DR. KAISER
precision through diamond

DRESSING OF GRINDING WHEELS

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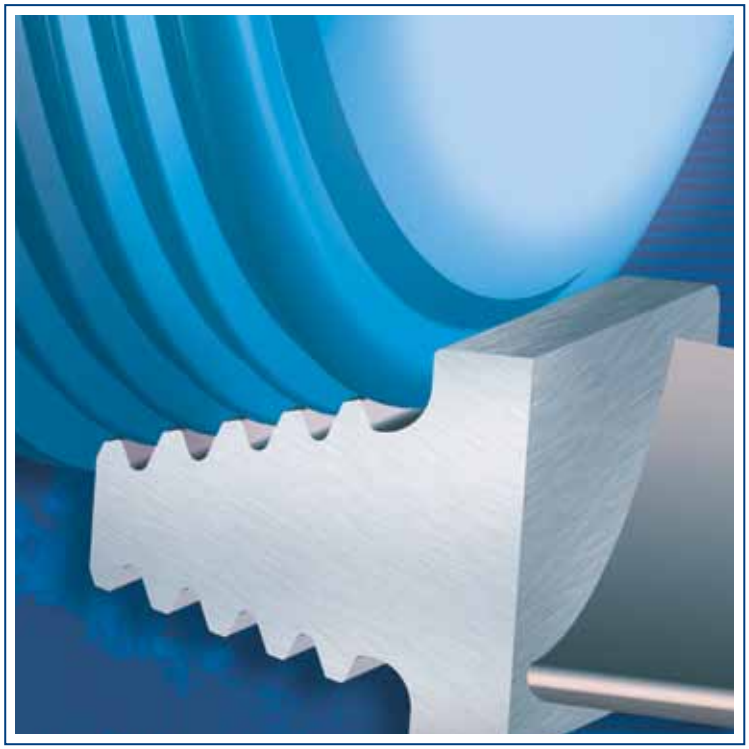
PROFILE ROLLERS



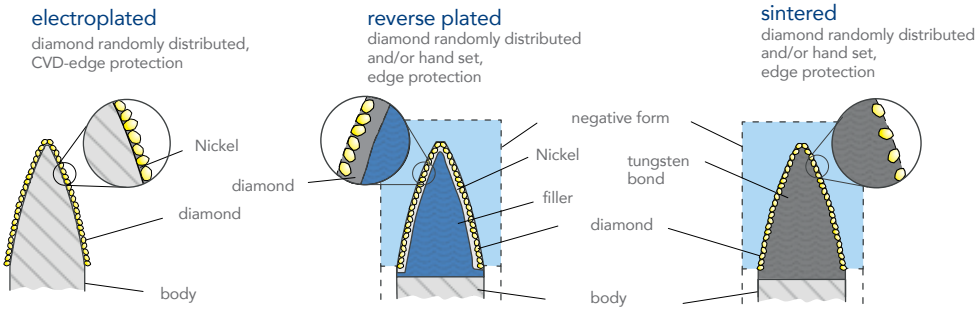
THE CLASSICAL PROCESS

Single axis rotary diamond dressers are used to form grinding wheels for many different kinds of mass production. Shorter dressing time and long tool life leads to high productivity and consistent process conditions. Many kinds of conventional grinding wheels, and in special cases super-hard grinding wheels, can be dressed with this dressing method. CD dressing (continuous dressing) is often used for dressing grinding wheels used to machine hardened work parts as well as super-alloy fine profiles. For all types of dressing applications, DR. KAISER delivers application specific dressing tools to achieve the required tolerances and tool life.

USED IN MANY APPLICATIONS:

- Threads
- Turbine Blades
- Bearing Journals
- Bearing Races
- Twist-free Surfaces
- Engine Valves
- Fuel Injector Components
- Shearing Blades
- Gears
- Engine Components
- Transmission Components
- ...

OVERVIEW OF THE MANUFACTURING PROCESSES



OUR MANUFACTURING PROGRAM

DESCRIPTION	TYPE	MANUFACTURING PROCESS/BONDING	DIAMOND TYPE USED	EDGE PROTECTION	REMARKS
Profile Roller	R	Reverse sintered with Tungsten bond	Hand set H Random G CVD diamond C	Natural diamond K CVD diamond C	Long tool life
Profile Roller	PG	Reverse plated with Nickel bond	Hand set H Random G	Natural diamond K CVD diamond C	Highest precision, fine profiles
Profile Roller	RG	Direct-plated with Nickel bond	Random G	CVD diamond C	Pre-profiling, prototype applications

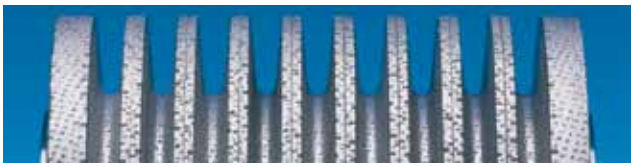
DRESSING BY SINGLE AXIS INFEED

OPTIMIZATION OF THE PROCESS

Dressing parameters such as infeed, dresser rotation and speed ratio can be influenced significantly by the rotary diamond dresser design and the diamond pattern (grit size, setting pattern and type of diamond), as well as the surface preparation of the diamond dresser. DR. KAISER's long-term experience in designing dressing tools is used to optimize process behavior of your dressing tool.
Special wear protection with high quality diamonds or our proprietary CVD diamond prevents key sections of the diamond dresser from premature wear.

handset diamond

diamond randomly distributed with hand set edge protection



ACCURACY

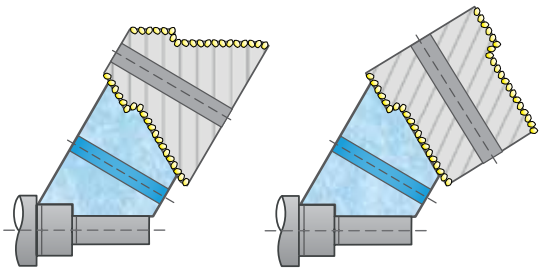
All tools of DR. KAISER are manufactured to the highest accuracy. Reverse-plated manufacturing technique is used to achieve the highest precision for profile dressing tools. Reverse sintering technique produces very long tool life in combination with diamond reinforcing to high-wear sections of the diamond tool. For applications such as pre-profiling and prototype production, direct-plating technique is used as a cost-effective and multi-replatable dressing tool solution. Every tool has measuring areas which can be used to adjust the tool at the machine by checking the run-out of the tool.

DELIVERY

The installation of rotary dressing tools is a high-precision operation. We can deliver dressing tools mounted on customer-supplied arbors or as a self-mounting system shipped in a wooden box. If desired, we can include a coupon of the dressing tool profile.
Each profile dresser will be delivered with an inspection document which can be custom-designed for customer inspection requirements.

