## SYNERGY D6 FLOW - Case Histories

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Composites with high flow properties, referred to as flowable composites, have become an essential material in dental practices as a supplement to standard composite materials. SYNERGY D6 FLOW is the perfect material for a wide range of very different applications. The indications listed below are of interest in my daily work in the practice:

- Class V fillings
- Repairs of small cavities or marginal gaps in composite or ceramic restorations
- Extended fissure sealing
- Blocking out undercut sites, e.g. for in-

lay preparations

- Adhesive cementing of dental jewellery
- Repairs of provisional dentures in the marginal region for classical crowns and bridges and provisional implants
- Gingival shaping with provisional restorations on implants in the anterior tooth region

The properties of SYNERGY D6 FLOW make it very user-friendly: it is easily applied, it is stable and does not flow away (thixotropic properties), i.e. users can work free of stress and always in control. SYNERGY D6 FLOW ensures that the sur-

face is throughly covered, which means an invisible marginal closure that cannot be felt with a probe. Another advantage is the ease of polishing. It is also x-ray-opaque, an essential property for a modern filling material.

Various applications are described as examples of the wide range of possibilities:

- Cementing tooth jewellery
- Repairing a marginal fracture in a filling
- Repairing an enamel defect

### Case 1 | Cementing tooth jewellery

The 16-year-old patient, having just completed orthodontic treatment, wanted to decorate her perfect teeth. She expressed interest in tooth jewellery at her annual examination. She wanted a Swarovski crystal cemented to tooth 12. It was applied in the following steps:



Fig. 1: Initial situation



Fig. 4: After spraying the etched surface is wetted with A.R.T. Bond and light-cured.



Fig. 2: Cleaning the tooth surface (with Prophyflex (KaVo)) – a thoroughly clean tooth surface is essential for the following steps.



Fig. 5: Application of SYNERGY D6 FLOW with a fine application tip (application tip for etching



Fig. 3: Etching the surface with 35% phosphoric acid.

gel). The flow is spread with a probe, where the regular wetting does not pose a problem. The dental jewellery can be pressed into the viscous SYNERGY D6 FLOW and applied in exactly the right position.

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Fig. 6: Light polymerisation



Fig. 7: Final result after polishing with rubber polishing tip. The treatment was concluded with an application of fluoride.



Fig. 8: Final result

### Case 2 | Repair of a marginal fracture in a filling

During a treatment session in the first quadrant a 68-year-old woman with good oral hygiene complained about roughness on tooth 24. It turned out that the cause was a small marginal fracture. The problem could be resolved in just a few steps with SYNERGY D6 FLOW:



Fig. 1: Initial situation



Fig. 2: Placing the rubber dam (Flexidam from roeko).



Fig. 3: Cleaning the surface with fluoride-free pumice paste.



Fig. 4: Cleaned surface



Fig. 5: Etching the surface with 35% phosphoric acid.



Fig. 6: Application of mixed primer from A.R.T. Bond System to the dentine.



Fig. 7: Application of A.R.T. Bond on enamel and dentine.



Fig. 8: Light polymerisation for 10 seconds



Fig. 9: Application of SYNERGY D6 FLOW: the flowable material can be applied to the site without any difficulty.



Fig. 10: Distribution with the probe for improved wetting; this is very easy with the flowable SYNERGY D6 FLOW.



Fig. 11: Light polymerisation for 30 seconds



Fig. 12: Polishing with two different rough rubber polishers; the material makes polishing easy with a high-quality result.



Fig. 13: Checking the occlusion.



Fig. 14: End situation

### Case 3 | Repair of an enamel defect

A young patient did not like a small, rough spot on tooth 22. The enamel defect had been there for a long time, but she only really noticed it after a course of orthodontic treatment. There was virtually no aesthetic effect, but it could be emphasised by colour material deposits. A restoration of the enamel defect would be preventive treatment in the form of fissure sealing.



Fig. 1: Initial situation



Fig. 2: Enamel etching after cleaning with fluoride-free pumice paste.



Fig. 3: Visible etching pattern



Fig. 4: Application of A.R.T. Bond Systems bond.



Fig. 5: Light polymerisation of bond for 10 seconds.



Fig. 6: Application of SYNERGY D6 FLOW.

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Fig. 7: Efficient and easy polishing.



Fig. 8: End situation; the shading properties and the translucence form a very attractive result.

SYNERGY D6 FLOW can be used with all standard composites and is available in all SYNERGY D6 composite Duo Shade colours. I would not like to work without a composite with the properties of SYNERGY D6 FLOW in the dental practice. The ease of using this material in our daily work are due to the excellent flow properties and the high stability of the material. The dentist's work with flowable materials is greatly simplified, because the material can be applied easily and accurately. It can also be used for many other

indications with its physical properties. The ease of polishing ensures a good visual result.

#### **CONTACT**

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