

DENTISTRY

DFS
Dental Future Systems
D I A M O N

*DEVELOPING AND MANUFACTURING
INNOVATIVE DENTAL PRODUCTS
FOR OVER 30 YEARS.*



DIAMOND INSTRUMENTS FOR DENTISTRY



DFS Diamon manufactures a wide range of diamond instruments for all dental medical applications. The grit sizes include all grits relevant for dental applications. These range from extracoarse and coarse for efficient, fast abrasion, medium-grit instruments with universal applications in prosthetic dentistry, to fine and superfine grit sizes used for smaller or finer applications on teeth. Superfine and fine diamonds are intended for finishing and smoothing, e.g. in case of composite fillings.

Product quality

All DFS Diamon diamond instruments feature a multi-layer diamond coating with each layer being individually embedded. The exclusive use of natural diamond in all relevant grit sizes ensures superior cutting efficiency coupled with outstanding durability. As a result, the user will experience not only practical application-related advantages but also economic benefits. Given these technical features and based on our decades of experience in manufacturing dental rotary instruments, DFS Diamon diamond instruments excel not only in performance but also contribute to the bottom line of dental practice.

FG diamond burs

High speed FG diamonds are available in standard FG shank, in FG short shank and for some items in long shank. In addition, DFS Diamon manufactures FG diamond burs for minimally invasive applications and FG Turbo diamonds with spiral. FG Turbo diamonds are primarily used in crown and cavity preparation. The design of the spiral improves the cooling effect by channeling the water flow; moreover, the design of the spiral accelerates the transportations of debris. These advantages assist the dentist as less pressure is needed while grinding, thus the aquaplaning effect can be avoided. Turbo diamonds are available in two different designs, one with a spiral without diamond coating, the other with a spiral milled into the blank and full diamond coating.

All relevant shapes used in the dental practice are included in our product range. Common shapes such as egg, football, lense, torpedo, flame, conical and cylindrical shapes are manufactured in a wide variety of diameters. In addition, DFS Diamon has developed additional instruments such as FG diamonds with a depth marking, reducers in various designs and tools for veneer preparation.

Given the depth and breadth of the product range, all tasks to be performed in a dental practice can be handled efficiently and economically. For crown preparations the Diafutur instruments provide additional support as they are designed with a non-diamond coated guide pin. The different burs have been specifically created for PFM, full ceramic such as L2S and zirconia restorations. The unique shape and the different diameters support preparations even in complex cases as they assist the dentist to respect specific and unique widths and wall strengths.

CA (right angle) diamonds

In addition to FG diamonds we manufacture diamonds for CA (right angle) including diamonds for periodontic work.

FG Piranhas

FG Piranhas are manufactured using a complex three-layer diamond coating. Using diamonds of different grit sizes in sequential production steps delivers an extremely dense, homogeneous and stable structure of the diamond coating, which significantly improves lifetime.

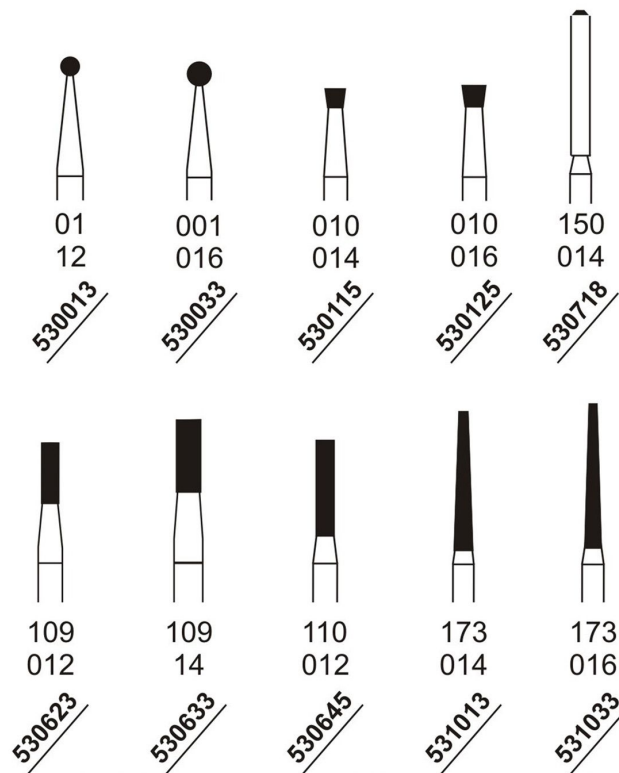
Furthermore, DFS Diamon has developed several special instruments designed for cutting zirconia crowns (e.g. Zircut instruments), a tool for trepanating zirconia, the Miniflex diamond disc for intraoral corrections and the Softy-Longlife sintered diamond crown cutter. If used correctly this unique crown cutter prevents injury of soft tissue while efficiently cutting metal frameworks.