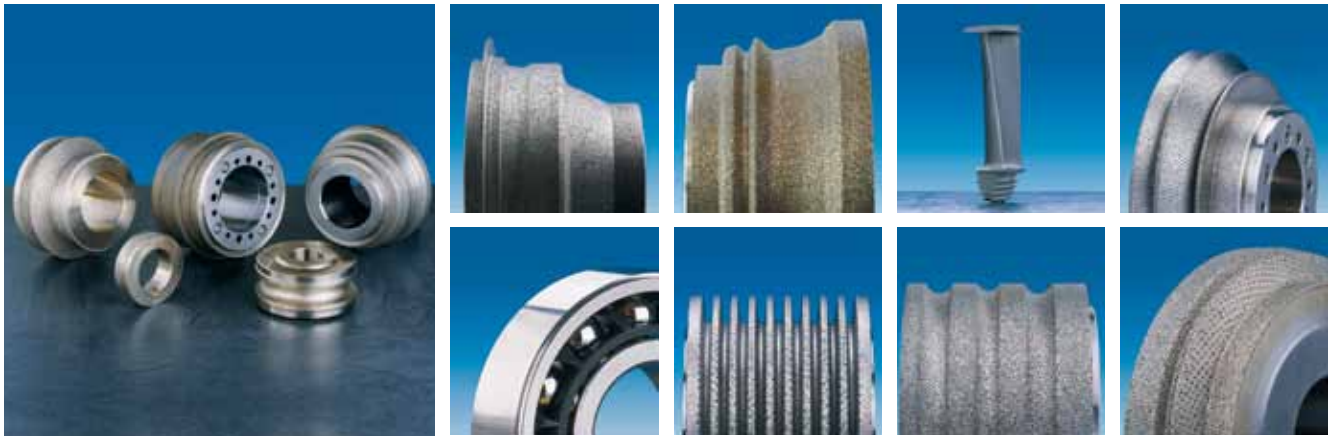
POSITIONING OF PROFILE ROLLERS

For design of profile dressers used for angle-approach grinding applications, the position of the rotary dresser axis relative to the grinding wheel axis is important. Our design department will discuss all important machine and application issues before the design is developed. An approval drawing of the proposed dresser design is available for customer review before manufacturing begins.

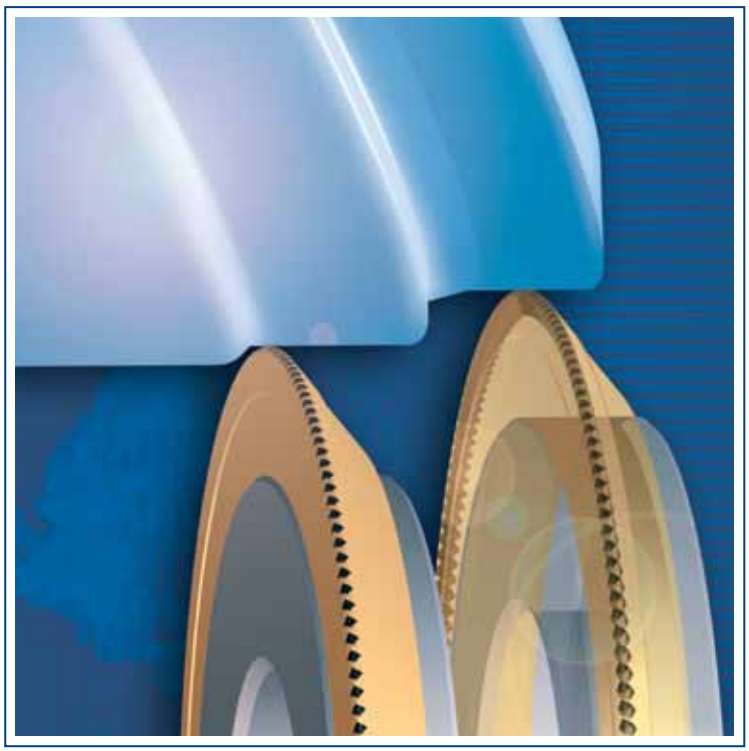


Further products for related processes:

- Sets of diamond dressing discs, profile rollers and multi-rib profile dressers for gear grinding
- Pre-profiling dressing tools (electroplated and sintered bond)



DRESSING DISCS



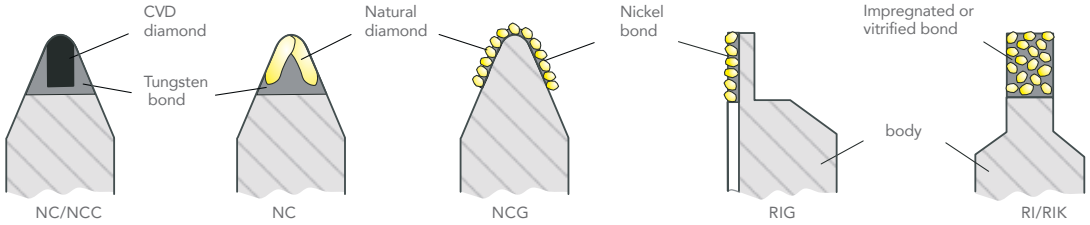
MULTI-AXIS ROTARY DRESSERS

The CNC dressing technique can be used in all fields of grinding production, especially for small and medium production lot sizes and for prototype applications. The flexibility of the CNC control allows changing of the production flow easily. CNC rotary dresser cost-per-piece is low compared to plunge roller dressing. All different kinds of grinding wheels can be dressed. CNC dressing discs with natural diamond or CVD diamond are used to dress conventional grinding wheels. Self-sharpening rotary dressing tools for dressing superabrasive grinding wheels are available. Precise optimization of the dressing tool and spindle system can achieve best run-out tolerances and best dressing results for fine dressing applications.

