

Straumann® Pro Arch
Basic Information



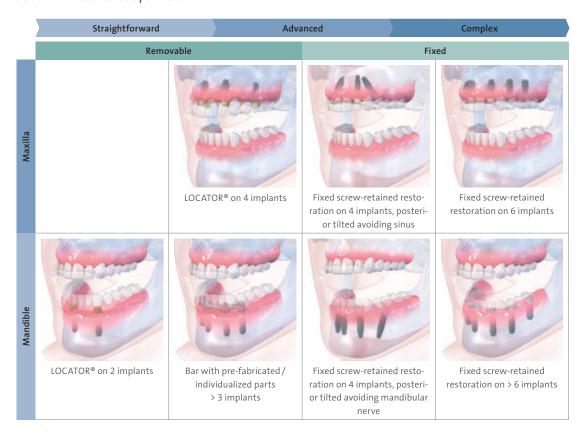
# Contents

Straumann® edentulous treatment portfolio.	2
More prosthetic options for esthetic	
and efficient restorations.	4
More than a fixed rehabilitation.	
A smart solution with reduced complexity.	6
Clinical case	18
Product overview	22
Appendix A: Straumann® Pro Arch Guide	26
Appendix B: Straumann® Bone Level Bone Profiler	27
Appendix C: Quick Guide for Holding Key for Straumann®	
Screw-retained Abutments	32

# Straumann® edentulous treatment portfolio.

Providing fixed restorations for edentulous patients is a complex procedure, and you need to consider several clinical and individual aspects. Within the existing Straumann product portfolio, you can now choose from several prosthetic treatment options to help edentulous patients<sup>1,2</sup>:

#### Straumann edentulous portfolio





When treating edentulous cases, removable options represent a more straightforward approach, whereas a fixed option with four or more implants (straight or tilted) represents a more advanced approach.

Depending on what your patient expects, a straightforward restoration might not be a viable option. Regardless of any possibly difficult anatomical situation, most patients look for functional esthetics with a high comfort. As a dental professional you are now challenged to provide an immediate fixed solution that meets all these criteria.

To address the requirements and expectations of patients seeking fast, convenient and reliable solutions for a full dental replacement, Dr. Paulo Malo from MALO CLINIC® developed a special treatment concept in the early 1990's called the MALO CLINIC® Protocol. The protocol offers immediate restorations for edentulous patients despite limited bone availability. Since then the protocol has become a popular procedure in a large number of clinics worldwide and has influenced further developments in shortening time to teeth. Straumann now offers a new generation of surgical and prosthetic components to provide full-arch fixed restorations on either straight or tilted implants with the additional advantages of its SLActive® surface and Roxolid® material technologies.

# More prosthetic options for esthetic and efficient restorations.

The Straumann® Bone Level Tapered Implant provides an optimized choice for implant treatment. It provides a unique combination of mechanics and biology for ease of use and enhanced primary stability. The unique Roxolid® material has been specifically designed for dental implantology and delivers outstanding mechanical results. Combined with the SLActive® surface, Straumann delivers an excellent implant system with outstanding osseointegration and healing properties.

The Straumann prosthetic portfolio provides a high level of flexibility to choose the best solution for the patient:

- with its sleek design the Straumann® Screw-retained Abutment portfolio allows overcoming implant angulations
- the improved CARES® offering for final restorations provides a wide range of designs and materials



#### Straumann® Screw-retained Abutment

- Same connector design for all diameters allows for a streamlined portfolio of tertiary components
- Abutment angulations of 17° and 30°
- Different gingiva heights of 1mm, 2.5 mm, 4 mm and 5.5 mm
- Simplified handling with CrossFit® connection



### Straumann® CARES® Screw-retained Bars and Bridges

- Custom-milled frameworks for final restoration
- Multiple bar and bridge designs available
- Bars and bridges for abutment level or implant level
- **NEW:** also available in 3M<sup>™</sup> Espe<sup>™</sup> Lava<sup>™</sup> Plus zirconia material



### Straumann® Bone Level Tapered Implant



Roxolid® – Reducing invasiveness with smaller implants

- More treatment options with smaller implants
- Preserves bone and reduces invasive grafting procedures<sup>4,5</sup>
- Increased patient acceptance with less invasive procedures<sup>30</sup>



# SLActive® – Designed to maximize your treatment success and predictability

- Higher treatment predictability in challenging protocols<sup>4–10</sup>
- Broadens treatment potentials for all your patients<sup>11–18</sup>
- Safer and faster treatment in 3-4 weeks for all indications<sup>19-28</sup>

# Apically tapered – Excellent primary stability even in compromised bone situations

- Full-depth thread to apex for early engagement
- Self-cutting in underprepared sites
- Protecting anatomical structure with round tip

# More than a fixed rehabilitation. A smart solution with reduced complexity.

Straumann® Pro Arch for fixed edentulous restorations combines several treatment steps which reduce complexity without compromising the outcome. From planning and implant placement to the final restoration, the entire treatment is seamless and less demanding for the patient.



### Implant planning

- 2D conventional implant and prosthetic planning based on (CB)
   CT scanning or x-rays
- 3D digital implant planning with coDiagnostiX® software for predictable results and treatment efficiency
- New coDiagnostiX® feature "synergy" allows improved communication between all stakeholders prior to surgery

2

## Surgical procedure

- Well-documented Straumann® Bone Level Implants with tapered design for improved primary stability
- Unique Roxolid® material with excellent mechanical properties<sup>29,30</sup>
- Outstanding SLActive® surface designed to deliver increased predictability even in challenging protocols³-10
- Straumann<sup>®</sup> Pro Arch Guide to support placement of tilted implants
- Internal CrossFit® connection

3

#### Prosthetic treatment

- Abutments with a low-profile design, additional abutment angulations and universal abutment connector
- Abutment portfolio allows immediate temporization to deliver teeth within a short period of time
- High-end final restorations with the option for custom-milled bar designs provided either by Straumann or Createch

#### Planning phase

For optimal and long-lasting results, a prosthetic-driven planning phase is essential, and it should be executed in collaboration with all partners involved. During the planning phase the following aspects need to be considered:

- Clarify patient's expectations
- Analyze patient's oral hygiene compliance
- Patient anamnesis (bone density, bone volume, sufficient lip support)
- Decide on final prosthetic restoration (fixed / removable)
- Decide on surgical procedure and implant placement based on bone volume (number of implants, implant angulation if necessary)
- Consider long-term post-operative care and maintenance

Proper diagnosis and treatment planning, including the consideration of your patient's chief complaints as well as an evidence-based implant / prosthetic design will result in a successful treatment. These factors can significantly improve the patient's quality of life<sup>31</sup>.

