Gi-Mask - Gingival masks for perfect restorations

AAD DIPL. DENTAL TECHNICIAN MARTIN LAMPL, JUNI 2008

Implant superstructures, crowns and bridges have to meet the highest standards with regard to aesthetics and function. Consequently dental technicians should not make any compromises when fabricating a gingival mask. The gingival mask helps to produce very impressive results!

"Dental experts are agreed on the advantages of gingival masks", commented Martin Lampl, AAD Dipl. Dental Technician, in a specialist article. Only by fabricating a gingival mask can the basis for aesthetically perfect, ideally fitting and functioning crowns be guaranteed, continued the dental technician from Dornbirn, Austria. The necessity of a gingival mask for fabricating highly precise implant superstructures, crowns and bridges is therefore undisputed. The advantages are clear. A gingival mask allows a natural view of the implant analogue and en-

sures that the fit of the superstructure can be checked very effectively. There is also extremely accurate replication of the gingiva and precise reproduction of the gingival margin, which have a positive influence on the optimal design of the prosthetic restoration. Fabrication of an accurate gingival mask also ensures that the superstructure is accessible for periodontal hygiene measures.

Handling the mask

Comments by dental colleagues that the elasticity of the A-silicone used for building up the gingival mask can cause inaccuracies during subsequent grinding and cutting are refuted by Martin Lampl by pointing to optimal base products, which he also names. One example is the Gi-Mask Automix from the Swiss manufacturer of quality products Coltène/ Whaledent. In the opinion of Martin Lampl this is the ultimate product. On the one

hand, the material is extremely stable, which allows it to be fitted and removed several times without affecting its properties. On the other hand, it has a short drying time combined with optimal elasticity that ensures accurate grinding and cutting of the gingival mask in the pontic region. A gingival mask is therefore indispensible for implant work. The clear representation of the gingiva and gingival margin guarantees results that patients expect: a restoration that meets the highest aesthetic and functional requirements for many years.

Fabrication options

Direct fabrication of a gingival mask for implant-supported superstructures: after taking an impression, the gingival mask is fabricated directly in the impression. A separating agent should be used before applying the high-grade A-silicone, e.g. Gi-Mask from Coltène. Silicone indices should be fabricated to act as a boundary for the gingival mask. The gingival mask is applied directly into the impression around the analogue implants and, after a short setting time, the removable gingival section is trimmed to a conical shape for fabricating the model. Indirect fabrication of a gingival mask for crown and bridge restorations: once the master model has been fabricated, the gingival stone segment is converted into a removable silicone gingival mask. A silicone index is produced with the screw-retained gingival abutments. The stone gingival segment is now trimmed away to the upper section of the implant analogue. The A-silicone is injected into predrilled filling channels in the silicone overcast. The gingival mask is then prepared by the dental technician.



Fig. 1: Isolation of the impression using GI-MASK Universal Separator.



Fig. 3: Isolation of the silicone matrix key using GI-MASK Universal Separator.

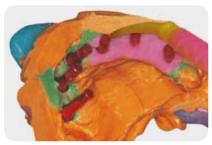


Fig. 2: Direct application of GI-MASK Automix New Formula into the impression.



Fig. 4: Injection of GI-MASK Automix New Formula material.

Professional tips

- Producing a stable gingival mask greatly facilitates preparation. Another reason for stability is that trimming may cause inaccuracies because of the elasticity of the Asilicone. Experience has shown that the Gi-Mask Automix from Coltène has optimal preparation properties for highly precise restorations.
- Gi-Mask has optimal elasticity and can be prepared in the pontic region. Trimming with a scalpel is easier, however, and it also has the advantage that the section that has been cut off can be repositioned for checking.
- Apply a layer of wax around the section of the impression post, which projects out of the impression, and up to the screw-retained analogue. Wax can also be applied in areas where bridge pontics are planned. This saves additional preparation of the gingival mask with rotary instruments.

Three questions

Martin Lampl, AAD Dipl. Dental Technician, owner of ZahnArt GmbH, Dornbirn, Austria, was put to the test by the ZWP editorial team regarding routine work using a gingival mask.

What is the advantage of working with a gingival mask?

A 1:1 oral situation can be reproduced without any visual restrictions for the technician. A gingival mask optimizes subgingival work and also produces a precise representation of the gingival margin and interdental spaces.

What does this mean for the finished restoration?

A prerequisite is that technicians are very familiar with the technique. If this is the case, with the aid of a gingival mask they can then produce fantastic results that will greatly impress dentists and patients! Crowns, bridges or superstructures can only attain a natural appearance and high aesthetic quality if gingival masks are used dur-

ing fabrication. The precise transition of gingiva to implant-supported superstructure also prevents possible recession (shrinkage) of the gingiva.

How do you assess the quality of silicones for fabricating a gingival mask?

Generally the standard is very high, though as always the level of quality varies. For many years now I have preferred using products from Coltène, a manufacturer of quality products. Successful restorations are proof that I have made the right choice.

CONTACT

Coltène/Whaledent GmbH + Co. KG

Raiffeisenstraße 30 89129 Langenau Germany

Tel.: +49 (0) 73 45/8 05-0 Fax: +49 (0) 73 45/8 05-2 01 E-mail: info@coltenewhaledent.de