VARIATIONS

Stable Form

Self-Sharpening



STABLE FORM

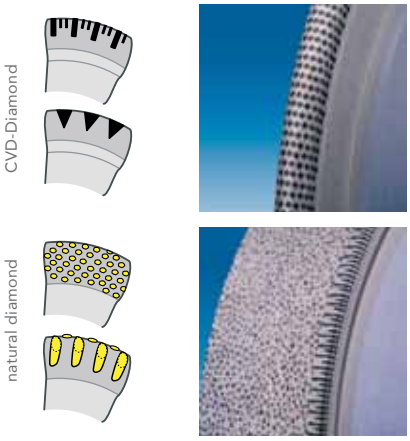
DESCRIPTION	TYPE	MANUFACTURING PROCESS/BONDING	DIAMOND TYPE USED	EDGE PROTECTION	REMARKS
Dressing Disc	NC	Reverse sintered with Tungsten bond	Hand set H Random G CVD diamond C	Natural diamond K CVD diamond C	Combinations possible
Point Crush Dressing Disc	NCC	Reverse sintered with Tungsten bond	Hand set H Random G CVD diamond C		Speed ratio q_d =1
Dressing Disc	NCG	Electroplated with Nickel bond	Random G		

SELF-SHARPENING

Dressing Disc	RI	Impregnated with Tungsten bond	Hand set H Random G		
Dressing Disc	RI	Impregnated with braze bond	Random G		
Dressing Disc	RIG	Electroplated with Nickel bond	Random G		
Dressing Disc	RIK	Impregnated with vitrified bond	Random G		

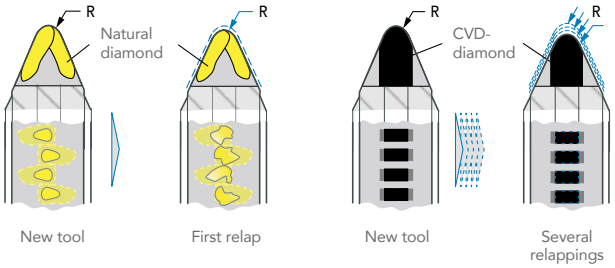
OPTIMIZATION OF THE PROCESS

Besides the classical parameters of infeed, dresser rotation and speed ratio, the process can be significantly optimized by the manufacturing process of the tool, the diamond pattern (grit size, setting parameters and diamond quality) and the geometry of the profile.
The high demand on very precise geometries can only be reached by using CVD diamond. With this technique, radii for fine profiles down to 1/100 mm can be reached.



RELAPPING OF DRESSING DISCS

CVD diamond allows multiple relapping of CNC dressing discs. This reduces the tooling costs significantly and the tool can be used for a long period in your production. After relapping, the process parameter is almost the same as a new dresser even after a number of relapping procedures.



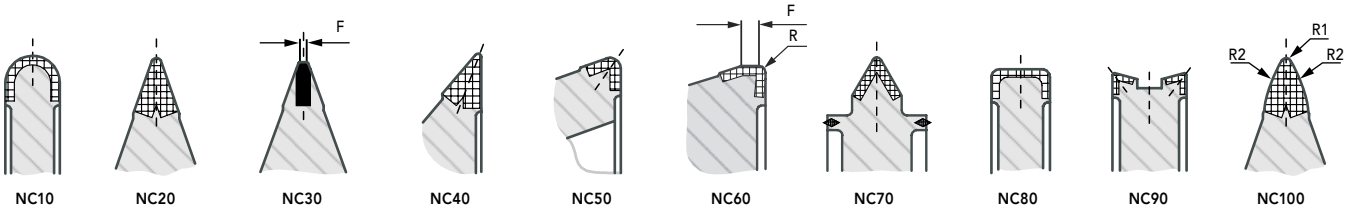
ACCURACY

All DR. KAISER tools have indicating bands for axial and radial run-out inspection while they are mounted on the customer machine. We deliver the tool including an inspection document and CNC setup data for your machine, individually designed according to your CNC requirements.

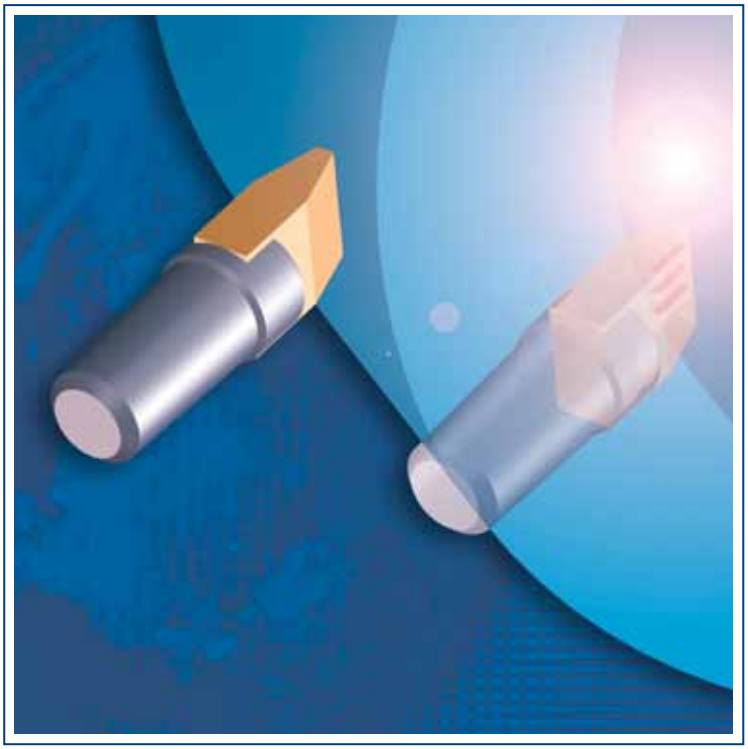
Further products for related processes:

- Spindle Systems and Drive Components
- Stationary dressing tools if no dressing spindle is available

STANDARD FORMS



STATIONARY DRESSING TOOLS



HIGHEST SURFACE QUALITIES

Stationary tools are used on all types of grinding machines and are a simple alternative to CNC rotary dressing discs.
Stationary dressing tools can be used to produce simple straight profiles on grinding wheels as well as complex forms using the machines CNC capabilities. Stationary dressing tools can be used for a wide variety of applications from internal grinding with very small grinding wheels to much larger wheels as would be used in automotive cam and crankshaft grinding.
Specialized tool holders allow stationary dressing tools to be adapted to any grinding machine. A rigidly mounted stationary dressing tool can provide excellent surface finishes on parts being ground.