Planning and implant preparation for multi-unit and single-unit restorations can either be done via conventional methods or with the help of digital planning softwares (e. g. coDiagnostiX®). In this treatment guide, the focus will be on the conventional procedure with an open-flap approach.

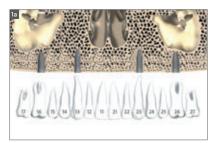
For additional information on Straumann® Guided Surgery, please consult the manual *Basic Information on Straumann® Guided Surgery*, 152.753.

For additional information on Dental Wings coDiagnostiX®, please contact your local Dental Wings distributor.

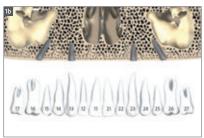
## Surgical procedure

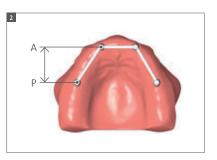
### Surgical preparation and general considerations

Based on the treatment decision and the desired final restoration, define the following:



- Position and orientation of the implant based on bone volume (based on Dr. Paulo Malo, MALO CLINIC®):
  - full bone volume up to molars: straight implant placement (1a)
  - bone volume sufficient in anterior region up to premolars: tilted implant placement in the posterior region (1b)





- 2. Implant position considering Anterior-Posterior (AP)-spread for biomechanical stability
- 3. Implant angulation (max. angulation): 30° (= higher A/P spread for higher stability)
- 4. Impression-taking: based on the level where the restoration is planned to be:
  - a. for a restoration based on abutment level, choose an abutment-level impression, also recommended when implants are tilted
    - for a restoration on implant level, choose an implant-level impression
  - b. for a final restoration using Straumann® CARES®, use an abutment-level impression to ensure optimal results
- 5. Together with the dental lab, produce an individual acrylic guide to verify implant axis, abutment/coping position and screw channels throughout the overall procedure.

# Surgical procedure (flap procedure), abutment placement and immediate temporization

Make sure the surgical and prosthetic planning are both completed and critical anatomical sites are not harmed (maxilla: sinus/mandible: mandible nerve). In some cases, the individual patient situation may require tilting of the implant. Posterior-tilted implants provide additional distal support for the prosthesis<sup>32</sup>.

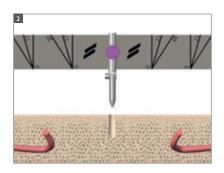
#### Prerequisites:

- Remaining dentition removed
- Flap opened and ready for implant placement
- Acrylic guide prepared by dental lab



#### Intraoral verification:

1. To ensure a proper implant position, it is recommended to use the Straumann® Pro Arch Guide.

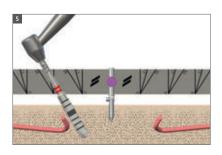


- 2. To prepare the placement of the Pro Arch Guide, do the necessary midline osteotomy by using the Ø 2.2 mm Pilot Drill for drilling down to 10 mm.
- 3. Place the Pro Arch Guide in the midline osteotomythe marks on the Pro Arch Guide help aligning the axis of the implant.



4. Bend the Straumann® Pro Arch Guide to adapt to the dental arch and use it as an orientation when you align the abutments/the Occlusal Screw channel. Ideally, the Occusal Screw channel is oriented more to the lingual/palatinal side in order to avoid the screw channel coming out buccally.

**Note:** To adjust the metal plate use the Hexagonal Screwdriver (046.421).

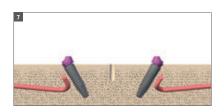


#### Implant site preparation:

5. Drill to appropriate depth and check correct angulation using the marks on the Straumann® Pro Arch Guide.

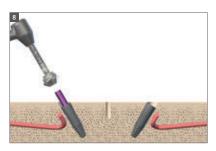


6. Place the appropriate implant following the surgical protocol<sup>24</sup>.



7. If needed, use Straumann® Plan Abutments intraorally to determine the final Straumann® Screw-retained Abutment's angulation and gingiva height (GH).

Note: Plan Abutments are only available in GH 2.5 mm.



8. Use the Straumann® Bone Level Bone Profiler to prepare the bone coronally to the implant shoulder in cases where the bone interferes with the abutment's emergence profile. For more details see *Appendix B: Straumann® Bone Level Bone Profiler*.



- 9. Position the final abutments with a torque of 35 Ncm. The Transfer and Alignment Pin is delivered pre-assembled with the angled abutment and simplifies abutment placement in the posterior region. Furthermore, the Transfer and Alignment Pin indicates orientation of the occlusal screw channel.
- 10. For anterior implant placement repeat steps 4 to 7.

  Note: For torqueing the abutment correctly despite low primary stability, refer to the Quick Guide Holding Key for Straumann® Screw-retained Abutments on page 32.





11. Place the titanium copings on top of the abutments and verify orientation and position with the help of the acrylic guide. Use the acrylic guide throughout the procedure to verify implant position and orientation.

**Note:** In order to find the correct abutment version (A or B), check the height markings on the Loxim™ Transfer Piece.

- If the height markings are oriented buccally use A-type abutments.
- If the height markings are not oriented buccally use B-type abutments.

#### Important information

Straumann® Screw-retained Abutments, straight NC GH 1.0 mm ( $\varnothing$  3.5 mm and  $\varnothing$  4.6 mm), are indicated for single-crown restorations of central and lateral incisors and for multi-unit restorations of incisors to pre-molars:

		Single-unit restoration	Multi-unit restorations (incisors to premolar region)	Multi-unit restorations (molar region)
NC Ø 3.5 mm	GH 1mm	Only central / lateral incisors	Yes	No
straight abutments	GH 2.5/4 mm	Yes	Yes	No
NC Ø 4.6 mm	GH 1mm	Yes	Yes	No
straight abutments	GH 2.5/4 mm	Yes	Yes	No
NC Ø 4.6 mm angled a	NC Ø 4.6 mm angled abutments		Yes	No
RC Ø 4.6 mm straight abutments		No limitation		
RC Ø 4.6 mm angled abutments		No limitation		

**Note:** For additional information on the surgical procedure, please consult the *Basic information on the surgical procedure for the Straumann® Bone Level Tapered Implant*, 490.038.

In case no immediate temporization is desired, place Protective Caps for Straumann® Screw-retained Abutments directly onto the abutments and hand-tighten them.

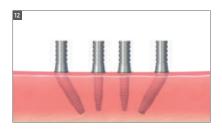
Do not keep the Protective Caps in the patient's mouth for more than 30 days. Prepare sufficient space in the patient's temporary fixed bridge until the final prosthesis is placed.