THREE - LAYER DIAMOND TECHNOLOGY

DFS-DIAMON piranhas only



Three-layer *diamond technology*



- ➔ Excellent quality
- ➔ Made in Germany
- ➔ Manufactured according to EN ISO 13485, your assurance for highest quality
- ➔ Colour coded for optimal efficiency
- ➔ For best results we recommend using the instruments in sequence following the colour code: from dark to light or 1 to 5.
- ➔ The colour ring on the instrument shank and the colour of the packaging correspond to the ISO code.

PRECICUT DFS DIAMON SOFT TISSUE TRIMMER



DFS PreciCut® Precision Soft Tissue Trimmer

DFS PreciCut® Precision Soft-Tissue Trimmers are inserted into the handpiece of a turbine like a dental bur. Please operate at high speed: 300000 rpm.

The cutting efficiency is like a scalpel cut but more precise. **Water cooling is not required.** DFS PreciCut® Precision Tissue Trimmers should be applied at a 90° angle to the gingival surface with only light pressure. The tip of the instrument is heating up through tissue friction quickly, the result is an immediate tissue coagulation and minimal bleeding, **provided you work without cooling water!**

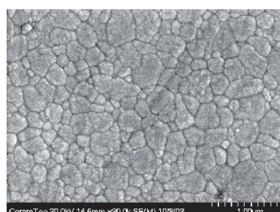
DFS PreciCut® Precision Tissue Trimmers can be used for plaque removal as well. Move the instrument under slight pressure across the dental surface.

Sterilize the tissue trimmer like any other surgical instrument after each contact with a patient.

The instrument is highly break-resistant and withstands pressure. The tip and the surface will not dull thus guaranteeing a multi-year service life.

We recommend a minimum stock of two DFS PreciCut® tissue trimmers for your practice, since one has to be resterilized after every contact with a patient before it can be used again.

Ceramic structure



ISO Nr.: 005315...

PreciCut

PreciCut Long



Fig.-Nr. / shape no.

164

164

Ø 1/10 mm

015

015

KL/ hl

5

8

VE / packaging unit

1

1

535000

535100

ZIRCONIA INSTRUMENTS FOR THE DENTAL PRACTICE



Adjustment of zirconia copings and structures including monoliths

Zirconia has risen to global prominence as an important material in dentistry. DFS Diamon has early on started to develop suitable instruments for this innovative yet challenging material. In doing so, we had to consider the specific challenges this material creates in order to minimize risks and achieve the best possible patient outcomes.

A regular occurrence in the dental practice is the need for minor chairside adjustments on a zirconia structure (monolith or zirconia structure with ceramic build-up). Special care is required even in simple adjustment cases as the dentist will most commonly be dealing with fully sintered zirconia. The grinding and polishing tools used must be specifically designed for zirconia. Furthermore, users need to ensure both sufficient water cooling and a careful approach to grinding to avoid microcracks, which weaken the zirconia structure and can significantly reduce the restoration's longevity.

DFS-Diamon has developed a new range of zirconia tools which meet the challenges that this material brings. The instruments have been coated with diamonds specially selected for this purpose in fine and superfine grit. A total of four different shapes are available (in both fine and superfine grit each) which are suitable for the adjustment work to be expected.