STABLE FORM

DESCRIPTION	TYPE	MANUFACTURING PROCESS/BONDING		DIAMOND TYPE USED		REMARKS
Profile Dresser	AFP	Tungsten bond Carbide bond	W H	CVD diamond MCD	C M	Relappable
Shoulder Dresser	AFS	Tungsten bond Carbide bond	W H	CVD diamond MCD	C M	Constant profile angle 90° relappable
OD Dresser	AF	Tungsten bond Carbide bond	W H	CVD diamond MCD	C M	
DIAFORM Dresser	AFR	Tungsten bond	W	CVD diamond	C	Relappable
Triangle Dresser	Z	Carbide-diamond composite		PCD CVD diamond	P C	W and w/o plug
Dressing Plate for Gears	ZF	Carbide-diamond composite		PCD CVD diamond	P C	See “gear dressing”

SELF-SHARPENING

Needle Dresser	NF	Tungsten bond Carbide bond	W H	Natural diamond needles	H	
Multi-point Dresser	KF	Tungsten bond Carbide bond	W H	Natural diamond grit	G	
Multi-point Cartridge	VP	Tungsten bond	W	Natural diamond	G	Grit size < D601
High Performance Cartridge	HP	Tungsten bond	W	Natural diamond	G	Grit size > D701

WEARABLE

Rotatable Dresser	AR	Tungsten bond Carbide bond	W H	Natural diamand CVD diamond MCD	H C M	
Single-point Dresser	EA	Tungsten bond	W	Natural diamond	H	Various carat weights available

STATIONARY PROFILE DRESSERS

The behavior of synthetic diamond is unique. Consistent quality and a wide variety of synthetic diamond shapes create new opportunities for the stationary dresser industry.

Stationary dressing tools such as "chisel types" and those made using triangular shaped synthetic diamond plates are considered to be "form stable" tools. This means that the diamond surface does not wear quickly. These tools are primarily used when there is a requirement to dress profiles into grinding wheels. CVD diamond and MCD diamond provide for long dressing tool life. These tools can also be reconditioned by re-grinding or, as it is sometimes called, "re-lapping" of the diamond surface to achieve the original shape.

DIAFORM tools with standard CVD diamond sizes and shapes are available as well as those with "special" diamond size requirements. MCD diamond is suitable for grinding wheels using very hard abrasives like SiC (silicon carbide). The behavior of the tool can be influenced by the synthetic diamond type selected and also by the orientation of the diamond in the tool itself. Please ask our dressing tool experts for details.

Triangular shaped dressing tools using either PCD or CVD diamond with or without stem (plug) are used with different clamping systems (cone or cylinder). The clamping system can be designed according to your needs.

RADIUS-DRESSER

Profile Angle	Radius
W 30°	R0,125
W 40°	R0,25
W 60°	R0,5

TRIANGLE PLATE

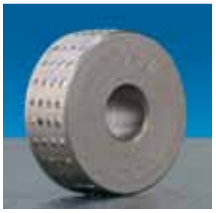
Design	Radius
Plug D1,5	R w/o
	R0,125
	R0,2
	R0,25
	R0,5

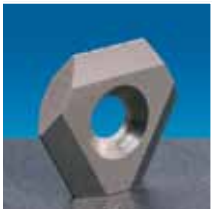
INNER COOLING

Thanks to a direct supply of coolant to the dressing zone, the process heat created is transported away optimally and the diamonds are protected from overheating. The system is also suitable for complex profiles and adverse assembly situations.

SIMPLE TURNING

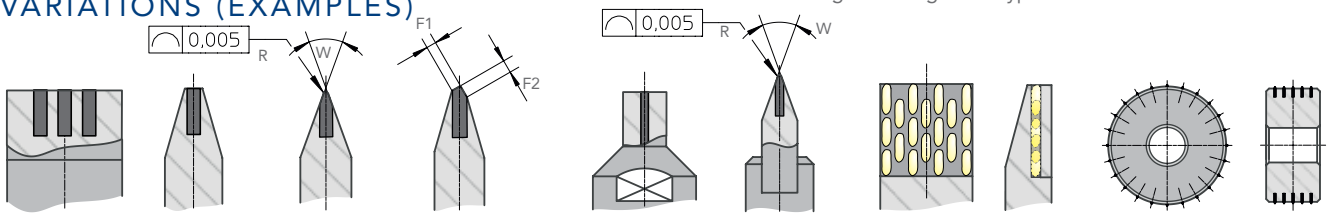
Rotatable dressing tools will provide long tool life and are therefore very economical to use. They are designed such that when one area of the tool containing the diamond section is worn away, the diamond section can be rotated a few degrees exposing a new "fresh" diamond surface.



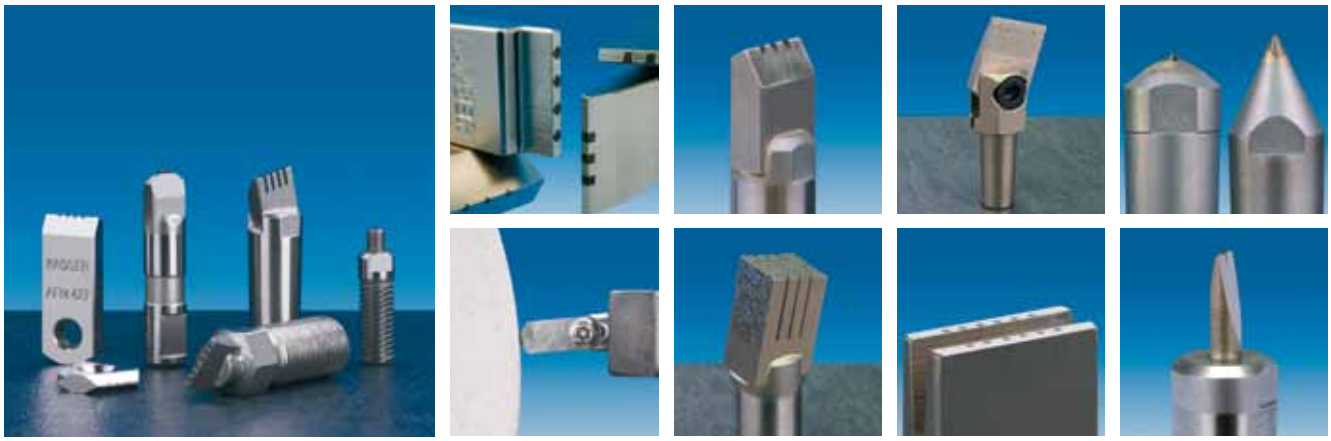


The machine operator can continue this process until the diamond section of the tool is completely consumed.information for installing and using these types of tools.