### Prosthetic treatment

#### Immediate temporization with the help of the dental lab

#### Prerequisites:

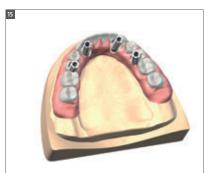
- Acrylic guide based on patient situation prepared by the dental lab
- Temporary restoration prepared by dental lab
- Abutments placed and tightened with 35 Ncm



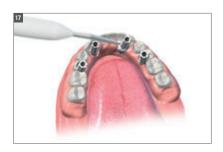
- 12. Place non-engaging Titanium Copings on the anterior and posterior abutments.
- 13. Ensure correct position of the Titanium Copings on the abutments. Avoid any gaps between the Titanium Coping and the abutment.



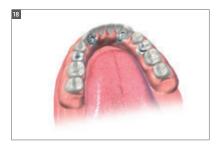
14. Use the acrylic guide to check the alignment and position of the Titanium Copings. Once the position is ensured make sure the occlusal set up fits with the prepared prosthesis. Use impression material to fix the Titanium Copings to the acrylic guide.



- 15. Use the acrylic guide to transfer the clinical situation to the dental lab.
- 16. The dental lab adapts the temporary restoration based on all information provided. Make sure to prepare sufficient space in the temporary restoration to fit in the Titanium Copings.



17. Intraorally, fix the Titanium Copings with the existing reworked prosthesis using resin material.

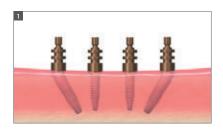


- 18. Finalize and polish the temporary restoration in the dental lab.
- 19. Place the temporary restoration in the patient's mouth and tighten the Occlusal Screws to 15 Ncm using the SCS Screwdriver along with the Ratchet and the Torque Control Device.

### Impression taking on abutment level for final restoration

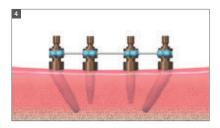
#### Prerequisites:

- Implants, abutments and Protective Cap placed
- Implant site healed
- Temporary prosthesis is removed

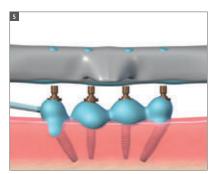


#### Open-tray impression

- 1. Place the Impression Post accurately into the abutment and hand-tighten the Guide Screw.
  - **Note:** For multi-unit restorations use the impression components with non-engaging features. For single-unit restorations use the impression components with the engaging features.
- 2. Ensure correct positioning of the Impression Posts to ensure proper fit of the restoration.
- 3. Make perforations in the custom-made impression tray (light-cured resin) according to the individual situation so that the Positioning Screw of the Impression Post sticks out visibly.



4. Splint the Impression Posts using a small wire or resin material.



- 5. Take the impression using a standard elastomeric impression material (e.g. polyvinyl siloxane or polyether rubber). Uncover the screws before the material is set.
- 6. Once the material is set, loosen the Guide Screws and remove the tray.
- 7. For easy abutment identification, include the impression components when you send the dental impression to your dental lab partner.
- 8. In the dental lab, reposition and fix the Analog in the impression using the Guide Screw.
- 9. Fabricate the master cast. A gingival mask should always be used to ensure that the emergence profile is optimally contoured.



#### Option for closed-tray impression:

Place the Impression Posts onto the Screw-retained Abutments, ensure correct positioning with the retentive features and click the Positioning Caps onto the Impression Posts allowing a vestibular orientation. After taking the impression, forward all impression components to the dental lab for processing. In the dental lab, screw the Impression Posts onto the corresponding analogs and click back into the Positioning Caps.

**Note:** All Impression Posts are intended for single use only to ensure optimal fit and precise impression taking for each patient. Hydrocolloid is not suitable for this application due to its low tensile strength.

#### Final fixed bridge including digital impression-taking and custom-milled bars

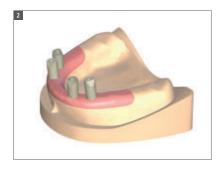
#### Prerequisites:

- Implants placed and completely osseointegrated
- Abutments placed
- Provisional fixed bridge available
- For digital procedure: digital impression taken from the dental model with the help of Straumann® CARES® Mono Scanbodies for Screw-retained Abutments, and imported into Straumann® CARES® Visual



**Digital impression on a dental model with scanbodies**If you decide to work with a custom-milled CARES® framework, please proceed as follows:

1. Fabricate a master cast based on a dental impression.



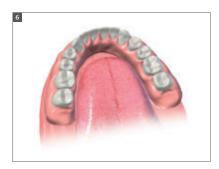
2. Place CARES® Mono Scanbodies for Screw-retained Abutments onto the abutments on the dental model.



3. Scan the dental situation with the help of the Straumann® CARES® Scanner.



- 4. Design the framework in Straumann® CARES® Visual.
- 5. Produce the final restoration based on the custom-milled framework.



6. In the dental office, place the final restoration into the patient's mouth.

In CARES® Visual software the following framework designs for fixed screw-retained restorations are currently available:

	Tissue Level	Bone Level	Screw-retained Abutment-level		
Bridge	✓	✓	✓		
Bar Design	✓	✓	✓		
CARES® Basic Fixed Bar	✓	✓	✓		
CARES® Advanced Fixed Bar	✓	✓	✓		
Material	Titanium grade 4, coron®, zirconia				







CARES® Basic Fixed Bar



CARES® Advanced Fixed Bar



Zirconia bar

For additional information on Straumann® CARES® products and services, please consult the following brochures:

- Straumann® CARES® Prosthetics, 490.020
- Straumann® CARES® Visual 10.0 Software Manual (www.straumann-cares-digital-solutions.com/manual)

**Note:** Straumann® CARES® may not be available in your country.

### Straumann® CARES® Scan & Shape option

In case you do not have access to a scanner and software you have the option to use our CARES® Scan & Shape service\*:



7. Fabricate a master cast based on a dental impression.



- 8. Send the impression and order sheet to your local CARES® Scan & Shape supplier and follow their instructions.
- 9. Produce the final restoration based on the custom-milled framework.
- 10. In the dental office, place the final restoration into the patient's mouth.

For more detailed information please refer to your local subsidiary.

#### Care and maintenance

For long-term success and proper fit of the fixed bridge, thorough patient instruction, and periodic check-ups (at least once a year) are recommended.

Careful maintenance of the fixed restoration provided, it is not necessary to exchange the Occlusal Screws at each check-up visit.

#### During these visits, you should carefully examine the:

- Condition of peri-implant tissues with regard to diseases<sup>31</sup>:
  - Plaque and calculus, bleeding, recession, bone loss, radiographs
- Superstructure:
  - Occlusal fit and articulation, proper fit of the fixed bridge, wear of occlusal surface, retention, attachment loosening, abutment status
- Function of the prosthesis.

