisungen sind nur für Anwender bestimmt, welche mit dem 3Shape CADCAM-System vertraut sind.

Anwendungsbereich

- CAD Abutments
- Zementierte TRI[®] Implantat-Kronen und Brücken
- Verschraubte TRI[®] Stegkonstruktionen und Brücken



TRI+ CAD CAM - Brochure

dental wings



Note

TRI+ represents the interface between the TRI dental implant system and the Dental Wings digital solutions. The following instructions are intended only for users who are familiar with the Dental Wings solutions.

Indications

CADCAM

- CAD abutments
- · Cement retained TRI implant crowns and bridges
- · Screw retained TRI implant bars and bridges

Guided Surgery (coDiagnostiX)

- 3D implant planning
- · Guided pilot drilling without depth stop
- · Guided pilot drilling with depth stop



TRI+ CAD CAM - Brochure

exocad



Note

TRI+ represents the interface between the TRI dental implant system and the exocad CADCAM system. The following instructions are intended only for users who are familiar with the exocad system.

Indications

CADCAM

- · CAD abutments
- · Cement retained TRI implant crowns and bridges
- · Screw retained TRI implant bars and bridges

TRI+ CEREC



The CEREC system from Sirona is a self-contained system.

It contains:

- planning software
- Scanbody
- titanium base
- block of material zyrcon
- block of material ceramic
- milling machine

It contains no open interface for planning software from other vendors, so there is not compatibility with them.

Sirona does not deposit STL files of other providers in their database because of their own scanbodies & titanium bonding bases.





TRI+ CEREC

- Sirona offers its own CEREC titanium bonding bases compatible with the implants of the leading manufacturers, including Straumann Tissue Level 4.8mm platform & Zimmer Dental Tapered Screw-Vent 3.5 mm platform.
- With this platforms xthe TRI-Octa & TRI-Vent implants are compatible. A CEREC customer can supply those implants with the CEREC titanium bonding base for Straumenn & Zimmer implants.



Implantatsysteme		Sirona Komponente ScanP	ost		Sirona Komponente TiBar	e		
Hersteller	Implantatlinie	ScanPost*	REF.	Anzahl in Stück	TiBase**	REF.	Anzahl in Stück	Anschluss- größe
Astra Tech	OsseoSpeed= 3,5 S / 4,0 S	ScanPostAT 0S 3.5/4.0 L	64 31 055		TiBase AT 0S 3.5/4.0 L	62 82 532		L
	OsseoSpeed= 4,5 / 5,0	ScanPost AT OS 4.5/5.0 L	64 31 063		TiBase AT 0S 4, 5/ 5, 0 L	62 82 540		L
Biomet 3i	Certain® 3,4	Scan Post B C 3.4 S	64 31 212		TiBase BC 3.4 S	63 08 048		s
	Certain® 4,1	ScanPost B C 4.1 L	64 31 220		TiBase BC 4.1 L	63 08 097		L
	Certain# 5,0	ScanPost B C 5.0 L	64 31 239		TiBase BC 5.0 L	63 09 121		L
Biomet 3i	Ex. Hex* 3,4	ScanPost B 0 3.4 L	64 31 089		TiBase B 0 3.4 L	62 82 557		L
	Ex. Hex* 4,1	ScanPost B 0 4.1 L	64 31 105		TiBase B 0 4.1 L	62 82 565		L
	Ex. Hex# 5,0	Scan Post B O 5.0 L	64 31 113		TiBase B 0 5.0 L	62 82 573		L
Dentsply Implants	Frialit*/ Xive* 3,4	Scan Post FX 3.4 S	64 30 891		TiBase FX 3.4 S	62 82 433		S
(Friadent)	Frialit*/ Xive* 3,8	Scan Post FX 3.8 S	64 30 909		TiBase FX 3.8 S	62 82 441		s
	Frialit*/ Xive* 4,5	Scan Post FX 4.5 L	64 30 917		TiBase FX 4.5 L	62 82 458		L
	Frialit*/ Xive* 5,5	Scan Post FX 5.5 L	64 30 925		TiBase FX 5.5 L	62 82 466		L
Nobel Biocare	Nobel Active® NP 3,5	Scan Post NBA 4.5 L	64 31 279		TiBase NB A 4.5 L	63 08 188		L
	Nobel Active* RP 4,3 / 5,0	Scan Post NBA 5.0 L	64 31 287		TiBase NB A 5.0 L	63 08 253		L
Nobel Biocare	Brånemark* NP 3,3	Scan Post NB B 3,4 L	64 31 006		TiBase NB B 3.4 L	62 82 516		L
	Brånemark® RP 3,75 / 4,0	Scan Post NB B 4.1 L	64 31 022		TiBase NB B 4.1 L	62 82 524		L
Nobel Biocare	Replace* NP 3,5	Scan Post NB RS 3.5 L	64 30 933		TiBase NB RS 3.5 L	62 82 474		L
	Replace* RP 4, 3	ScanPost NB RS 4.3 L	64 30 941		TiBase NB RS 4.3 L	62 82 482		L
	Replace* WP 5,0	Scan Post NB RS 5.0 L	64 30 958		TiBase NB RS 5.0 L	62 82 490		L
	Replace* 6,0	Scan Post NB RS 6.0 L	64 30 982		TiBase NB RS 6.0 L	62 82 508		L
Straumann	Bone Level® 3,3	Scan Post S BL 3.3 L	64 31 246		TiBase S BL 3.3 L	63 08 154		L
	Bone Level® 4,1 / 4,8	Scan Post S BL 4.1 L	64 31 253		TiBase S BL 4.1 L	63 08 337		L
Straumann	SynOcta® NN 3,5	ScanPost SS0 3.5 L	64 31 162		TiBase SSO 3.5 L	62 84 231		L
	SynOcta* RN 4,8	ScanPost SS0 4.8 L	64 31 170		TiBase SSO 4.8 L	62 84 249		L
	SynOcta®WN 6,5	ScanPost SSD 6.5 L	64 31 196		TiBase SSO 6.5 L	62 84 256		L
Zimmer /TRI	Tapered Screw-Vent® 3,5	ScanPost Z TSV 3.5 L	64 31 139		TiBase Z TSV 3.5 L	62 82 581		L
	Tapered Screw-Vent® 4,5	ScanPost Z TSV 4.5 L	64 31 147		TiBase Z TSV 4.5 L	62 82 599		L
	Tapered Screw-Vent* 5,7	ScanPost Z TSV 5.7 L	64 31 154		TiBase Z TSV 5.7 L	62 82 607		L

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www.tri-implants.com

TRI-Narrow Implant