# DENTAL LAB

DFS
Dental Future Systems
DIAMON

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

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## DFS DIAMON CARBIDE BURS FOR THE DENTAL LAB

# DFS Diamon Carbide Burs

DFS Diamon has decades of experience in developing and manufacturing dental tungsten carbide cutters and masters the latest manufacturing technology. This combination ensures that technicians can rely on DFS Diamon instruments to be high performing tools with exceptionally long lifetimes. Several technical features that deliver tangible advantages to users differentiate DFS Diamon tungsten carbides from conventional instruments. These include the unique soldering technique of carbide head and steel shank. Contrary to other models, DFS Diamon does not solder the carbide head flat onto the steel shank but inserts the shank into the carbide head for soldering thereby avoiding the weak link of conventional soldering. In addition, we achieve perfect concentricity resulting in smoother, vibration-free running.

The DFS Diamon design of the cutting blades is an additional feature which combines the advantage of sharp blades with an improved support, making cutting surfaces more stable and long-lasting.

## Uni Disc

The next unique DFS Diamon feature is the Uni Disc which is mounted onto the shank. The propeller-shaped plastic accessory protects chuck and bearings from dust and provides an additional airflow.

## Product range

It is our ambition to provide technicians with high performing instruments meeting the highest quality standards for all relevant dental materials and applications. In addition to important classical applications such as non-precious alloys, acrylics and plaster, the product range also contains instruments for soft lining material, titanium, composites and other. The wide range of shapes and diameter cover every need.

## Turbo carbide cutters

The Turbo carbide cutters are highly popular around the world for applications on plaster and acrylics. The blades' extra coarse design facilitates rapid work progress and consistently high cutting efficiency.

Several sharp cutters are available for cutting tray material, thermoplastics and other acrylics, such as the Tri-Cutter or the Mini-Tri.

# DFS Diamon Carbide Burs:

## Carbide cutters Macro, Quattro, Micro and Milli-Micron

The classical cross-cut designs are of course also part of the DFS Diamon range. Our cross-cuts are reliable high performers especially suited for non-precious alloys, acrylics (Macro) and composites (Micro). The cut designs range from coarse (Macro) to superfine (Milli-Micron), the finer the cut the smoother the resulting surface of the workpiece and the less abrasion is produced. A selection of the Quattro and Micro series is also available with TiN (titanium nitride) coating.

## Double-end carbide cutters

Double-ended cutters such as the Bibur are a unique DFS Diamon innovation. Both ends of the carbide have a cutting area (in different designs), by simply switching around the instrument, technicians have a second cutter available.

## Carbide cutters Strato and Matro

These two carbide series are specially designed for acrylics and are among the most popular carbide cutters worldwide for this application.

## Carbide cutters Super-Tech and Titano

The unique feature of the Super-Tech cutters is the three-sectional cut which goes beyond the classical crosscut. Super-Tech and Titano burs are a great option when working on difficult alloys, such as titanium, but also perform well on non-precious alloys.

## Carbide cutters Star and Super-Star

These series of carbide cutters are for fast and effective grinding of tough acrylic veneers (Star) and soft lining material (Super-Star).

## BlueStar® carbide cutters

The newly developed Blue Star® coating (the newest generation of supernitrides) excel by their improved lifetime. The coating significantly reduces friction resistance while maintaining the cutting performance and thereby extending the lifetime of the instruments.

## Other instruments

The Okklu-Point bur has been designed for occlusal ceramic fissures. A new series of steel burs are an efficient and attractive option for working on soft lining material.

## HP carbide instruments

In addition to standard shapes such as carbide rosehead burs and fissure burs, DFS Diamon also offers specially developed carbide instruments such as the Okklu-Star and special finishing burs.

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## *DFS DIAMON SINTERED DIAMONDS AND SINTERED DIAMOND DISCS*

# DFS Diamon Sintered Diamonds

As with carbide burs DFS Diamon has decades of experience in developing and manufacturing high performing sintered diamonds. Sintered diamonds are used predominately on partial frameworks, as their characteristics and performance deliver significant advantages compared to conventional stones. Most importantly, their lifetime is about 200-300 times longer than that of stones. Next to the obvious economic advantages sintered diamonds also deliver additional environmental benefits resulting from reduced raw material consumption. The use of sintered diamonds also reduces dust and thereby improves the work environment and technicians also save time because fewer instruments need to be used and less frequently changed. Finally, sintered diamonds require less pressure while running and can thereby extend the lifetime of the micro motor.

Please note that sintered diamonds should not be used on surfaces intended for ceramic build-up in order to avoid excessive heat and residual contamination. This of course also applies to stones.

Another application for sintered diamonds is ceramics where they are appreciated because of their exceptionally long lifetime. We recommend that ceramics focus on fine (red) and superfine (yellow) diamonds grit sizes. When using sintered diamonds on ceramics black marks can appear on the workpiece because of the metal bonding used. This does not constitute contamination or damage to the ceramic as the black marks can easily be removed by sand blasting or polishing.