For proper care at home, instruct the patient to clean the space between gingiva and fixed bridges, especially around the implants on a regular basis. Dental floss, bushy dental floss or interdental brushes are recommended.

## Clinical case

# The team approach in a complete mouth hybrid reconstruction using the indirect method for provisionalization

### Case presented by Dr. Robert Levine and Dr. Harry Randel, Philadelphia, USA

A 65-year old non-smoking female presented to the office to solve her failing dentition. Her chief complaint was to improve her esthetics and comfort with a desire for a permanent and quick solution to replace her failing dentition. She also desired a reduction of her maxillary anterior gummy smile in the final prosthesis.



Initial situation



Supraeruption of her maxillary and mandibular anterior teeth



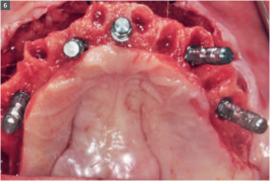
Obtain a CBCT of both arches to evaluate bone quality, bone quantity, and anatomical limitations



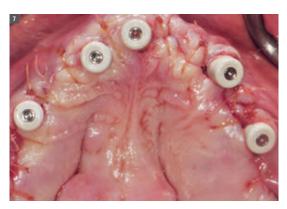
Planning of the implant position based on CBCT scan  $\,$ 



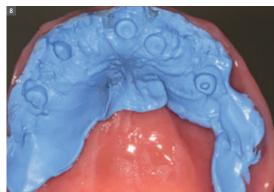
Create the prosthetic room necessary for a hybrid restoration



The implant sites were prepared per the manufacturer's protocol (except for bone tapping) for the Straumann® BLT Implant



Screw-retained Abutments were placed directly onto the Straumann® BLT Implants, followed by placement of corresponding Protective Caps



Check to evaluate that there was adequate space for the pink acrylic to allow for bite registration material thickness



Delivery of metal-reinforced, screw-retained provisionals, within 24 hours and insertion to the patient's mouth the next afternoon



Panoramic radiographic confirmation of proper seating



After 4.5 months, passivity fit was confirmed with the help of verification jig  $\,$ 



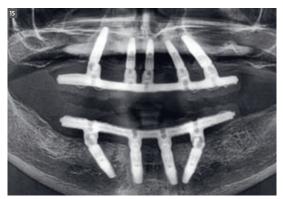
Custom trays were used to transfer the relationships to the dental lab



Framework was designed within the parameters of the acrylic/tooth borders



Excellent healing of the soft tissue prior to insertion of the prosthesis



CBCT scan of final situation



Final restoration in place

# Product overview

	Pictures Art. No. Product description		Plan components			
		022.27455	NC Screw-retained Abutment, TAN, straight 0°, D 3.5 mm, GH 1 mm, sterile			NC Plan Screw-retained Abut- ment, POM, straight 0°, D 3.5 mm, GH 2.5 mm
Ø 3.5mm		022.27465	NC Screw-retained Abutment, TAN, straight 0°, D 3.5 mm, GH 2.5 mm, sterile		025.2648-04	
	0°	022.27535	NC Screw-retained Abutment, TAN, straight 0°, D 3.5 mm, GH 4 mm, sterile			
		022.27475	NC Screw-retained Abutment, TAN, straight 0°, D 4.6 mm, GH 1 mm, sterile			
	40	022.27485	NC Screw-retained Abutment, TAN, straight 0°, D 4.6 mm, GH 2.5 mm, sterile		025.2650-04	NC Plan Screw-retained Abut- ment, POM, straight 0°, D 4.6 mm, GH 2.5 mm
	0°	022.27545	NC Screw-retained Abutment, TAN, straight 0°, D 4.6 mm, GH 4 mm, sterile			
		022.27495	NC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 2.5 mm, Type A, sterile		025.2655-04	NC Plan Screw-retained Abut- ment, POM, angled 17°, D 4.6 mm, GH 2.5 mm, Type A
	17°	022.2750S	NC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 2.5 mm, Type B, sterile			
		022.2755S	NC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 4 mm, Type A, sterile		025.2658-04	NC Plan Screw-retained Abut- ment, POM, angled 17°, D 4.6 mm, GH 2.5 mm, Type B
		022.27565	NC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 4 mm, Type B, sterile	7		
Ø 4.6 mm		022.00105	NC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 5.5 mm, Type A, sterile			
		022.00115	NC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 5.5 mm, Type B, sterile			
		022.27515	NC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 2.5 mm, Type A, sterile		025.2653-04	NC Plan Screw-retained Abut- ment, POM, angled 30°, D 4.6 mm, GH 2.5 mm, Type A
	30°	022.27525	NC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 2.5 mm, Type B, sterile			
		022.27575	NC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 4 mm, Type A, sterile		025.2660-04	
		022.27585	NC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 4 mm, Type B, sterile	7		NC Plan Screw-retained Abut-
		022.00125	NC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 5.5 mm, Type A, sterile			ment, POM, angled 30°, D 4.6 mm, GH 2.5 mm, Type B
		022.00135	NC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 5.5 mm, Type B, sterile			

	Pictures	Pictures Art. No. Product description			Plan components		
	1	022.4745S	RC Screw-retained Abutment, TAN, straight 0°, D 4.6 mm, GH 1 mm, sterile				
	4	022.47465	RC Screw-retained Abutment, TAN, straight 0°, D 4.6 mm, GH 2.5 mm, sterile	•	025.4648-04	RC Plan Screw-retained Abut- ment, POM, straight 0°, D 4.6 mm, GH 2.5 mm	
	0.	022.47515	RC Screw-retained Abutment, TAN, straight 0°, D 4.6 mm, GH 4 mm, sterile				
		022.47475	RC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 2.5 mm, Type A, sterile		025.4649-04	RC Plan Screw-retained Abut-	
		022.47485	RC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 2.5 mm, Type B, sterile			ment, POM, angled 17°, D 4.6 mm, GH 2.5 mm, Type A	
	V	022.47525	RC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 4 mm, Type A, sterile			RC Plan Screw-retained Abut- ment, POM, angled 17°, D 4.6 mm, GH 2.5 mm, Type B	
	9	022.47535	RC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 4 mm, Type B, sterile	T)	025.4650-04		
Ø 4.6 mm	17°	022.00145	RC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 5.5 mm, Type A, sterile				
		022.00155	RC Screw-retained Abutment, TAN, angled 17°, D 4.6 mm, GH 5.5 mm, Type B, sterile				
		022.47495	RC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 2.5 mm, Type A, sterile		025.4653-04	RC Plan Screw-retained Abut- ment, POM, angled 30°, D 4.6 mm, GH 2.5 mm, Type A	
		022.47505	RC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 2.5 mm, Type B, sterile				
	W	022.4754S	RC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 4 mm, Type A, sterile			RC Plan Screw-retained Abut- ment, POM, angled 30°, D 4.6 mm, GH 2.5 mm, Type B	
	P	022.47555	RC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 4 mm, Type B, sterile	T	025 4660 04		
	30°	022.00165	RC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 5.5 mm, Type A, sterile		025.4660-04		
		022.00175	RC Screw-retained Abutment, TAN, angled 30°, D 4.6 mm, GH 5.5 mm, Type B, sterile				