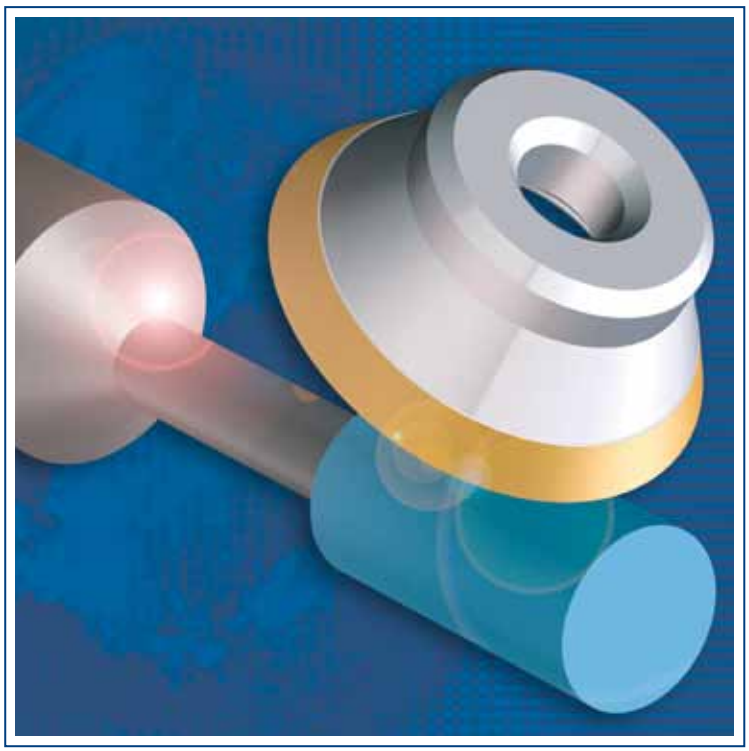
VARIATIONS (EXAMPLES)



Outside-ø AF1 | Radius AFR3 | Shoulder AFS5 | One-Stick AF21 | Radius-Dresser AFR4 | Natural diamond NF/KF | Rotatable dresser AR



DRESSING OF CBN WHEELS

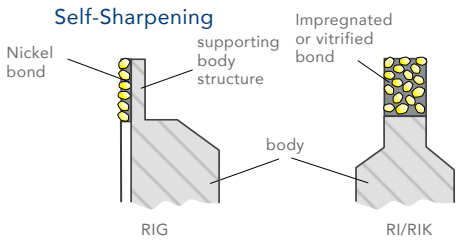


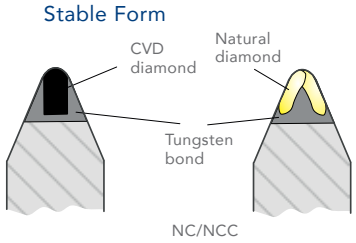
HARD AGAINST HARDER

Vitrified CBN and Diamond grinding wheels are the most effective "dressable" products for production grinding applications. The extreme hardness of these abrasives proves to be very abusive towards diamond dressing tools.

For simple profiles, dressing can be done economically and effectively by using "self sharpening" dressing tools. These tools continually expose new diamond grit during the dressing process. For complex and precise profiles, form-stable dressing tools (rotary diamond dressing discs) should be utilized.

VARIATIONS





SELF-SHARPENING

DESCRIPTION	TYPE	MANUFACTURING PROCESS/BONDING	DIAMOND TYPE USED	EDGE PROTECTION	REMARKS
Diamond Dressing Disc	RI	Infiltrated with Tungsten bond	Hand set H Random G	CVD diamond C	Combinations and addings possible
Diamond Dressing Disc	RIG	Electroplated with Nickel bond	Random G		
Diamond Dressing Disc	RIK	Infiltrated with vitrified bond	Random G		
Diamond Impeller	DF	Infiltrated with Tungsten bond	Random G		Driven or slowed by air or coolant

STABLE FORM

Diamond Dressing Disc	NC	Reverse sintered with Tungsten bond	Hand set H Random G CVD diamond C	Natural diamond K CVD diamond C	For wear-optimized vitrified CBN wheels
Point-Crush Roller	NCC	Reverse sintered with Tungsten bond	Hand set H Random G CVD diamond C		Speed ratio q_d=1
Diamond Dressing Disc	NCG	Electroplated with Nickel bond	Random G	CVD diamond C	For wear-optimized vitrified CBN wheels
Profile Roller	R	Reverse sintered with Tungsten bond	Hand set H Random G	Natural diamond K CVD diamond C	For wear-optimized vitrified CBN wheels
Profile Roller	PG	Electroplated with Nickel bond	Random G	Natural diamond K CVD diamond C	For wear-optimized vitrified CBN wheels

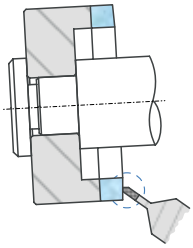
INFILTRATED OR SINGLE-LAYER

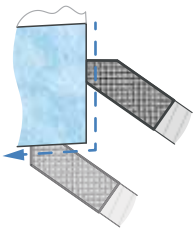
Single-layer tools coated using positive electroplating (RIG) in a hard nickel bond are robust and efficient. The dressing behaviour can be adjusted to the process at hand by applying different types and sizes of diamond and by controlling the bonding depth. The support body may be made from steel or brass and is worn away by the grinding wheel during dressing.

Sintered tools with impregnated coating (RI) may be adjusted to the grinding wheel to be dressed by adapting the diamond specification, grain concentration, coating width, bond properties and porosity. Impregnated coatings are highly stable and can be produced to a minimum width of 0.6mm without coating support , which means that profile dressing is also possible.

For „fine" dressing of the smallest grinding wheels and delicate grinding wheel profiles, ceramic-bonded impregnated tools (RIK) are especially well suited. The combination of impregnated coatings and additionally incorporated CVD diamond rods opens up new possibilities for dressing. wear on the dresser is limited thanks to edge reinforcement, without impairing it's easy-cutting ability. As these tools (RI-GC) exhibit very good edge stability, they allow the creation of delicate and high-precision profiles.

All impregnated tools from DR. KAISER can also be used to dress conventional grinding wheels.





ACCURACY

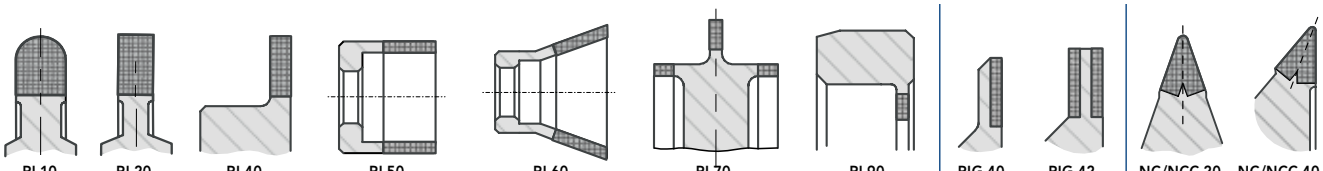
Even consumable rotary dressing tools (RI and RIG) require good radial and axial run-out characteristics to perform at their best. Each new dresser is provided with a ground concentricity band on the OD and a ground surface on the face of the dresser so that the dresser can be "indicated in" during the initial installation process. An inspection document is supplied with each dresser which includes all critical dimensional information required for machine set up.