DFS Diamon sintered diamonds are superior to conventional sintered instruments because of their higher diamond concentration. Sintered diamonds are manufactured using a metal bonding together with the actual diamonds. DFS Diamon has succeeded in gradually reducing the share of the metal bonding (thereby increasing the diamond content) without reducing stability. As a consequence , DFS Diamon sintered diamond instruments will excel in delivering outstanding cutting efficiency coupled with exceptional lifetime . Contrary to electroplated diamonds, sintered diamonds are full diamond and can be used all the way down to the core of the instrument.

# DFS Diamon Sintered Diamonds:

## Shapes and diamond grit sizes

Sintered diamond in extracoarse and coarse grit sizes are especially popular when working metal alloys (Superturbo and Turbo) since they perform exceptionally well in terms of grinding efficiency while maintaining a long lifetime. Instruments in medium grit (Macro) and also intended primarily for use on metal frameworks whereas the finer grits Micro and Milli-Micron find their use predominantly on ceramics. Cleaning stones in different sizes are available for cleaning of sintered diamonds.

## Sintered diamond discs

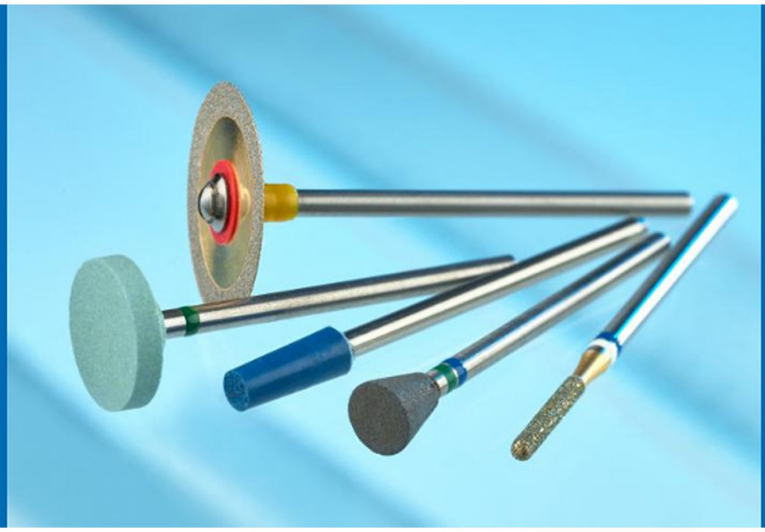
Using the same manufacturing technology DFS Diamon also manufactures sintered diamonds discs which have been popular for decades used on partial frameworks.

## Sidia® electroplated sintered diamond disc

The electroplated sintered discs Sidia® are a unique, innovative DFS Diamon development. These discs combine the advantages of conventional diamond discs (thickness of only 0.15 mm and some flexibility) with the advantages of a sintered disc (long lifetime because of full diamond content). The diamond edge of the Sidia® discs is made of full diamond – similar to sintered diamond discs – and guarantees an exceptionally long lifetime when used correctly.

The Sidia® discs are used primarily for separating and cutting ceramics including zirconia.

# ZIRCONIA TOOLS FOR THE DENTAL LAB



## Adjustment of zirconia copings and structures

Zirconia plays an important role in dental labs everywhere. Even though there is a lot less manual work needed to produce zirconia copings and structures due to the ubiquitous CAD/CAM systems there are still a few manual operations and adjustments necessary. For these purposes only a limited set of instruments are needed to efficiently work zirconia both in green state and in fully sintered state.
DFS Diamon has developed a selection of tools for dry adjustment work and alternatively, instruments to be used with water cooling. It is very important that in both cases technicians are aware of the material-specific challenges in order to avoid microcracks and possible long-term damage to the zirconia structures. The speed recommendations should be strictly followed, especially since these are shape and instrument-specific. Excessive speed and/or excessive pressure do not lead to faster results but significantly increase the risk of reduced long-term stability of the workpiece.

## Instruments for dry adjustment grinding of zirconia

The Circool Lab instruments are intended for dry adjustment work as the porosity of their material absorbs and transports a significant amount of the friction heat generated. The Circool XL instruments are for rough adjustment work; the Circool Lab instruments serve a similar purpose but are slightly less aggressive. The shapes available are a reasonable selection of what is typically needed for this type of adjustment work. DFS Diamon has indicated a shape-specific speed recommendation for these instruments which needs to be observed.

## Polishing of zirconia

The Circool Lab instruments with medium grit (blue) are for fine adjustment grinding and prepolishing of zirconia. The Circopol Lab polishers are for final polishing.
The zirconia set 800139 combines the most important instruments especially those for dry adjustment work.

## Instruments for adjustment grinding of zirconia with water cooling

The most important instruments to be mentioned are the zirconia HP diamonds. These instruments are coated with specially selected diamonds and are manufactured in four different shapes. Small adjustments can be carried out with these instruments trouble-free under water cooling. As an alternative, DFS Diamon also offers some sintered and electroplated FG diamonds for manual adjustment grinding.
Two options are available for cutting off connecting bars, the conventional perforated diamond disc Sepaflex® and the gold-coated Sidiaflex Gold. The significantly longer lifetime of the Sidiaflex Gold is due to the full diamond on its edge. The gold coating moreover has the technical advantage of reducing heat generation by sparks.