**Note:** The Transfer and Alignment Pin is also available as a single product: 025.0009.

	Impr	ession / transfe	r / lab components
	1	025.2243	Impression Post for open tray for crown, TAN, for Screw-retained Abutment, abut. level, D 3.5 mm
8	025.0011	Impression Post open tray for bridge, TAN, for Screw-re- tained Abutment, abut. level, D 3.5 mm	
		025.2245	Impression Post for closed tray for crown, TAN/ POM, for Screw-retained Abutment, abut. level, D 3.5 mm
Ø3.5mm	025.0013	Impression Post closed tray for bridge, TAN, for Screw-re- tained Abutment, abut. level, D 3.5 mm	
Ø		025.0000	CARES® Scanbody for Screw-retained Abutment, D 3.5 mm (NC)
		023.2754	NC Analog for Screw-retained Abutment, TAN, straight 0°, D 3.5 mm
		025.0049	NC Analog for Screw-retained Abutment, edentulous, TAN, straight 0°, D 3.5 mm
		025.0004V4	Polishing Aid for Screw-re- tained Abutment

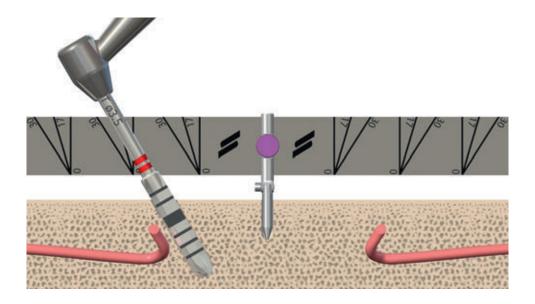
Temporary restorations / Copings / Screws						
	024.2323-04	NC Protective Cap for Screw-retained Abutment, D 3.5 mm, H 5 mm, PEEK/TAN				
9	024.2324-04	NC Protective Cap for Screw-retained Abutment, D 3.5 mm, H 6.5 mm, PEEK/TAN				
	024.2325-04	NC Protective Cap for Screw-retained Abutment, D 3.5 mm, H 8 mm, PEEK/TAN				
m	023.2747	NC Coping for Screw-retained Abutment, Ti, Crown, D 3.5 mm				
	023.2749	NC Coping for Screw-retained Abutment, Ti, Bridge, D 3.5 mm				
	023.2750	NC Coping for Screw-retained Abutment, Ti, Bar, D 3.5 mm				
9	023.2755	NC Burn-out Coping for Screw-retained Abut- ment, POM, Bridge/Bar, D 3.5 mm				
	023.2748	NC Burn-out Coping for Screw-retained Abut- ment, POM, Crown, D 3.5 mm				
0	023.2751	NC Gold Coping for Screw-retained Abutment, Crown, D 3.5 mm, Ceramicor®/POM				
6	023.2752	NC Gold Coping for Screw-retained Abutment, Bridge, D 3.5 mm, Ceramicor®/POM				
	023.2753	NC Gold Coping for Screw-retained Abutment, Bar, D 3.5 mm, Ceramicor®/POM				

VVV===VVV	026.0016	Straumann® Pro Arch Guide for Screw-retained Abutment
EEEEEEE	026.0902	CrossFit® Plan Set
	026.0000	CrossFit® Plan Set, empty
(# 83.5 ohen / top / haut e4.6	025.0019	Straumann® Holding Key

		Impression / t	transfer compo	nents / lab components
			023.4756	NC/RC Analog for Screw-retained Abut- ment, TAN, straight 0°, D 4.6 mm
		-	023.4757	NC/RC Analog for Screw-retained Abut- ment, TAN, angled 17°/30°, D 4.6 mm
			025.0050	NC/RC Analog for Screw-retained Abut- ment, edentulous, TAN, straight 0°, D 4.6 mm
			025.2244	Impression Post for open tray for crown, TAN, for Screw-retained Abut- ment, abut. level, D 4.6 mm
Ø 4.6 mm	Ø 4.6mm		Ø 4.6 mm	025.0012
		3	025.2246	Impression Post for closed tray for crown, TAN/POM, for Screw- retained Abutment, abut. level, D 4.6 mm
			025.0014	Impression Post closed tray for bridge, TAN, for Screw-retained Abutment, abut. level, D 4.6 mm
			025.0001	CARES® Scanbody for Screw-retained Abut- ment, D 4.6 mm (NC/RC)
		•	025.0005V4	Polishing Aid forScrew- retained Abutment

Temporary restorations / Copings / Screws					
	024.4323-04	NC/RC Protective Cap for Screw-retained Abutment, D 4.6 mm, H 5.1 mm, PEEK/TAN			
	024.4324-04	NC/RC Protective Cap for Screw-retained Abutment, D 4.6 mm, H 6.6 mm, PEEK/TAN			
	024.4325-04	NC/RC Protective Cap for Screw-retained Abutment, D 4.6 mm, H 8.1 mm, PEEK/TAN			
	023.4747	NC/RC Coping for Screw-retained Abutment, Ti, Crown, D 4.6 mm			
11	023.4751	NC/RC Coping for Screw-retained Abutment, Ti, Bridge, D 4.6 mm			
	023.4752	NC/RC Coping for Screw-retained Abutment, Ti, Bar, D 4.6 mm			
9	023.4758	NC/RC Burn-out Coping for Screw-retained Abutment, POM, Bridge/Bar, D 4.6 mm			
8	023.4748	NC/RC Burn-out Coping for Screw-retained Abutment, POM, Crown, D 4.6 mm			
0	023.4753	NC/RC Gold Coping for Screw-retained Abut- ment, Crown, D 4.6 mm, Ceramicor®/POM			
8	023.4754	NC/RC Gold Coping for Screw-retained Abut- ment, Bridge, D 4.6 mm, Ceramicor®/POM			
	023.4755	NC/RC Gold Coping for Screw-retained Abut- ment, Bar, D 4.6 mm, Ceramicor®/POM			
m	023.4749	NC/RC Screw for Screw-retained Abutment, TAN, straight 0°, GH 1 mm			
	023.4750	NC/RC Screw for Screw-retained Abutment, TAN, straight 0°, GH 2.5 mm			
0	023.4760	NC/RC Screw for Screw-retained Abutment, TAN, straight 0°, GH 4 mm			
8	023.4763	NC/RC Occlusal Screw, TAN, for Coping, Screw-retained Abutment			
1	025.0002	NC/RC Screw for Screw-retained Abutment, TAN, 17°/30°			
	025.0006	Straumann® Lab Processing Screw 20 mm			
	025.0052	Straumann® Lab Processing Screw 10 mm			

# Appendix A: Straumann® Pro Arch Guide



**Intended use:** The Straumann® Pro Arch Guide is used for visual and three-dimensional orientation of the implant angulation (mesial/distal) and oral parallelization.

