Ivoclar Vivadent has been your renowned partner for clinical and dental-lab products for esthetic restorations for many years and is thus also your partner for implant-retained restorations.

A functional and esthetic implant-retained restoration is based on sound preparation and execution of the prosthetic work supported by a planned surgical treatment.

The fabrication of a functional and esthetic implant-retained restoration involves interwoven clinical and technical procedures that can be divided into six consecutive treatment steps.

The division provides you with a quick overview. It facilitates the allocation of the individual coordinated clinical and technical products to the corresponding treatment steps.
Sound planning is decisive for durable, esthetic and functional implant-retained restorations.

The planning stage begins with the exact recording of the clinical jaw situation using Virtual®, a very ductile putty. Impressions made with Virtual show dimensional stability and can be poured several times for planning models. The resulting exact models then form the basis for the subsequent steps in prosthetic planning. OptraGate® ExtraSoft is used for patient-friendly impression-taking.

With the easy-to-place UTS 3D transferbow, the patient-specific alignment of the dental arches in relation to the temporomandibular joint is transferred to the articulator. This step is crucial for functional implant-retained restorations.

The addition-reaction silicone material Virtual CADbite is particularly suitable for the fabrication of the bite registration on the 3D Bite Fork. The short time the bite registration remains in the oral cavity minimizes the risk of inaccuracies caused by jaw movements. The high final strength permits easy trimming and prevents shifting during plane-oriented mounting of the models in the articulator.

Planning with coordinated products is the basis for the subsequent treatment steps of an implant-retained restoration.
EXACT POSITONING

The exact determination of the implant position is a basic prerequisite for the fabrication of esthetic and functional prosthetic restorations.

The laboratory fabricates a preoperative diagnostic template using the functionally set up, radiopaque SR Vivo TAC®/SR Ortho TAC® denture teeth. With the help of this X-ray template, the correct positioning of the implant can be precisely determined. As soon as drill sleeves have been placed in their predetermined position, the X-ray template then serves as a drill template, which supports the dentist during implantation.

Measuring tubes placed in the denture teeth are used to gain information about the bone structure available for implantation and about the possible position of the implant.

The diagnostic and drill templates can be individually adjusted using the SR Vivo TAC/SR Ortho TAC Modifier Kit.

The radiopaque denture teeth SR Vivo TAC/SR Ortho TAC are suitable for X-ray diagnostics for both fixed and removable denture prosthetics.
TEMPORARY RESTORATION

ESTHETIC INTERLUDE

The temporary restoration plays a major part in the treatment procedure. It already permits a preview of the final result. The function and esthetics of the permanent restoration are pre-defined and may still be adapted during this treatment phase. Enter Telio®.

The Telio system comprises products for all stages of short- and long-term temporization. The chemical compositions and shades of the materials are coordinated to ensure reliability and flexibility.

Chairside temporary restorations are fabricated using the self-curing Telio CS C&B crown and bridge materials. The material convinces users with its quick and easy handling and its excellent mechanical properties. Given the compatibility with all the other Telio products, the temporary restoration can be easily modified.

Telio Lab is particularly suitable for lab-fabricated temporary restorations. It can be applied in various ways and is thus quickly integrated into the daily lab work. The comprehensive range of materials increases your flexibility regarding individualized characterizations or substantial adjustments. This is particularly important for comprehensive implant-retained reconstructions.

CAD/CAM users may fabricate milled temporary restorations with Telio CAD. The Telio CAD blocks are compatible with the milling systems from Sirona (CEREC and inLab). Furthermore, you can order Telio CAD by NobelProcera precision-milled restorations from Nobel Biocare.

For designing emergence profiles of all Telio restorations, Telio Add-On Flow – a flowable, light-curing composite – is the material of choice. The Telio CS Link luting composite completes the system for temporary restorations.
COORDINATED SYSTEM

The strength of an alloy is an important criterion in the fabrication of metal-supported implant-retained restorations. The ceramic alloy *Sagittarius* exhibits exactly the needed strength and thus counteracts deformation caused by masticatory forces. Furthermore, the alloy demonstrates a high temperature resistance, which is the basis for accurately fitting frameworks on abutments.

*IPS InLine®* is a metal-ceramic system that is distinguished for its outstanding flexibility of use. You choose the type of processing once the opaquer has been applied: the efficient one-layer technique with *IPS InLine One*, the conventional multi-layer technique with *IPS InLine* or the precision press-on technique with *IPS InLine PoM* (Press-on-Metal). All three techniques have in common that esthetically pleasing, individualized restorations can be fabricated in conjunction with the wide range of additional materials.

The *SR Adoro® Gingiva* materials are especially suitable for the lifelike design of lost soft tissues around implant-retained restorations. These materials are adjusted to the cross-product gingiva concept of Ivoclar Vivadent and thus meet the requirements for achieving perfect pink esthetics.

The *SR Adoro Gingiva* composite exhibits a significantly lower affinity to plaque development and can be supplemented at any time, if required. These coordinated products thus enable an excellent esthetic interplay between the implant, metal-ceramic restorations and gingival design.
INNOVATIVE FABRICATION TECHNIQUE

No matter what type of permanent restoration you choose, Ivoclar Vivadent always offers a first-class solution.