## Circone diamonds for parallel milling

Another option for working zirconia is to use the hydro air carver with water cooling. DFS Diamon offers FG diamonds specifically developed for this purpose with diamond coating ranging from medium (blue) to hyperfine (pink). The Circone diamond are available as a set in cylindrical and conical shapes (1° and 2°) and as refills.

# DFS DIAMON DIAMOND DISCS AND SEPARATING DISCS

## Flexible diamond discs

For many years, developing and manufacturing innovative quality diamond discs has been another one of DFS Diamon's product range focal points. Diamond discs are available in different strengths and diamond grit sizes. After decades of perfecting our expertise in diamond coating, it is again put to use by applying the proven multi-layer diamond coating technology with individual embedding similar to HP diamonds or diamonds used in dentistry, enabling exceptional and long-lasting product performance. The exclusive use of natural diamonds ensures efficient performance whenever needed.

Next to popular discs, such as the Flexiflex®, the Superflexiflex® and the Top-Flex (each with different diamond grit), a variety of perforated disc designs are available. These allow technicians to monitor the workpiece by looking across the discs while the disc is rotating. The perforation also improves the air flow and thereby the cooling. The most popular discs are the Sepaflex® (available in two different strengths), the Polyflex and the Plexoflex.

Both discs with double-side coating and single-side coating are available; for example the popular discs Flexiflex® and Superflexiflex® are manufactured in both variants. Many discs are also produced in different diameters, mostly in 190 and 220.

DFS Diamon offer several unique discs for specific tasks such as the rigid Cono-Disc and the Double Action which features coatings in two different diamond grit sizes on either side. This improves separating and contouring if the technician prefers to have abrasion on only one side.

Another DFS Diamon specialty are the Hydroflex discs with ultrafine diamond for finishing, which hold the world record for the thinnest diamond disc.

In addition to producing discs for working ceramics, DFS Diamon also manufactures discs for acrylics, such as the Rapidocut, Sensoflex, Cutflex and Laserflex discs.

## Separating discs

The reinforced DFS Diamon shark discs are available in three different diameters/strengths for efficient cutting of non-precious alloys. The Powercut disc is an alternative option for non-precious alloys as well. The popular Golden Devil disc is designed for precious and other alloys.

## Plaster discs

DFS Diamon is a leading manufacturer of high performing plaster discs. Various discs for use in straight handpiece are available in diameters between 320 and 450 1/10 mm. The perforated discs High Tech and Plastro have proven to be especially popular and have stood the test of time in countless dental labs around the world.
Electroplated diamond plaster discs with multiple layers of diamond are also available for use in model saws. The product range includes many types with different inner and outer diameters and disc strengths so that a suitable disc is available for most popular models of models saws.

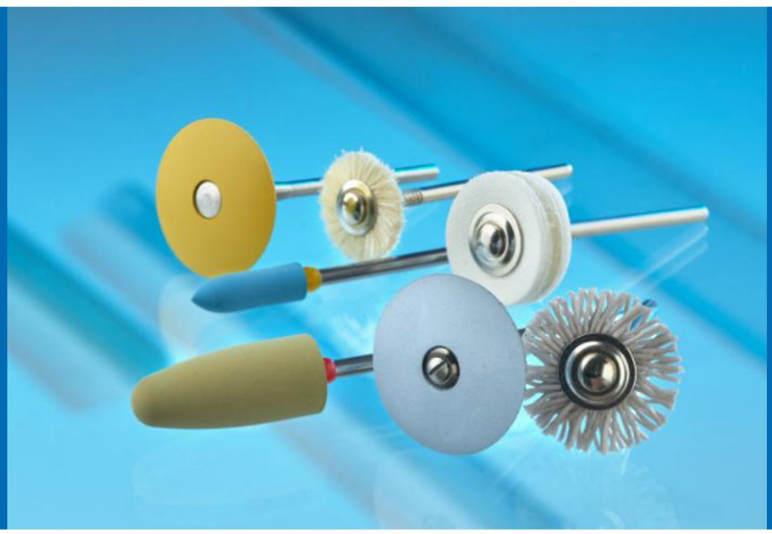
## Wire brushes

The diamond-coated wire brushes are designed as brushes to finish stippled partial surfaces on model plates and as brushes to finish surfaces of partials and for cleaning of crown interiors.

## Mandrels and reducers

A complete range of mandrels for discs and polishers plus reducers in various designs.

# DFS DIAMON POLISHERS AND POLISHING SYSTEMS



## Upofix® polishing system

The Upofix® dental polishing system consists of six polishing brushes with fibers ranging from extracoarse to superfine in terms of aggression and strength. The main advantage of this system is that a broad range of materials can be polished in one of two steps with only six polishers. The fibers adapt to the shape of the workpiece and allow the technician to effectively polishand finish all surfaces including difficult areas such as interdental spaces.

Please note that the Upofix® polishing instruments should be used at low speed (2000-5000 rpm) using high-torque micro motors. As a general rule, low speed and firm pressure results in light abrasion whereas technicians should reduce pressure at slightly higher speeds in order to achieve shine or high shine on the workpiece. Intermittent pressure and circular, diagonal movements improve the polishing result.