**Indication:** The surgical and prosthetic procedure is the placement of multiple implants in combination with Screw-retained Straight or Angled Abutments.

**Product description:** The Straumann® Pro Arch Guide is used in edentulous jaws for surgical implant placement. The template of the Pro Arch Guide can be easily bent to adapt to the dental arch. It is secured by drilling into the symphysis with a Ø 2.2 mm Pilot Drill and a pin in the jaw. The drilling depth for the bone cavity of the pin is 10 mm. The drilling depth can be checked optically using the depth markings on the drills or using the optional depth stop system. The slider is used to position the template for drilling. Drill the implant sites according to the surgical protocol. Each drill is aligned parallel to the template surface and at the implantation angle. Make sure the Pro Arch Guide is properly assembled, clean and sterile. Never use potentially contaminated components.

Warnings and precautions: Take the following precautions prior to or during treatment:

- Position the patient in such a way that the danger of aspiration of components is minimized. All components that are used intraorally must be secured to prevent aspiration or swallowing.
- Do not use damaged or blunt instruments. Always inspect the instruments before use.
- If the laser markings are illegible, the device must be replaced.
- Do not use more than 20 times.

**Sterilization:** Autoclave, fractionated vacuum method or gravitation method: at least 18 min (for prion inactivation) at 134 °C (273 °F).

# Appendix B: Straumann® Bone Level Bone Profiler

The Bone Level Bone Profiler is used to remove bone coronally to the implant shoulder in the following situations:

- deeply placed implants
- angulated/tilted implants
- scalloped or sloped alveolar ridge

**Important:** Use the Bone Level Bone Profilers only if the bone walls interfere with the abutment's emergence profile.

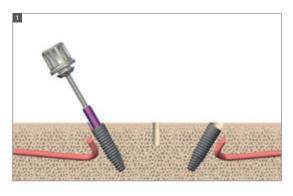
The Straumann® Bone Level Bone Profiler system consists of the following components:



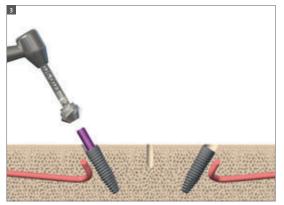
Instrument	Article number
Guiding Cylinder NC for Bone Level Bone Profiler	026.0025S
Guiding Cylinder RC for BL Bone Profiler	026.00265
Bone Level Bone Profiler 1	026.0022
Bone Level Bone Profiler 2	026.0023
Bone Level Bone Profiler 3	026.0024

#### Instructions for use

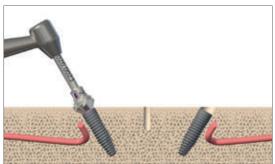
For detailed instructions please consult the *Instructions for use: Straumann® BL Bone Profilers*, 701713 supplied with the product or at www.ifu.straumann.com



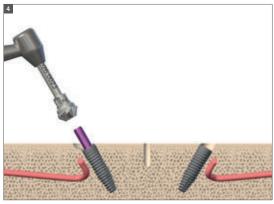
- Depending on the implant connection type (RC or NC), screw the Guiding Cylinder NC (026.0025S) or Guiding Cylinder RC (026.0026S) into the implant using an SCS Screwdriver. Hand-tighten the Guiding Cylinder.
- 2. Choose the Bone Profiler 1, 2 or 3 depending on the abutment emergence profile, the implant position (e.g. subcrestal placement, tilted position) and surrounding bone situation (e.g. uneven, scalloped ridge). Table 1 (on the next page) shows which Bone Profiler is generally suggested for a particular abutment in situations of deeply (subcrestally) placed implants.



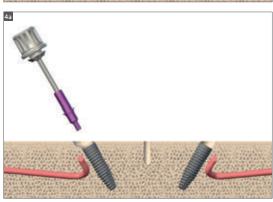
3. Insert the Bone Profiler into the dental hand-piece. Without turning the Bone Profiler, place it over the Guiding Cylinder and slide it down until the Bone Profiler is 1 mm away from the bone. Once in position, drill into the bone not exceeding the maximum rotational speed of 200 rpm. Use intermittent drilling technique with ample irrigation with sterile precooled physiological saline solution.



Important: When drilling keep the Bone Profiler and the Guiding Cylinder axially aligned and do not apply any bending forces. Continue drilling until the Bone Profiler reaches the stop collar of the Guiding Cylinder.