Fabricate all-ceramic implant-retained bridge restorations using the CAD/CAM-based IPS e.max® CAD-on fabrication technique. It permits the fabrication of high-strength and highly esthetic restorations of IPS e.max CAD lithium disilicate (LS₂) in conjunction with IPS e.max ZirCAD zirconium oxide (ZrO₂) in an innovative fashion.

With the help of the user-friendly Multilayer software, an IPS e.max ZirCAD framework and the corresponding accurately fitting IPS e.max CAD veneering structure can be constructed in one step and subsequently milled separately.

Quick sintering of the IPS e.max ZirCAD framework is carried out in the Programat® S1. Parallel fabrication and the short process times increase your productivity. The homogeneous glass-ceramic bond between the two components is achieved with the new IPS e.max CAD Crystall./Connect fusion glass-ceramic and the fusion/crystallization firing.

Benefit from this new era in bridge fabrication which combines convenience, efficiency and overall strength in a unique way.
ADDITIONAL ANCHORAGE

Removable implant-retained dentures not only provide patients with a completely new attitude to life from a psychological perspective; it is the anchorage that gives them a reassuring feeling. Thanks to the variety of denture teeth and the matching denture base materials, this positive attitude towards life can last for years.

By combining the denture teeth SR Phonares® NHC, SR PhonaresLingual® NHC and the denture base material SR Ivocap® High Impact you make the right decision.

The exceptional shape, individual layering and surface texture of the SR Phonares NHC anterior teeth return a natural smile to the face of the patient. Given their lingualized occlusion, the SR PhonaresLingual NHC teeth are particularly suitable for the fabrication of implant-retained dentures. The new NHC material developed by Ivoclar Vivadent provides for long-lasting satisfaction of your patients.

The SR Ivocap High Impact denture base material combines the well-known advantages of the SR Ivocap injection system with an enhanced impact resistance, coordinated with the higher stress exerted on implant-retained dentures. The opaque shading of the Implant Shades facilitates the masking of construction elements.
For the chairside fabrication of implant restorations, the suitable block is of primary importance. With the CAD/CAM processing technique, you benefit from a high-performance material that combines strength, esthetics and efficiency **IPS e.max CAD**.

Make use of the impressive **IPS e.max CAD** material properties. Efficiently mill lithium disilicate glass-ceramic in its „soft“ state, when the material shows its characteristic blue colour. With the subsequent short crystallization process in the **Programat CS** ceramic furnace directly in your dental practice, the **IPS e.max CAD** restorations obtain their final physical properties, such as the high strength of 360 MPa. In addition, the restorations are imparted with the desired esthetic properties, such as tooth shade, translucency and brightness. If additional characterization are desired, the restorations may be stained using the **IPS e.max CAD Crystall./Shades and Stains**.

The innovative blocks for chairside processing are available in two levels of translucency and 2 sizes, as well as 16 A–D and 4 Bleach BL shades.

**Additional product for permanent restorations (chairside): IPS Empress® CAD**
Proven leucite glass-ceramic for the fabrication of anterior and posterior crowns; polychromatic block for optimum esthetics.
The trend in placing implant-retained restorations is towards direct placement on the implant abutments.

Depending on the objective and preference of the operator, either temporary or permanent luting cements may be used to place the restorations.

If a temporary cementation is chosen, the Telio® CS Link dual-curing translucent luting composite is suitable for the esthetic cementation. The convenient double-push syringe permits time-saving direct application while the mixture of the eugenol-free material continuously remains homogeneous. If required, gentle and sound removal of the restoration is possible.

If the operator chooses a permanent cementation method, various materials can be used, depending on the restoration type and framework material: conventional glass ionomer cements, e.g. Vivaglass® CEM, self-adhesive composite cements, e.g. SpeedCEM®, or adhesive luting composites, e.g. Multilink® Implant.

Multilink Implant and SpeedCEM combine a particularly high bonding strength with easy processing and time-saving direct application from the syringe. Manual mixing is not required.

You will certainly be enthusiastic about OptraGate® ExtraSoft. This patient-friendly lip and cheek retractor can be placed quickly and provides a clear view of the treatment field for working without getting tired, particularly in the posterior region.
PROFESSIONAL CARE

The objective of recalls is to maintain the functionality and esthetics of implants and prosthetic reconstructions, as well as the general oral health. In this context, efficient bacterial control and the prevention of inflammation in the oral cavity play a decisive role.

The Implant Care program supports your professional care of your patients during the different phases of an implant treatment and the aftercare throughout the rest of their lives. Ingredients, delivery form, handling and application of the coordinated Implant Care products are geared to the special requirements of implants and the corresponding prosthetic reconstructions and render treatment easier and more convenient.

OptraGate ExtraSoft retracts lips and cheeks and thus facilitates the access to complex, implant-retained restorations. The fluorescent disclosing liquid Plaque Test renders bacterial accretions clearly visible. Professional cleaning is carried out with the fine prophy paste Proxyl®, which creates a smooth, biofilm-free surface and maintains the esthetic appearance. After incorporation of the prosthetic restoration, the professional application of the protective chlorhexidine varnish Cervitec® Plus along the restoration margins is recommended. Depending on the individual requirements of your implant patients, you may recommend either Cervitec® Liquid antibacterial mouth rinse or Cervitec® Gel with chlorhexidine and fluoride for application at home.
Implant Esthetics is only one field in which Ivoclar Vivadent fully exerts its competence. For a comprehensive overview, please also read our other brochures:

These products form part of our Implant Esthetics competence area. All the products from this area are optimally coordinated with each other.