Further products for related processes:

- CNC Dressing Discs
- Single Axis Profile Dressers

STANDARD FORMS

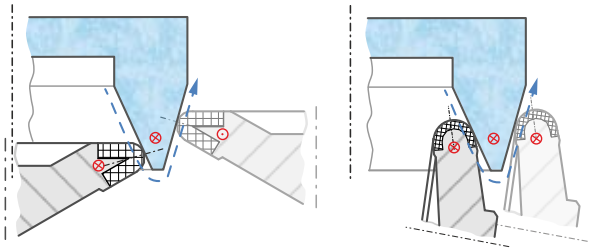
Pictured below are typical dresser configurations. Custom designs are also available.



GEAR MANUFACTURING

SINGLE TOOTH GEAR GRINDING

Since gear grinding is one of the last processes in gear production rotary diamond dressers have to combine long life with a correctly profiled grinding wheel to produce high-accuracy tooth geometries and the best-quality surface finish.
DR. KAISER has introduced a number of rotary innovations such as CVD edge reinforcing to meet the steadily increasing demands on dressing tools.



THE BOW IS IMPORTANT

Bevel gear grinding requires a rotary dresser capable of dressing a grinding wheel in both perpendicular and parallel axes.
Rotary dressers with CVD diamond are replacing natural diamond dressers as the most cost-effective dressing solution. CVD dressers can be relapped multiple times and give a better and more consistent part finish.

SPINDLE SYSTEMS

DR. KAISER supplies dressing spindle systems to builders of grinding machines. For gear grinding applications we have developed special design spindle systems. We would be pleased to discuss your specific requirements with our application specialists.

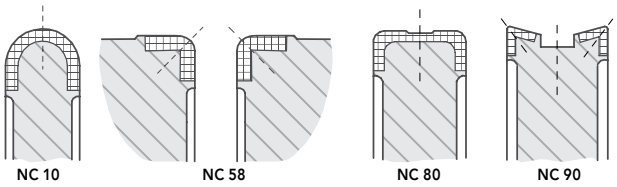
DIAMOND DRESSING DISCS FOR GEAR GRINDING

DESCRIPTION	TYPE	MANUFACTURING PROCESS/BONDING	DIAMOND TYPE USED	EDGE PROTECTION	REMARKS
Dressing Disc	NC	Reverse sintered with Tungsten bond	Hand set H Random G CVD diamond C	Natural diamond K CVD diamond C	Combinations possible
Point Crush Dressing Disc	NCC	Reverse sintered with Tungsten bond	Hand set H Random G CVD diamond C		Speed ratio q_d =1
Dressing Disc	NCG	Electroplated with Nickel bond	Random G		as NC, but prototypes
Diamond Dressing Disc	RI	Infiltrated with Tungsten bond	Hand set H Random G		For wear-optimized bonding systems

TOOTH BY TOOTH – SPACE BY SPACE

The rotary diamond dresser is the most important tool in single tooth profile grinding. The dresser must have high form stability in the radius section of the dresser and produce an aggressive dressing performance, therefore natural diamond construction is substituted more frequently by CVD diamond technique.
The latest developments in CVD diamond production have produced diamonds with high hardness which can be geometrically shaped by laser cutting.
Besides a consistent and aggressive dressing action, these tools can be relapped several times which reduces dressing costs versus natural diamond dressers.

IMPORTANT VARIANTS



RELAPPING

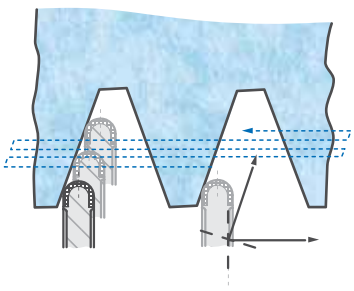
The use of CVD diamond in rotary diamond dressers allows multiple relapping procedures. The geometrical defined shaped of CVD material results in consistent dressing behavior after relapping of the tools. Although the dresser diameter will be changed, the dresser performance is consistent.

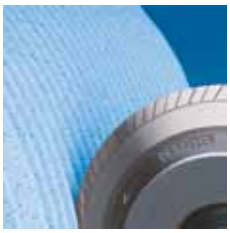
ACCURACY

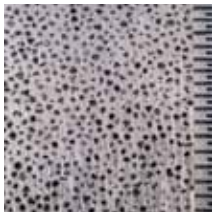
All DR. KAISER tools have indicating bands for axial and radial run-out inspection while they are mounted on the customer machine. We deliver the tool including an inspection document and CNC setup data for your machine, individually designed according to your CNC requirements.

FLEXIBLE DRESSING OF WORM WHEELS

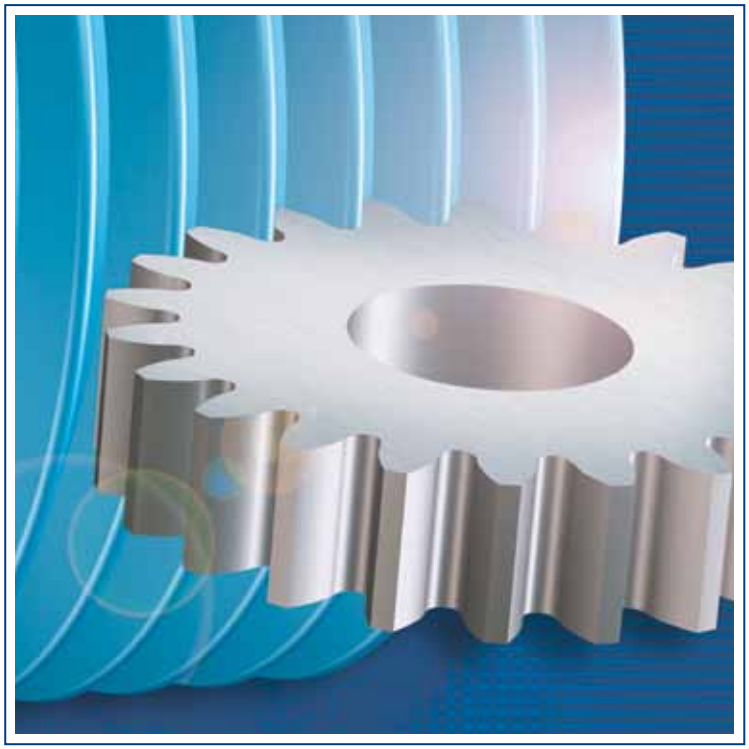
Flexible CNC dressing can be used for dressing worm wheels for small lot or prototype production. We use CVD diamond construction technique to design fine radius diamond dressing tools which can form even the smallest modules in worm wheels with high accuracy.