Upofix® polishers 0 to 3 are intended for metals with Upofix® I and II as prepolisher and shine polisher respectively. Upofix® III and IV are best suited to ceramics as prepolisher and shine polisher and Upofix® IV and V are best used on composites and acrylics as prepolisher and shine polisher.

## Polishing of zirconia

A number of special polishers have been developed by DFS Diamon as alternative polishing and finishing instruments. First among them are the Unifix polishing instruments which are highly effective at low speed on ceramics and composites. This is due to their diamond-impregnated fibers. The combination of goat hair brushes and DFS Diamon Xtreme polishing paste deliver excellent polishing results on precious metal alloys, composites and acrylics. The cotton polisher Supershiny and the two Hypofix polishing instruments are intended for dental metal alloys. The diamond-impregnated felt polisher Diafix® delivers the ultimate high shine on ceramics and composites.

## Polishing brushes

The idea behind the development of the DFS Diamon polishing brushes is to provide technicians with an easy and efficient polishing solution and for them to have better control while operating the brushes. For this reason we integrated the polishing paste into the polishing brush so that sputtering and smearing of the polishing paste can be avoided.
Hypofix Polyacryl is intended for polishing of acrylic dentures whereas Hypofix-Alpha and Beta are suitable for dental metal alloys

## Polishers

The assortment of DFS Diamon polishers contains suitable polishers for all relevant dental materials used in the dental lab. We recommend the Duropol polishers in two shapes for coarse polishing of acrylics. The Palapol polisher range has been popular for decades worldwide as a convincing, effective polishing solution for all acrylics including soft lining material. The Palapol polishers are available in three shapes in two polishing steps.

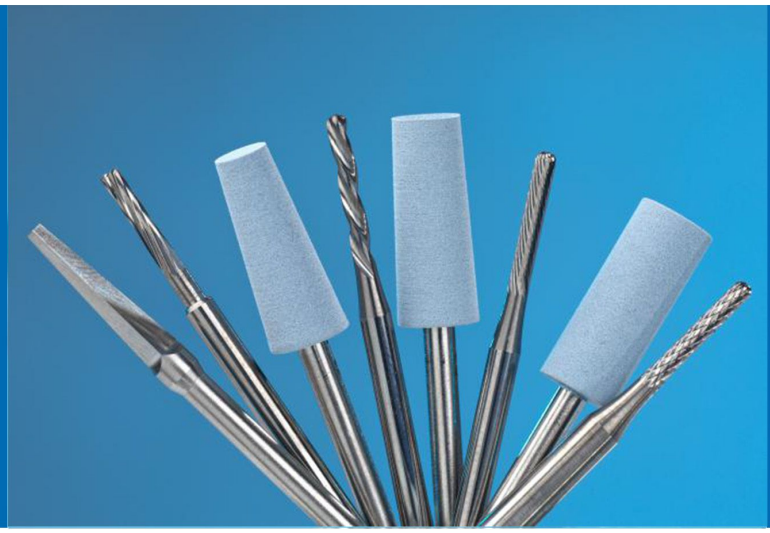
Uni-Pol and Multipol polishers are intended as metal polishers, with the latter available again in three shapes and two polishing steps. Polo and Polli are additional polishers suitable for dental metal alloys.

For ceramics we recommend the Top-Glaze polishers which ensure outstanding polishing results on ceramics as well as on metals thanks to the high diamond concentration.

The Silco-Pol universal polisher is also popular worldwide as it sets the industry standard in terms of efficiency on precious alloys, non-precious alloys, composite and ceramics.

Titanopol has been developed for polishing titanium with three shapes and three polishing steps available.

# DFS DIAMON INSTRUMENTS FOR MILLING TECHNIQUE



The DFS Diamon instruments for milling technique were developed in order to provide technicians with a comprehensive yet compact range of robust, efficient and long-lasting milling burs. The objective was to limit the number of instruments needed and to deliver consistent quality results with the least amount of investment and effort needed.

As a general rule, carbide burs are available in three different cuts, coarse (green) as a first milling bur, medium (blue) as a milling bur and fine (red) as a finishing bur. The cylindrical burs for parallel milling at 0 degree are manufactured in three different diameters (010, 015 and 023) which matches the usual standard. In addition, carbide burs are available at two, four and six degree angles, at each angle with one diameter. At two degrees the diameter is 023, at four degrees 031 and at six degrees 040.

In addition to these carbide milling burs, a number of instruments have been added for specific applications. Wax milling burs are available in identical diameters as the milling burs or alternatively as wax scraping instruments at zero, two, four and six degree angles.

Several additional instruments for parallel millings are useful complements to the milling bur range. These include Twisters, helpful for milling interlocks, a centering bur and shoulder cutting burs with a cut design at the tip with the function of protecting already milled surfaces whilst milling shoulders. Groove cutters for milling of lateral grooves complete the product range.

In addition to the burs, DFS Diamon offers the Millipol polishing range at different angles and diameters for finishing surfaces, including a polisher for milled bracings and ledges. The polishers are available in three polishing steps, as prepolishers (brown), and two gradated polishers in blue (fine) and grey (superfine).

To complete the milling technique range, a transfer jig can to be used in the parallelometer or in the milling machine in order to transport cast objects from the master to the milling model. The transfer jig allows s imultaneous transfer of up to eight objects, while securing a stable positioning on the milling model.