4. Remove the Bone Profiler and unscrew the Guiding Cylinder from the implant.



5. Place the abutment and screw it into the implant.

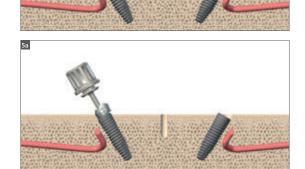


Table 1: Abutments and corresponding Bone Level Bone Profilers

	Art No	Product Description	Bone Profiler 1 026.0022	Bone Profiler 2 026.0023	Bone Profiler 3 026.0024
Bone Level Healing Abutments	024.4236, 024.42365	RC, Ø 4.7 mm, bottle-shaped, 6 mm	✓		
	024.4234, 024.42345	RC, ∅ 4.4 mm, bottle-shaped, 4 mm	✓		
	024.4222	RC, Ø 5 mm, conical, 2 mm	✓		
	024.42225	RC, Ø 5 mm, conical, 2 mm		✓	
	024.4224, 024.42245	RC, Ø 5 mm, conical, 4 mm	✓		
	024.4226, 024.42265	RC, Ø 5 mm, conical, 6 mm	✓		
	024.4242, 024.42425	RC, Ø 6.5 mm, conical, 2 mm			✓
	024.4244, 024.42445	RC, Ø 6.5 mm, conical, 4 mm		✓	
	024.2236, 024.22365	NC, ∅ 3.3 mm, bottle-shaped, 5 mm	✓		
	024.2234, 024.22345	NC, Ø 3.3 mm, bottle-shaped, 3.5 mm	✓		
	024.2222, 024.22225	NC, Ø 3.6 mm, conical, 2 mm	✓		
one	024.2224, 024.22245	NC, Ø 3.6 mm, conical, 3.5 mm	✓		
Ω	024.2226, 024.22265	NC, Ø 3.6 mm, conical, 5 mm	✓		
	024.2242, 024.22425	NC, Ø 4.8 mm, conical 2 mm		✓	
	024.2244, 024.22445	NC, Ø 4.8 mm, conical 3.5 mm	✓		
	024.2246, 024.22465	NC, Ø 4.8 mm, conical 5 mm	✓		
	024.4246	RC, Ø 6.5 mm, conical, 6 mm		✓	
	024.42465	RC, Ø 6.5 mm, conical, 6 mm	✓	√*	
Screw-retained Abutments	022.2745P	NC, straight, including pin 025.0009 and screw 023.4749, Ø 3.5 mm, gingiva height 1 mm	✓		
	022.2746P	NC, straight, including pin 025.0009 and screw 023.4750,  Ø 3.5 mm, gingiva height 2.5 mm	✓		
	022.2753P	NC, straight, including pin 025.0009 and screw 023.4760, Ø 3.5 mm, gingiva height 4 mm	✓		
	022.2747P	NC, straight, including pin 025.0009 and screw 023.4749, Ø 4.6 mm, gingiva height 1 mm		<b>√</b>	
	022.2748P	NC, straight, including pin 025.0009 and screw 023.4750, Ø 4.6 mm, gingiva height 2.5 mm	✓		
	022.2754P	NC, straight, including pin 025.0009 and screw 023.4760, Ø 4.6 mm, gingiva height 4 mm	✓		
	022.2749P	NC, angled, angle 17°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 2.5 mm			✓
	022.2750P	NC, angled, angle 17°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 2.5 mm			✓
	022.2755P	NC, angled, angle 17°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 4 mm		✓	
	022.2756P	NC, angled, angle 17°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 4 mm		✓	
	022.2751P	NC, angled, angle 30°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 2.5 mm			<b>√</b>
	022.2752P	NC, angled, angle 30°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 2.5 mm			✓
	022.2757P	NC, angled, angle 30°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 4 mm		✓	
	022.2758P	NC, angled, angle 30°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 4 mm		✓	

<sup>\*</sup>Bone Profiler 2 may only be needed if the implant is placed deeper than 3 mm subcrestally, otherwise use Bone Profiler 1.
\*\* Use Profiler 2 only if implant is placed deeper than 2.5 mm subcrestally; otherwise use Bone Profiler 1.

Table 1: Abutments and corresponding Bone Level Bone Profilers

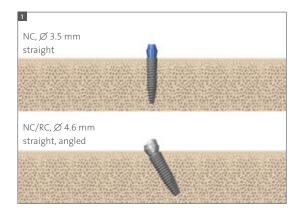
	Art No	Product Description	Bone Profiler 1 026.0022	Bone Profiler 2 026.0023	Bone Profiler 3 026.0024
Screw-retained Abutments	022.4745P	RC, straight, including pin 025.0009 and screw 023.4749, Ø 4.6 mm, gingiva height 1 mm		~	
	022.4746P	RC, straight, including pin 025.0009 and screw 023.4750, Ø 4.6 mm, gingiva height 2.5 mm	✓		
	022.4751P	RC, straight, including pin 025.0009 and screw 023.4760, Ø 4.6 mm, gingiva height 4 mm	✓		
	022.4747P	RC, angled, angle 17°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 2.5 mm			✓
	022.4748P	RC, angled, angle 17°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 2.5 mm			✓
	022.4752P	RC, angled, angle 17°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 4 mm		<b>√</b>	
	022.4753P	RC, angled, angle 17°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 4 mm		<b>√</b>	
	022.4749P	RC, angled, angle 30°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 2.5 mm			✓
	022.4750P	RC; angled, angle 30°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 2.5 mm			✓
	022.4754P	RC; angled, angle 30°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 4 mm		✓	
ew-reta	022.4755P	RC, angled, angle 30°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 4 mm		✓	
Scr	022.0010P	NC, angled, angle 17°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 5.5 mm	✓		
	022.0011P	NC, angled, angle 17°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 5.5 mm	✓		
	022.0012P	NC, angled, angle 30°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 5.5 mm	✓		
	022.0013P	NC, angled, angle 30°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 5.5 mm	✓		
	022.0014P	RC, angled, angle 17°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 5.5 mm	<b>√</b> **		
	022.0015P	RC, angled, angle 17°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 5.5 mm	<b>√</b> **		
	022.0016P	RC, angled, angle 30°, type A, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 5.5 mm	<b>√</b> **		
	022.0017P	RC, angled, angle 30°, type B, including pin 025.0009 and screw 025.0002, Ø 4.6 mm, gingiva height 5.5 mm	<b>√</b> **		

<sup>\*</sup>Bone Profiler 2 may only be needed if the implant is placed deeper than 3 mm subcrestally, otherwise use Bone Profiler 1.
\*\* Use Profiler 2 only if implant is placed deeper than 2.5 mm subcrestally; otherwise use Bone Profiler 1.

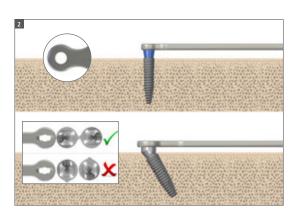
# Appendix C: Quick Guide for Holding Key for Straumann® Screw-retained Abutments



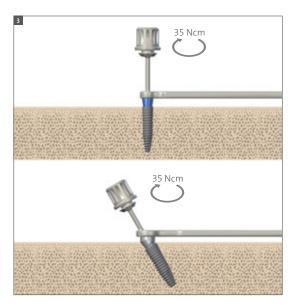
The intended use of the Holding Key for Straumann® Screw-retained Abutments is to prevent the abutment and implant from rotating when applying the recommended tightening torque of 35 Ncm for final abutments.



Having the Straumann® Bone Level Implant seated in the final position, place the Straumann® Screw-retained Abutments into the implant in the desired orientation.



Use the connection marked with  $\varnothing$  3.5 for straight NC,  $\varnothing$  3.5 mm abutments and the connection marked with  $\varnothing$  4.6 for the straight and angled abutments NC,  $\varnothing$  4.6 mm and RC,  $\varnothing$  4.6 mm. Ensure that the Holding Key is properly seated and engaged on the abutment.



