Switching from an excellent impression material to one that's even better!

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All dentists who do prosthetic work as part of their practice try to produce an impression that accurately reflects the situation in the patients mouth.

This is particularly important for constructions with a combination of natural and implant-supported abutments. On one hand, a detailed reproduction of the prepared teeth with an accurate correction material is required. On the other hand, the impression posts must be firmly anchored in the impression.

In our dental practice we select impression materials in cooperation with dental assistants and dental technicians.

Selection criteria for dental assistants

- Simple mixing
- Easy filling of impression tray
- Easily cut

Selection criteria for dental technicians

- Dimensional stability
- Accuracy
- Simple model fabrication
- (pouring, demoulding)

Selection criteria for dentists

- Simple application
- Maximum accuracy
- Comfortable for the patient
- (taste, ease of removal)

The Coltène/Whaledent "AFFINIS heavy body" impression materials and the correction materials "AFFINIS regular body" and "AFFINIS light body" meet all the requirements of our practice. All materials are polyvinyl siloxane. This is the state of the art in our practice, because polyvinyl siloxane is very easy and uncomplicated to use and patients like the neutral taste. However, the most important factor for all involved is the extremely accurate impression results that AFFINIS gives us and the resulting precisely fitting restorations. We became aware of the new material from Coltène/Whaledent at IDS 2009. AFFINIS SYS360 putty - a putty material from the mixing machine.

After its introduction to the market in October 2009, we tested this new material, which can be shaped like putty, and started using it as a replacement for our previous tray material. This kneadable material has a pleasant initial stability and a higher positioning pressure than "AFFINIS heavy body" when placing the impression tray in the mouth. This way the pressure build- up ensures that the correction material penetrates even the thinnest parts. The tray remains in place without difficulty in the final position. The whole team of dental assistants, dental technicians and dentists decided to start using this material. For the fitting accuracy of the final restoration it is particularly important for the impression posts to be solidly anchored in the impression when taking an impression with implants. The slightest shaking or resilience in the impression will have a serious effect on the accurate fit of the restoration. This is another reason we like the accurate flow properties of AFFINIS SYS360 putty around the impression sites and the stabilising stiffness of the polymerized impression material, which fixed the impression posts in the exact position.

As users we have noted other positive material properties of AFFINIS SYS360 putty:

- Uniform consistency throughout the complete processing time
- Excellent mouldability
- Does not stick to gloves
- Excellent legibility, having a light grey-green colour (including in combination with AFFINIS correction material)
- Bonding characteristics designed for all AFFINIS correction materials
- Homogenous and bubble-free mixing quality
- Easily cut
- Genuine putty quality

We present a case report from our practice to demonstrate the procedure for working with AFFINIS SYS360 putty and show the result.

Patient: male, 72 years old

		)(	KM	KM	BM					b	k	k				f	
Tooth	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Tooth**
		SKM	BM	SKM	BM							KM	BM	BM	SKM	f	

Tooth diagram of the new restoration

Fig. 1 Initial situation

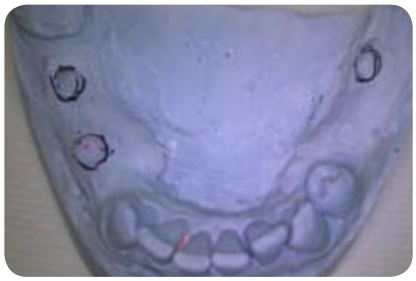

Fig. 2 Model for manufacture of the customised tray for the open implant impression

Fig. 3 Open, customised tray for impression with three implants

Fig. 4 Impression posts in situ

Fig. 5 Double-mix impression with open tray with a combination of AFFINIS SYS360 putty and AFFINIS light body

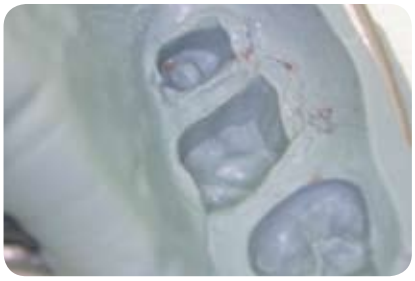

Fig. 6 Initial impression with AFFINIS SYS360 putty in the opposite jaw

Fig. 7 Preparations with AFFINIS light body applied

Fig. 8 Preliminary impression cut out with AFFINIS light body

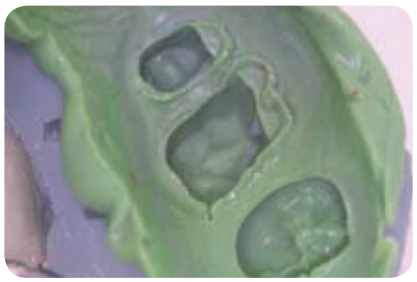

Fig. 9 Perfect impression result

Gig. 10 Master cast with GI-MASK gingival mask (Coltène/Whaledent AG)

Fig. 11 Implant restoration on the model

Fig. 12 Finished restoration in situ

Fig.13 Maxilla and mandible in situ

Conclusion

The introduction of the new material AFFINIS SYS360 putty by Coltène/Whaledent AG has made it even easier for our team to achieve a successful restoration for our patients. We have learned to appreciate the accurate flow properties of AFFINIS SYS360 putty at the impression sites and the stiffness of the polymerized impression material.

The dental technician has found the model fabrication very convenient, because the precision plaster wets the impression surface very thoroughly and makes it easy to remove the model from the tray.

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