A reduced set of burs is available for use in milling machines requiring a shank diameter of 3 mm.

The popular Implantan milling burs for titanium abutments deserve a final mention. The specially designed cutting geometry enables technicians to efficiently and conveniently perform milling operations on titanium. The burs deliver smooth titanium surfaces, resulting in facilitated polishing.

# SYNAROCK PLASTER AND INSTRUMENTS FOR PLASTER


## SynaRock plaster

The DFS Diamon plaster SynaRock is a thixotropic superstone class 4+, the ultimate synthetic blend with unmatched bending/ breaking strength. SynaRock delivers optimum fit and represents the standard for accurate reproduction concerning hardness, expansion behavior, edge strength and stability. With its extraordinary flow characteristics you will achieve outstanding detail and precision. The shiny and smooth surface allows easy cleaning of the model. Synarock can be used in combination with all materials– alginates, hydrocolloides, silicones, rubber, polyesther etc.

Pouring time at 20°C is 6-8 minutes, after 40 minutes the plaster model is fully set. Synarock is available in buckets of 3,6 and 25 kg and in bags of 3 kg.

## Durolan die spacer

After applying Durolan die spacer, surfaces are smooth and scratch-resistant. It's even, homogeneous texture improves the fit of restoration noticeably. Durolan is available in bottles containing 25 ml in different thicknesses and colors including blue (5µ), red (10µ), silver (13µ) and gold (15µ). The Durolan clear (thickness 3-5µ) acts as a surface hardener to avoid abrasion of occlusal contact points of plaster models. The clear die spacer is also suitable for insulating or hardening basal plaster surfaces and as a first layer before applying a colored spacer. A thinner is also available to top off the die spacer range.

## Other instruments and consumables for working on plaster

Plastrim diamond burs have been developed for adjusting and grinding on plaster models. Smooth and vibration-free grinding without clogging is possible due to the instrument shape and the diamond coating design. The layout of the diamond coating supports the removal of debris and avoids interruptions due to cleaning because of clogging.

The silicone spray and Isofix have been developed to insulate different materials. The silicone spray reliably separates plaster against acrylics, rubber, metal, wax and plaster. The spray is available in a 75 ml can. Isofix forms a microfilm of 3-5µ after a single application per brush. Crowns and bridges can be lifted off easily tension-free and stains on the inner parts of the crowns can be avoided. Isofix is solvent-free and water soluble. The packaging unit consists of a 25 ml brush bottle and a refill bottle of 500 ml.

Plastodur deserves mentions as a surface hardener to avoid abrasion of the contact points of plaster models during trial articulation. It is applied with a brush onto plaster surfaces, scratch-resistant after 15 min, hard and fast after 30 minutes.

The DFS Diamon duplication gel completes the range of consumables in this segment. The duplication gel is available in three variants with the pink and clear gel suitable for plaster and the green gel intended for partial framework investments and resin casting technique. All DFS Diamon duplicating gels are reversible.

# WAX AND INSTRUMENTS AND MATERIAL FOR WAX


## Modelling instruments

The new product range of manual modelling instruments for the dental lab consists of high quality instruments, the design of which meets the industry standard technicians are familiar with. Five different waxing instruments PK Thomas (also available as a set), plus the modelling instruments LeCron and Zahle meet any wax modelling needs. This range also contains two Fahnenstock wax knives in different lengths.

Other indispensable instruments for the dental lab include the plaster and mixing spatulas, a soldering tweezer and the Mosquito-plier curved. A scalpel holder and replacement blades complete the range.

DFS Diamond has also developed the Titanoform double handle as an alternative to the modelling instruments. Seven different instrument ends are available with or without titanium nitride coating. The handles are anatomically shaped so that relaxed modelling is guaranteed.

## Debubblelizer

The DFS Diamon silicone and wax wetting agent (debubblelizer) releases and smoothens silicone impressions and wax models. Applied with the pump spray bottle included in the set it leaves surfaces smooth and evaporates residue-free within 5-15 seconds. After a short drying time the debubblelizer enhances the precision of reproductions, especially with inlays and weakly defined preparation edges. Crown inner parts and fine fissures are reproduced bubble-free, excellent reproduction of fine retention and bracket-parts of partial frameworks.

## Wax and wax wires

DFS Diamon modelling wax is available in 60 g boxes in 5 different colors. The easy handling and optimized wax hardness facilitate the modelling process. The assortment also contains special waxes such as the dipping wax Flexidip to create elastic wax models that maintain their shape. A special cervical wax (increased hardness) and milling wax, undercut wax and stick-on wax complete the wax range. Wax wires are available in six different diameters with 250 g each on a roll. Casting pears in diameters of eight and nine millimeters facilitate th e casting canal modellation.

## Okkluflex occlusal surface modelling

The Okkluflex system was developed by DFS Diamon for fast and easy modelling of gnathological occlusal surfaces, its unique system creates individual occlusal surfaces in 2-3 minutes. Okkluflex is available as a set containing 16 patterns and is made of transparent, highly tear-resistant Silcotex. The patterns can be used with wax, ceramics and composites; in case of ceramics we strongly recommend using the Kera-Sep spray for easy separating. The individual patterns are available as refills packed as 2 pcs.