Polishing

The Circopol Instruments have been developed for efficient polishing of zirconia (including ceramic build-up). Two sequentially used polishers (blue and red) in FG shank rapidly produce a shiny surface; the blue polisher (step 1) also generates a slight abrasion on the material. The Circopol Highshine and the diamond-impregnated felt polishers (single use only, not autoclavable) are ready to deliver perfect high shine.

Zirconia set

The abovementioned instruments have been combined into a kit (article number 800209) in order to provide an assorted set in an autoclavable bur stand and to facilitate the clinical processes.

Preparation of zirconia restorations

We refer users to the product segment diamond instruments regarding the special preparation set Diafutur Z for zirconia preparations and the preparation set C for full-ceramic restorations.

Oral interventions on zirconia restorations

DFS Diamon offers an effective set of instruments suitable for oral interventions on zirconia crowns and bridges, some of which have already been discussed in the product segment diamond instruments:

- ➔ Zircut: high performance crown cutter for zirconia crowns and bridges
 - ➔ Special instrument for trepanating zirconia crowns
 - ➔ Crown cutter zirconia: a conventionally designed crown cutter for zirconia is available in FG shank as an alternative to the Zircut.
- Manufactured from a blank with the cut milled into the blank and high performance diamonds specially selected for zirconia

INSTRUMENTS FOR DENTISTRY

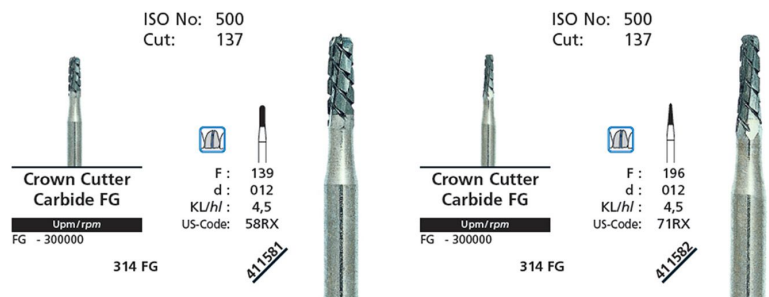


Crown cutters carbide

Cutting of precious, non-precious and titanium crowns and bridges as well as extrahard composites.

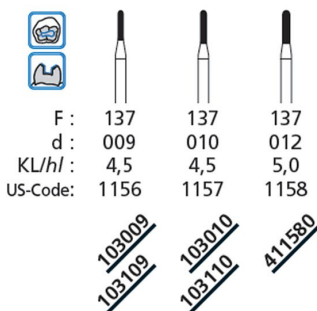
Crown cutters carbide

Cutting of precious, non-precious and titanium crowns and bridges as well as extrahard composites.



Amal Cut

ISO No: 500
Cut: 006



Amal Cut

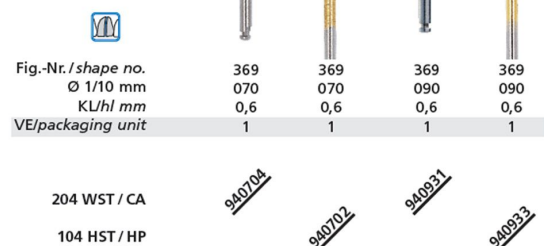
To remove old amalgam fillings without clogging

Zircut® - Crown cutter for ceramics and zirconia

Specially designed diamond-coated disc for separating full-ceramic crowns and bridges, especially zirconia. Extremely high cutting efficiency, lifetime of 15-25 crowns if used correctly. Design and diamond coating optimized to ensure maximum cooling effect so that damage to the pulpa due to excessive heat while cutting can be avoided. Warning: contact with soft tissue must be avoided, risk of injury! Water cooling required.

ISO Nr: 806 ...

Drehzahl / speed
15' - 25000 Upm / rpm



204 WST / CA
104 HST / HP