DR. KAISER
präzision durch diamant

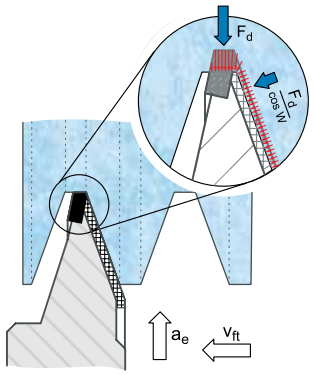


SMALL GEARS

The generating method of gear grinding is one of the most efficient processes for long-run production. Electroplated gear tools with long tool life are used for this process because of their aggressive dressing behavior. Innovative and continuous development of gear dresser manufacturing processes guarantees to deliver process optimized dressing solutions for all machine systems. DR. KAISER delivers these gear dresser solutions to customers all over the world.

CVD DIAMOND PROTECTION – THE ONLY WAY TO PROTECT THE OD

DR. KAISER established in the 1990's the technologies of CVD diamond protection for the OD of electroplated dressing tools. This technique is used successfully in dressing the latest grinding wheel developments which use difficult-to-dress abrasive types. When the dresser OD is protected the body of the electroplated dresser



is protected against damage, the result being longer dresser life and minimization of catastrophic damage to the dresser body. Dressers with CVD diamond protection can be relapped and replated as usual.

PROFILE ROLLERS FOR GENERATING GEAR GRINDING

DESCRIPTION	TYPE	MANUFACTURING PROCESS/BONDING	DIAMOND TYPE USED		EDGE PROTECTION		REMARKS
Dressing Roller or Set of Dressing Disks	RGF	Electroplated with Nickel bond	Random	G	CVD diamond	C	For one-start dressing and different modules
Dressing Roller Assembly	RGM	Electroplated with Nickel bond	Random	G	CVD diamond	C	For one-start dressing with fixed modules
Multi-rib Roller	PGM	Reverse plated with Nickel bond	Random	G	CVD diamond	C	For multi-start dressing
Dressing Roller or Set of Dressing Discs	RF	Reverse sintered with Tungsten bond	Hand set	H	CVD diamond	C	In special cases
Profile Roller or Dressing Roller Assembly	RM	Reverse sintered with Tungsten bond	Hand set	H	CVD diamond	C	For one-start dressing of fixed modules
Profile Roller	RG	Electroplated with Nickel bond	Random	G	CVD diamond	C	Double cone version for pre-profiling
Dressing Disk	RI	Impregnated with Tungsten bond	Random	G			For root relief of grinding worms

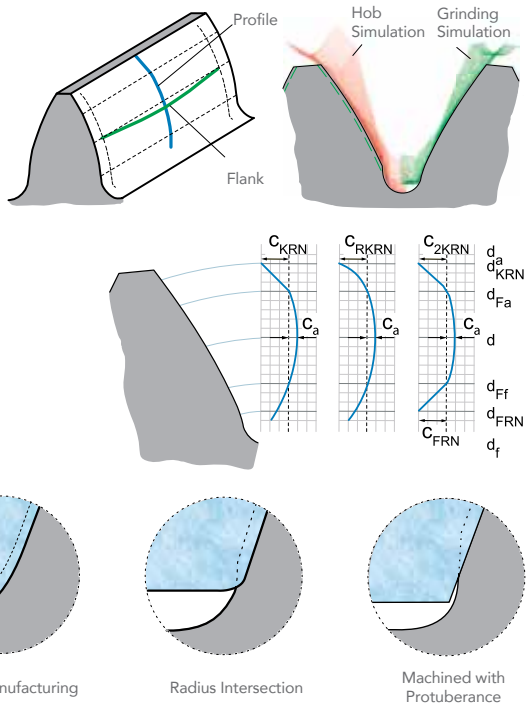
PROFILE ACCURACY IS THE KEY

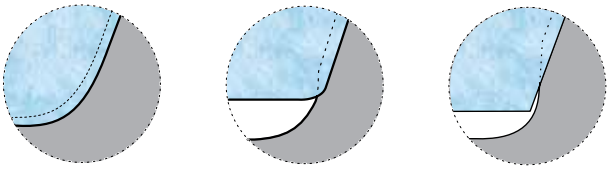
The gear profile modification is formed in the grinding worm by the diamond dresser. Profile crowning, as well as tip and root relief of the gears, are generated by the diamond dresser. The calculation of profile modifications is simulated by special mathematically based software.

For full-form profile dressers the geometry of a root section is also simulated. It is important to the dresser design to know whether the grinding process has to grind a root, a smooth intersection, or if a pre-manufactured profile has a protuberance.

Tip and root geometry can be modified as a straight line, a radius or a multi-angle relief combined with the crowning of the profile. The effect of twist in high-helix angle gears influences the profile modification. These influences are simulated as well in the design of profile for the dresser.

DR. KAISER gear specialists are calculating all dresser profiles with our proprietary simulation software based on your gear drawing requirements.





Root Manufacturing | Radius Intersection | Machined with Protuberance

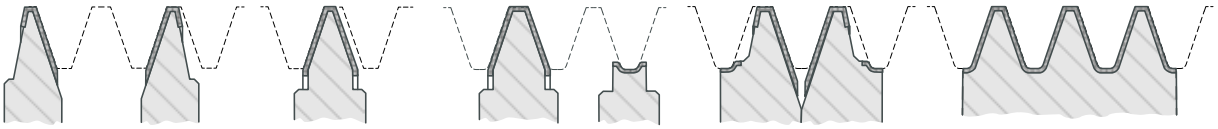
ACCURACY

All DR. KAISER tools have indicating bands for axial and radial run-out inspection while they are mounted on the customer machine. We deliver the tool including an inspection document and CNC setup data for your machine, individually designed according to your CNC requirements.

DRESSING TOOLS FOR GEAR ROOTS

To dress defined OD radii geometry of grinding worms CVD diamond plates, radius dressers or dressing bars are used for different applications. Our gear experts will calculate the correct profile geometry and design a proper dressing tool for your part requirements.