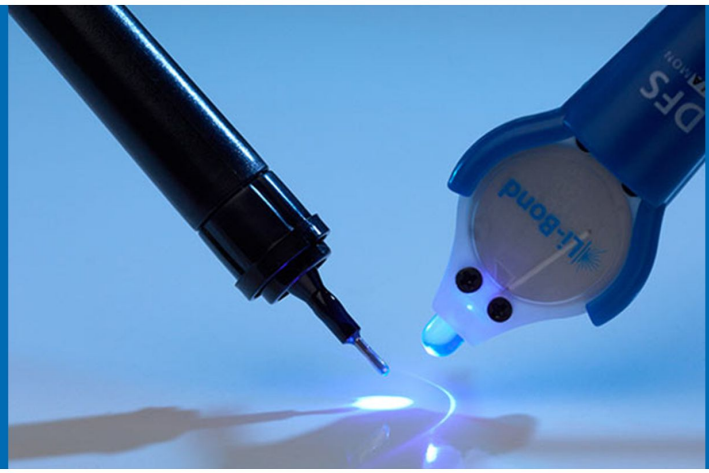
## Wax relief parts, wax patterns and accessories

Singles wax relief parts have been developed as a useful accessory for partial framework which can be easily attached with adhesive spray. The individual shapes are available as replacement (packaging unit 20 pcs) in addition to the intro set. This product segment also contains the Quattro Intro-Set consisting of four teeth per link, also available as replacement parts of 10 pcs each.

DFS Diamon wax patterns contain a range of well-established wax patterns. In addition to the usual patterns such as molar clasps, ring clasps, bonyhard clasps and other, we also offer preparation wax and casting wax.

The DFS Diamon ultrafine wax smoothing brush is a useful accessory to smoothen wax surfaces.

# LI - BOND PEN : LIGHT-CURING FIXATION AND MODELING MATERIAL

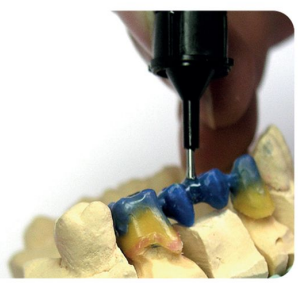




## Li-Bond Pen

**Order-no.: 26600**

- Content: 4 g
- Extremely fast-curing, highly resistant bonding material
- Firmly attaches all commonly used materials in dental labs within seconds. Can also be used as modelling material, e.g. for telescopes and attachments. Excellent neutral contraction behaviour, burns without residue. Can be used at a range of temperatures.

## Refill cartridge

**Order-no.: 26602**

- Content: 2 x 4 g


## LED light

**Order-no.: 26603**

- Content: 1 pc

# CASTING SYSTEM THERMO-FIX, INVESTMENTS AND ACCESSORIES


## The ringless casting system Thermo-Fix 2000

The ringless casting system Thermo-Fix is the first system which allows free expansion of the muffle in all directions. The fit of crowns and bridges improves significantly compared to conventional systems wherein the expansion will naturally take the direction of least resistance, i.e. upwards. With the Thermofix system, the setting expansion is both laterally and vertically possible, which not only improves the fit but also reduces adjustment work and improves the economics of the process.

The system consists of base formers in the usual sizes 1, 3, 6 und 9, a special foil in the respective sizes which closes with velcro onto the base former and an adhesive rail. The base former and the inner side of the foil require an evenly applied coverage with silicon spray before pouring the investment. After positioning the wax model onto the base former, the investment (mixed as usual with liquid and water) is poured into the ring. After a few minutes, which are indicated by the color temperature indicator on the foil ring, the foil can be removed, allowing the muffle to expand freely in all directions while setting.

The setting expansion will be complete after approximately 25 minutes following the removal of the foil ring. The muffle can then be placed into the preheated oven. As Thermofix improves the quality of the fit of crowns and bridges, the system also improves process productivity especially regarding non-precious alloy restorations.

## Investment

The phosphate-bonded investment Vesto-Fix® is graphite-free and especially suitable for non-precious alloys. Both regular and speed heating is possible. Technicians can control the fit by adjusting the ratio of liquid to distilled water in order to meet their specific requirements. The high-quality, controlled raw materials and the gentle mixing process make sure that users will experience consistent, replicable accuracy and quality. De-vesting cast objects from a Vesto-Fix® muffle is easy.

Diavest and Diavest Turbo are the DFS Diamon investments for partial framework; the former for regular heating, the second for speed heating. Both investments are phosphate-bonded und graphite-free.

Orovest has become an increasingly popular investment as it is not only suitable for precious alloys but also for pres ceramics including lithium disilicate.

All DFS Diamon investments are packed with sufficient liquid in different packaging units between 4,8 kg and 20 kg. The expansion liquid is also available single in 1, 3 or 5 liter sizes.

## Adhesive spray and Kera-Sep spray

Both sprays are important and helpful accessories for casting processes. The adhesive spray is designed for the application of wax relief parts before casting. It leaves a thin layer when evenly sprayed onto either hardened or unhardened models. Wax relief parts stick and will not detach during the investment vibration. Modellations are enhanced as waxing of single parts is not required.

