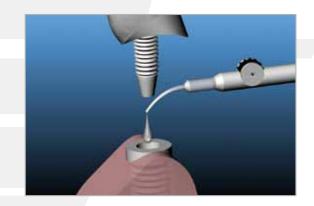
Sealing of Hollow Spaces in Implants





- · Seals implant gaps and hollow spaces
- Durably stops infiltration of germs into the hollow spaces
- Eliminating risk of reinfection of periimplantal tissue
- Effectively avoids a main reason for periimplantitis
- Successful 16-year clinical study of the University Düsseldorf, Germany
- Quick and easy handling and application



Gap sealing against Periimplantitis

Out of manufacturing reasons, gaps and hollow spaces between implant and structures are inevitable for all compound implants (Fig. 1).

These gaps can be minimized depending on fabrication precision. However, they are never completely bacteria-proof and in an open connection with the bacteria- and fungi-settled oral cavity. The spectrum of germs settling in the hollow spaces consists of a large quantity of gram-negative, mostly anaerobic bacteria, as it is the case with periimplantitis. These

humid and warm implant interiors offer an ideal milieu for bacteria growth and partly also cause fungi affection. Already 16 years ago, the Clinic for Oral and Maxillofacial Surgery of the Heinrich-Heine University, Düsseldorf, Germany under the direction of Prof. Dr. Dr. Fritzemeier has started to find a solution to this problem. The gap between abutment and implant averages, only 45 µm (Fig. 2), whereas most of the relevant bacteria have a size of between 0.5 µm and 4 µm.



Fig. 1

Based on extensive studies and tests, a material was developed sealing germ-proof all capillary gaps and interior spaces of compound implants. GapSeal is based on a special silicone matrix ingredient composition which creates an effective barrier preventing germ infiltration. Implants are long term protected against colonization caused by bacteria, viruses and fungi.

GapSeal is very fast and easy in its application. It is delivered in ready-to-use carpules together with a specially designed applicator (Fig. 3+4). Each carpule supports enough material for 2-3 implants.



Fig. 3

erythrocyte 7μ
gap 45μ
implant

Magnification (745 x)

Fig. 2

GapSeal seals the gaps and hollow spaces, which are to be found in every compound implant, thus effectively and durably avoiding an colonization of germs into these hollow spaces and eliminating the risk of re-infection of the periimplant tissue, the main reason for periimplantitis.

GapSeal Set (applicator + 10 tips) REF 152 041
GapSeal Refill (10 tips, 0.06 ml each) REF 152 040
Applicator REF 152 042



Insert the GapSeal tip into the applicator.



Pictures: Prof. Dr. Dr. Claus Udo Fritzemeier

Step 2:

Take off the cap and apply GapSeal by simply turning the transport wheel.





Step 3:

Apply GapSeal copiously to the implants directly after the first fixing of the locking screw.





Fig. 4