Mount the Straumann® SCS Screwdriver to the abutment screw, at the same time hold the Holding Key to prevent the abutment and implant from rotating while torqueing. Use the Straumann® Ratchet to apply a final torque of 35 Ncm.

#### References

1 based on Dawson A et al.: The SAC Classification in Implant Dentistry, ITI 2009, Classification of Restorative Cases, Edentulous Maxilla/Mandible 2 In general maxillary implant-supported/retained overdentures are considered advanced restorations 3 Benic GI, Gallucci GO, Mokti M, Hämmerle CH, Weber HP, Jung RE. Titanium-zirconium narrow-diameter versus titanium regular-diameter implants for anterior and premolar single crowns: 1-year results of a randomized controlled clinical study. Journal of Clinical Periodontology 2013; [Epub ahead of print] 4 Nicolau P et al.: Immediate and early loading of chronically modified implants in posterior jaws: 3-year results from a prospective randomized study. Clin Implant Dent Relat Res. 2013 Aug;15(4):600-612 5 If a GBR procedure can be avoided 6 Schwarz, F., et al., Bone regeneration in dehiscence-type defects at chemically modified (SLActive®) and conventional SLA® titanium implants: a pilot study in dogs. J Clin.Periodontol. 34.1 (2007): 78–86 7 Lai HC, Zhuang LF, Zhang ZY, Wieland M, Liu X. Bone apposition around two different sandblasted, large-grit and acid-etched implant surfaces at sites with coronal circumferential defects: An experimental study in dogs. Clin. Oral Impl. Res. 2009;20(3):247–53. 8 Buser D, Wittneben J, Bornstein MM, Grütter L, Chappuis V, Belser UC. Stability of Contour Augmentation and Esthetic Outcomes of Implant-Supported Single Crowns in the Esthetic Zone: 3-Year Result of a Prospective Study With Early Implant Placement Post Extraction. J Periodontol. 2011 March; 82(3): 342-9. 9 Buser D, Chappuis V, Kuchler U, Bornstein MM, Wittneben JG, Buser R, Cavusoglu Y, Belser UC. Long-term Stability of Early Implant Placement with Contour Augmentation. J Dent Res. 2013 Dec;92(12 Suppl):176S-82S. 10 Nicolau P, Reis R, Guerra F, Rocha S, Tondela J, Brägger U. Immediate and early loading of Straumann® SLActive implants: A Five Year Follow-up. Presented at the 19th Annual Scientific Meeting of the European Association of Osseointegration – 6-9 October 2010, Glasgow 11 International Diabetes Federation. http://www.idf. org/diabetesatlas/ 12 Schlegel KA, Prechtl C, Möst T, Seidl C, Lutz R, von Wilmowsky C. Osseointegration of SLActive® implants in diabetic pigs Clin Oral Implants Res. 2013 Feb;24 (2):128-34. 13 Reginster JY, Burlet N. Osteoporosis: a still increasing prevalence. Bone. 2006 Feb;38(2 Suppl 1):54-9. 14 Mardas N, Schwarz F, Petrie A, Hakimi AR, Donos N. The effect of SLActive® surface in guided bone formation in osteoporotic-like conditions Clin Oral Implants Res. 2011 Apr;22(4):406-15. 15 WHO: http://www.who.int/ageing/about/facts/en/index.html 16 iData Report , Dental Implants and Final Abutments, Europe 2012 17 iData Report, Dental Implants and Final Abutments, USA 2012 18 Slotte Christer et al, Four-mm implants supporting fixed partial dentures in the posterior mandible. 5-year results from a multicenter study. Presented at the 20th Annual Scientific Meeting of the European Association of Osseointegration, 10-13 October 2012, Copenhagen, Denmark. 19 from single-tooth to edentulous 20 Rupp F, Scheideler L, Olshanska N, de Wild M, Wieland M, Geis-Gerstorfer J. Enhancing surface free energy and hydrophilicity through chemical modification of microstructured titanium implant surfaces. Journal of Biomedical Materials Research A, 76(2):323-334, 2006. 21 De Wild M. Superhydrophilic SLActive® implants. Straumann document 151.52, 2005 22 Katharina Maniura. Laboratory for Materials – Biology Interactions Empa, St. Gallen, Switzerland Protein and blood adsorption on Ti and TiZr implants as a model for osseointegration. EAO 22nd Annual Scientific Meeting, October 17 – 19 2013, Dublin 23 Schwarz, F., et al., Bone regeneration in dehiscence-type defects at non-submerged and submerged chemically modified (SLActive®) and conventional SLA® titanium implants: an immunohistochemical study in dogs. J Clin. Periodontol. 35.1 (2008): 64–75. 24 Rausch-fan X, Qu Z, Wieland M, Matejka M, Schedle A. Differentiation and cytokine synthesis of human alveolar osteoblasts compared to osteoblast-like cells (MG63) in response to titanium surfaces. Dental Materials 2008 Jan;24(1):102-10. Epub 2007 Apr 27. 25 Schwarz F, Herten M, Sager M, Wieland M, Dard M, Becker J. Histological and immunohistochemical analysis of initial and early osseous integration at chemically modified and conventional SLA® titanium implants: Preliminary results of a pilot study in dogs. Clinical Oral Implants Research, 11(4): 481-488, 2007. 26 Lang, N.P., et al., Early osseointegration to hydrophilic and hydrophobic implant surfaces in humans. Clin Oral Implants.Res 22.4 (2011): 349–56. 27 Raghavendra S, Wood MC, Taylor TD. Int. J. Oral Maxillofac. Implants. 2005 May–Jun;20(3):425–31. 28 Oates TW, Valderrama P, Bischof M, Nedir R, Jones A, Simpson J, Toutenburg H, Cochran DL. Enhanced implant stability with a chemically modified SLA® surface: a randomized pilot study. Int. J. Oral Maxillofac. Implants. 2007;22(5):755–760. 29 Norm ASTM F67 (states min. tensile strength of annealed titanium). 30 Data on file for Straumann cold-worked titanium and Roxolid® Implants. 31 Wismeijer D et al.: ITI Treatment Guide: Loading protocols in Implant Dentistry – Edentulous Patients, Volume 4, 2010, page 223 Patient Consideration 32 Wismeijer D et al.: ITI Treatment Guide: Loading protocols in Implant Dentistry – Edentulous Patients, Volume 4, 2010, page 54 Treatment Options for the Edentulous Arch

### **International Headquarters**

Institut Straumann AG
Peter Merian-Weg 12
CH-4002 Basel, Switzerland
Phone +41 (0)61 965 11 11
Fax +41 (0)61 965 11 01
www.straumann.com

MALO CLINIC is a registered trademark of Malo Clinic, LD, Portugal.