Kera-Sep Spray is a silicone-free separation spray for ceramics against plaster. We recommend spraying the objects twice at a 1 min interval, spray traces remaining on the ceramics burn without residue.

# DFS DIAMON NON-PRECIOUS DENTAL ALLOYS INCLUDING ACCESSORIES


## Biodur® Soft

The nickel-free dental alloy Biodur® Soft (CoCr basis) is a non-precious alloy type 4 suitable for all high-fusing ceramics. Biodur® Soft can be processed with all applicable common casting techniques. Biodur® Soft is easy to work with, given it's Vickers hardness of 314 HV, moreover the alloy leaves a pleasant oxide. The liquidus point is 1395°C, the casting temperature is reached at 1500°C.

## Niadur®

This non-precious dental alloy on nickel basis is an alloy type 3 for ceramic crown- and bridgework. It can be used with high-fusing ceramics, with a Vickers hardness of 194 HV 10 Niadur® is easy to process and to work on. Niadur® is popular worldwide and has been successfully used for decades to produce quality dental prosthetic work.

## Diadur®

Diadur® is a nickel-free casting alloy type 5 for partial frameworks. The Vickers hardness is 370 HV 10 and therefore meets all requirements for a modern casting alloy for partial frameworks.

All DFS Diamon non-precious alloys are available in a packaging unit of 1 kg or as 10 kg in bulk.

As a helpful and necessary accessory to the range of dental alloys, DFS Diamon offers the highly effective flux material Fluxur, which is suitable for both precious and non-precious alloys. The solders Soldur® C for non-precious alloys on CoCr basis are available as sticks of 1,5 g or 0,5 g. For nickel-based alloys such as Niadur®, the solder Soldur® N is available as a special nickel-based solder.

All solders have excellent flowing properties and meet all requirements for a modern dental solder. Laser wires are available on CoCr and titanium basis.

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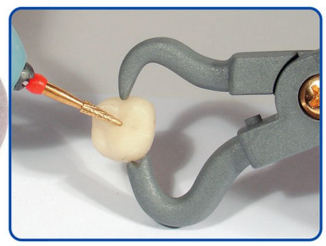
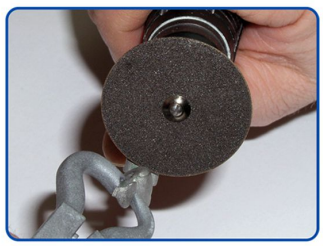
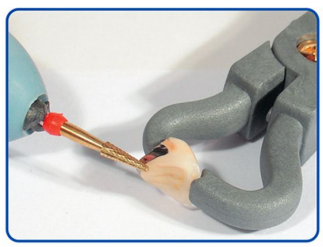
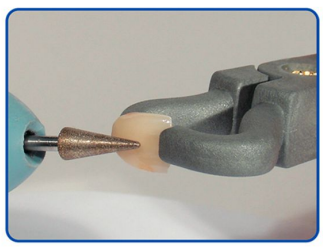
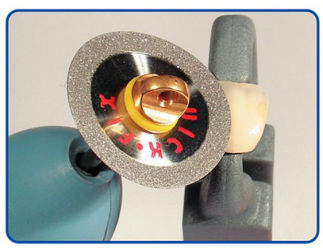
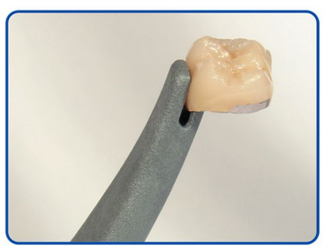
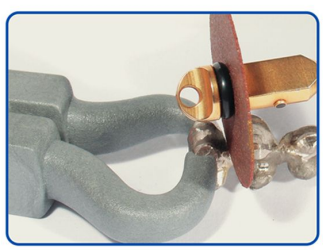
# DFS CROWN MASTER

## CROWN MASTER

**Order-no.: 12019**


## Your benefits:

**1.**
Prevents accidental injury and protects hands and fingers.

**2.**
Heat resistant up to 150° C

**3.**
Provides access to all surfaces and margins of crowns and inlays

# PRODUCTS FOR WORKING ON CERAMICS


This product segment contains the most important dental ceramic instruments for use on porcelain.

## Ceramic brushes

The Kera-Brush and Kera-Brush S are the ultimate quality brush for the demanding ceramist. Manufactured with Kolinsky hair, the brushes contain moving balls inside their tip, which keep the tip of the brush in shape after dipping it in water and quickly shaking it to move the balls. Kera-Brush and Kera-Brush S are different only in size.

DFS Diamon offers a series of additional special brushes for porcelain, among them the flat brush with natural hair for applying opaque and glaze material. The Mini-Brush is a special brush for occlusal surfaces, the cleaning brush on the other hand is helpful to clean the inner surfaces of crowns (both with natural hair). The Stain brush made from synthetic hair is utilized for staining ceramics and finally the Smoothing brush is a great option for smoothing ceramics.

Next to these special brush designs, the product range also includes standard ceramic brushes for porcelain either with synthetic or natural hair in sizes 00 to 14.