VARIATIONS (EXAMPLES)

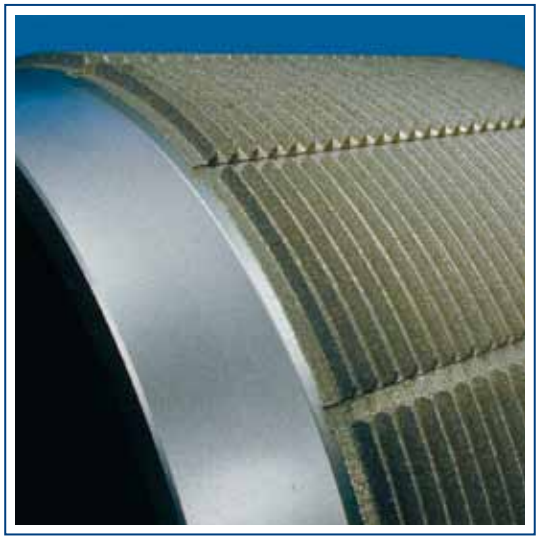


Set of Dressing Disks | Dressing Roller, Double Cone | Double Cone and OD Dresser | Dressing Roller Assembly | Multi-rib Roller

OUR FURTHER BUSINESS FIELDS

DRESSING SPINDLE SYSTEMS
IMPORTANT DRIVE

Application specific dressing systems are necessary to achieve both best surface qualities of the workpiece and high production reliability with excellent spindle run-out. Dressing systems are designed either for CNC dressing or single-axis plunge dressing operations. These systems can be designed for aligned electrical and mechanical power and best dynamic stiffness with different types of acoustic sensor systems. Spindle attributes such as stable drive speed, constant torque, temperature control and acoustic emission sensors are important to the performance of the dressing spindle. Our experts will help find the best solution for your dressing spindle requirements.

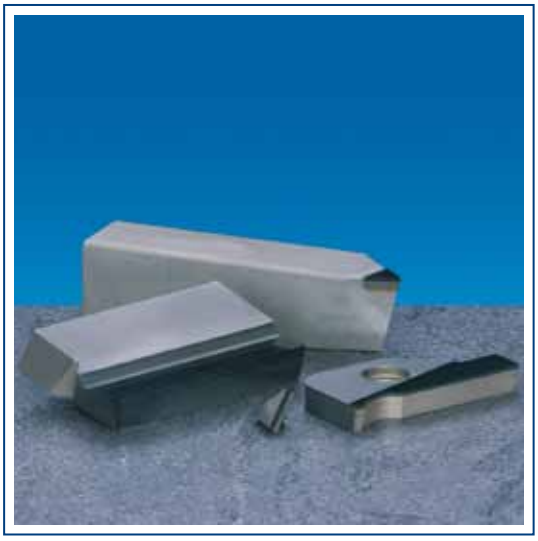


GRINDING WHEELS
FOR THE CORRECT CUT

Electroplated CBN and diamond grinding wheel do not have to be dressed. The galvanic Nickel bond leads to very high grain protrusion with high cohesion to the grit. High wear-resistance of the bond and excellent formholding result in long tool life. Another advantage of grinding with CBN is its high temperature resistance and cool grinding.
Vitrified CBN and diamond wheels are mainly used for straight ID and OD, as well as the grinding of complex and fine profiles. DR. KAISER vitrified CBN and diamond grinding wheels can be produced with bond porosity up to 60%. They are easily dressed and have high stock removal capability. Hardened and high-alloyed steel as well as carbide, ceramic and polycrystalline CBN and diamond are main applications for these grinding wheels.

WEAR RESISTANT PARTS
PCD LASTS LONGER

Guideways, shoes-bearings, drivers-bearings, prisms, male and female centers, steady rests or abrasive belt shoes are used to position work-pieces in grinding applications. These components are loaded by process forces resulting in extreme rotational and sliding friction. Special PCD coatings increase tool life and increase the accuracy of the process and improve the surface quality and form accuracy of the workpiece. Do not hesitate to ask a DR. KAISER application specialist to discuss the many possibilities for this modern technique.



CUTTING TOOLS
SPECIAL SOLUTIONS

Efficient milling and turning of composite materials and non-ferrous alloys can be done with application-designed superabrasive cutting tools. PCD and CVD diamond are used to optimize the process behavior and guarantee highest tool life and best surface finishes. Our knowledgeable specialists can discuss your specific requirements in detail.

PRECISION THROUGH DIAMOND

From a small enterprise, run from home, to a modern company with a worldwide reputation.

Dr. Michael Kaiser started his "shop for diamond tools" over thirty years ago as a small enterprise run from home. The company has grown to a modern company with a world-wide reputation, constantly expanding product lines through the creation of flexible and powerful production units. The company's goal has always been to be a problem-solver for all customers' questions, "regarding the grinding zone". The company's success comes from providing the highest precision products by consulting with individual customers to produce the best possible performance for its tools. The company, founded in 1977, had its first office in a cellar while the production of its first product, stationary diamond dressing tools, was performed on simple, small machines in a garden shed with an area of 7,55 m². In 1979 the company relocated to its first manufacturing facility and started production of rotary diamond dressing tools. In 1986, the product line was expanded with the introduction of a production department to manufacture diamond wear protection components and point crush dressing tools for the profiling of vitrified bond diamond grinding wheels.
Over the years, the number of production departments has grown in order to focus our manufacturing capabilities on customer's production requirements. In order to maximize performance of our rotary diamond dressers, a production department for dressing spindles using speed control and acoustic sensing technology was established.

In 1989, the precision electroplating department started production of electroplated dressing wheels with special focus on the dressing of gear grinding wheels. Production departments for manufacture of special application tools, such as stationary dressing tools using manmade diamonds and rotary dressers for ceramic bond CBN grinding wheels were established as new products based on existing DR. KAISER product and manufacturing technology. This was done in order to build a focused customer oriented manufacturing organization. In 2004 the production department for hard machining applications using electroplated CBN and diamond grinding products was established.
The high precision reverse plated profile roller department, which provides high precision and geometrically complex dressing tools, was established as an independent department in 2007.
In 2009, DR. KAISER established manufacturing and technical support capability for the production and application of Vitrified CBN and Diamond grinding wheels. DR. KAISER now has the ability to offer our customers a complete system solution for high performance super abrasive grinding wheels and rotary diamond dressing tools.
DR. KAISER is represented by a worldwide team of technical organizations providing product and process solutions to grinding and dressing operations.





EVERYTHING FROM
A SINGLE SOURCE:

DRESSING DISCS

SINGLE AXIS PLUNGE DRESSING ROLLERS

POINT CRUSH DRESSING DISCS

DRESSING SYSTEMS FOR VITRIFIED
CBN GRINDING WHEELS

ROTARY DRESSERS FOR
GEAR GRINDING

DRESSING SPINDLE SYSTEMS

ELECTROPLATED CBN- AND
DIAMOND GRINDING WHEELS

VITRIFIED BONDED CBN-
AND DIAMOND GRINDING WHEELS

PCD- AND CBN CUTTING TOOLS

PCD WEAR PROTECTION
COMPONENTS

STATIONARY DRESSING TOOLS

HOW TO FIND US

DR. KAISER
präzision durch diamant

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