## Forceps

The DFS Diamon Kera-Grip series of forceps consists of three variants (straight, curved and vaulted), each one with diamond inserts included. These inserts are also available as spare parts. The Crowny forceps, an elegant crown holder for the demanding ceramist (also with diamond inserts) and the Teleskofix forceps with specially shaped diamond inserts complete the assortment in this section.

## Firing trays

The DFS Diamon firing trays are characterized by extremely low temperature absorption and trouble-free heating /cooling down. Firing trays are available in two different shapes, either as two pieces per packaging unit or in a set together with metal pins. Metal pins are available straight, for incisives, with nose for incisives, curved for premolars and for molars.

## Diamond spray

The DFS Diamon diamond spray is intended for high shine polishing of ceramics and composites as well as for secondary parts of telescopic crowns and attachments (especially non-precious alloys). The ultrafine diamond grit (3-5µ) will not create abrasion or impact the structure of surfaces. High shine will appear shortly after spraying and polishing with any suitable polishing instrument.

## Polishing paste

The polishing paste Xtreme is a new development featuring a high concentration of diamonds suitable for all ceramics including zirconia monoliths. The exceptional concentration of diamonds rapidly delivers a high shine which nothing left to be desired. The texture of the polishing paste facilitates polishing e.g. when using a goat hair brush for polishing.

## Texture marker

The newly developed texture marker gold helps to visualize surface structures in different colors (plaster/ceramics). After a single, thinly spread application, the textures of plaster and porcelain are clearly visible. The texture marker gold can be easily removed with water and does not discolor the plaster.

# OCCLUSION SPRAY, TELESCAN AND OTHER CONSUMABLES


## Okklean

The DFS Diamon Okklean occlusion spray has been extremely popular around the world for decades. The spray is available flammable and non-flammable, in each case in green, red, blue white and gold. The packaging unit of the occlusion spray is a bottle containing 75 ml including a tube nozzle.

Okklean occlusion spray is insoluble in water and alcohol and therefore does not discolor the plaster models. The spray is intended for the marking of contact points on prosthetic work and crowns via a thin easily dosed color film. The thickness of the occlusion spray film is only 6-8µ. Okklean can be easily removed with a brush, or in case of deep or porose materials with a steam-jet.

## Telescan CAD/CAM scan spray

Telescan spray is available in white and red colors. It's intended use during CAD/CAM scanning is to avoid the mirror effect on scanned objects, thereby improving the scan quality. In addition, Telescan can be used for friction testing on telescopic crowns and attachments. The fine, dry powder film can be easily removed with a brush. Telescan is insoluble in water and alcohol.

## Other consumables

The solder heat protection paste with Thermofill, reliably protects acrylic parts of CPD while soldering. The paste is heat-resistant up to approximately 1200°C, however, after soldering the solder, the heat protection paste can be easily removed under running water.

Galvanet micronized conductive lacquer contains pure silver which makes all plaster and metallic surfaces conductive, e.g. for use in the electroplating technique.

The Top Glue DFS Diamon speed glue is a superfast speed glue on methyl ester basis intended for easy and accurate assembly of many materials such as plaster, metal, acrylics, wax, ceramics etc. Top Glue can also be used as a surface hardener and sealer on dry plaster. Compatible with Durolan die spacer.

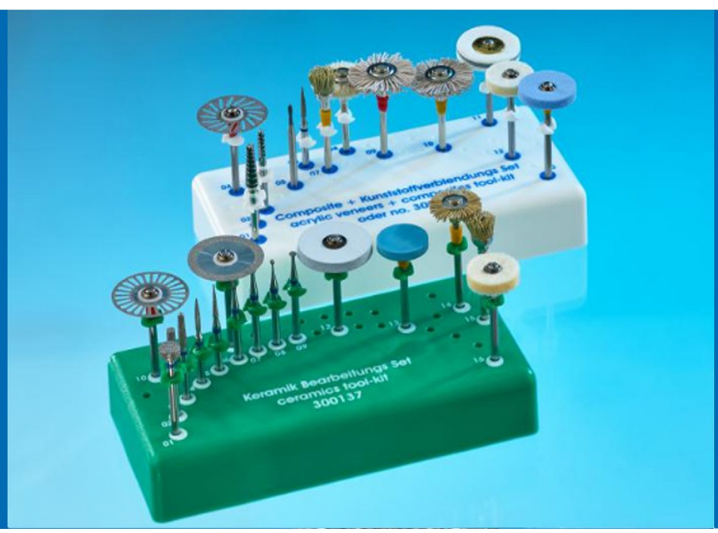
# DFS FLUXUR MATERIAL


## FLUXUR

Order-no.: 15085

- Content: 45 g
- Highly effective flux material for precious and non-precious dental alloys

# TOOL KITS FOR DENTAL TECHNICAL APPLICATIONS




## TOOL KITS

DFS Diamon has created tool kits for the most important technical applications that comprise a complete set of instruments. As a result, technicians have an easy option to source relevant instruments for specific applications.

The tool kits are available for model preparation, titanium, non-precious alloys, ceramics, precious alloys, composite and acrylics veneers, acrylics and milling technique.

Additional sets have been developed according to MDT Wolfgang Weisser for both zirconia and lithium disilicate.