

DISKUS WERKE GRINDING TECHNOLOGY

EFFICIENT AND PROFITABLE PROCESS ASSURANCE

Optimization and maintenance of your machines



04

The company

A leader in face and double face grinding since 1911, DISKUS WERKE Schleiftechnik offers comprehensive maintenance services for over 2,000 specialized machines..

06

Maintenance, repair & retrofitting

We extend the service life of your DISKUS machines through maintenance, repairs and modernization.



Contents

14

Remote diagnostics and remote maintenance

Our simple remote maintenance saves you time and money, reduces downtime and maximizes machine performance.



20

IONIC, spare and wear parts

Our high-quality spare parts and fast service ensure the longevity and maximum uptime of your DISKUS machines.

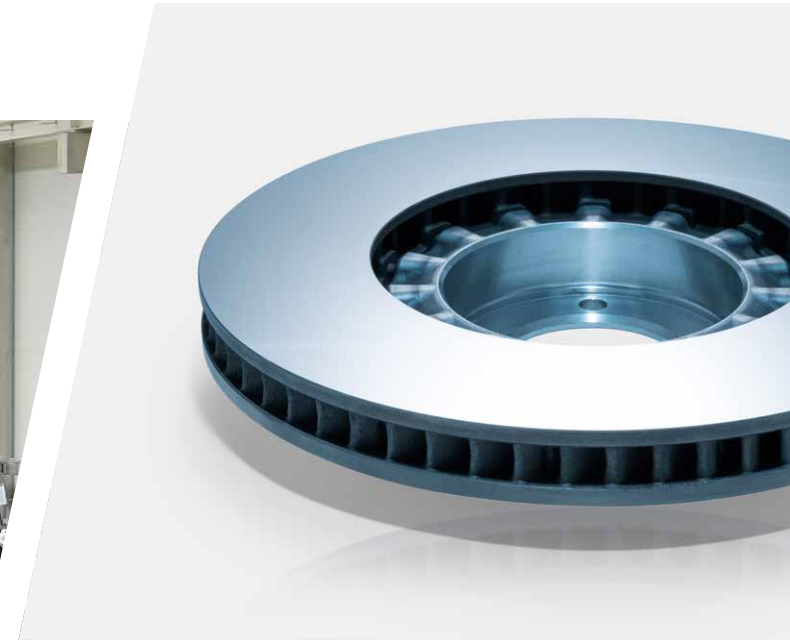


24

Training and process optimization

Optimize your production with training and detailed process analysis for maximum efficiency and product quality.





DISKUS WERKE SCHLEIFTECHNIK

Since its foundation in 1911, the company has established itself as a pioneer in the field of face and double face grinding, better known as "DISKUS grinding". With over a century of expertise, it has developed more than 2,000 customized, robust machines that offer maximum precision even after decades of use.

The company's products are widely used in various industries, including the automotive, bearings, watchmaking, glass and ceramics industries, demonstrating its adaptability and technological diversity.

To maximize the service life and efficiency of its machines, the company offers comprehensive services, including maintenance, repair, retrofitting, remote diagnostics, remote maintenance, spare parts supply, training and production support. This underlines its commitment to quality, customer service and technological innovation.

A DVS TECHNOLOGY GROUP COMPANY

The DVS TECHNOLOGY GROUP is a group of experienced companies engaged in the machining technologies of turning, gear cutting, grinding and honing. The DVS TECHNOLOGY GROUP employs more than 1050 staff worldwide and is considered a leading system provider of machines, tools, and manufacturing solutions for the soft and hard-fine machining of components.

The DVS TECHNOLOGY GROUP includes the following divisions:

DVS Machine:

Manufacture and sale of high-precision machine tools and automation systems

DVS International Sales & Service:

Local DVS partners for sales and service in international markets.

DVS Services & Tools:

Customer-specific development, manufacturing, and sale of machine components, tools, and abrasives and related services.

FOCUS ON CORE TECHNOLOGIES



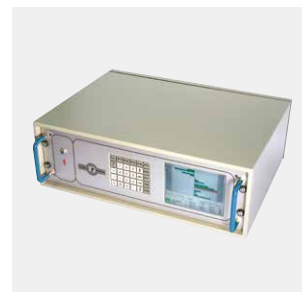
MAINTENANCE & REPAIR



RETROFITTING



REMOTE MAINTENANCE



IONIC & SPARE PARTS



TRAINING



PROCESS OPTIMIZATION



Maintenance, repair & retrofitting

Turning old into new

The service life of reliable machine tools depends heavily on regular maintenance and any necessary repairs. Our trained and passionate team, combined with a well-equipped spare parts supply, guarantees short downtimes and optimum functionality of your machines. We not only rely on conventional maintenance, but also offer you

comprehensive solutions. Regardless of the age or condition of your machines, we not only carry out maintenance and repair work, but also optimization, modernization and complete retrofits. We give your DISKUS machines a second life and ensure that they meet the constantly growing demands of modern production technology.

OPTIMUM MAINTENANCE THANKS TO MAINTENANCE CONTRACTS!





Inspection

Regular maintenance ensures the performance of the machine

During an inspection, we subject your machine to a technical check. Using a checklist that our technicians draw up together with you, you have an overview of the condition of your machine. Regular inspections enable existing defects to be detected at an early stage, the number of downtimes to be minimized and the

machine's service life to be reduced and and to increase the availability of your DISKUS machines. If spare parts are required, DISKUS WERKE Schleiftechnik will always replace the necessary components with a functional warranty.

We carry out the following inspections for you:

- Geometric check
- Lubrication check
- Bearing noise measurement
- Bearing measurement of the spindles
- Inspection of wear parts



Retrofitting

Mechanics & electrical control

Are your machine tools showing the first signs of aging? At DISKUS WERKE Schleiftechnik, we can get them back into top shape! It is generally known that the reliability and service life of high-quality machines depend to a large extent on regular maintenance and the necessary repairs. But our range of services goes far beyond the standards of conventional maintenance.

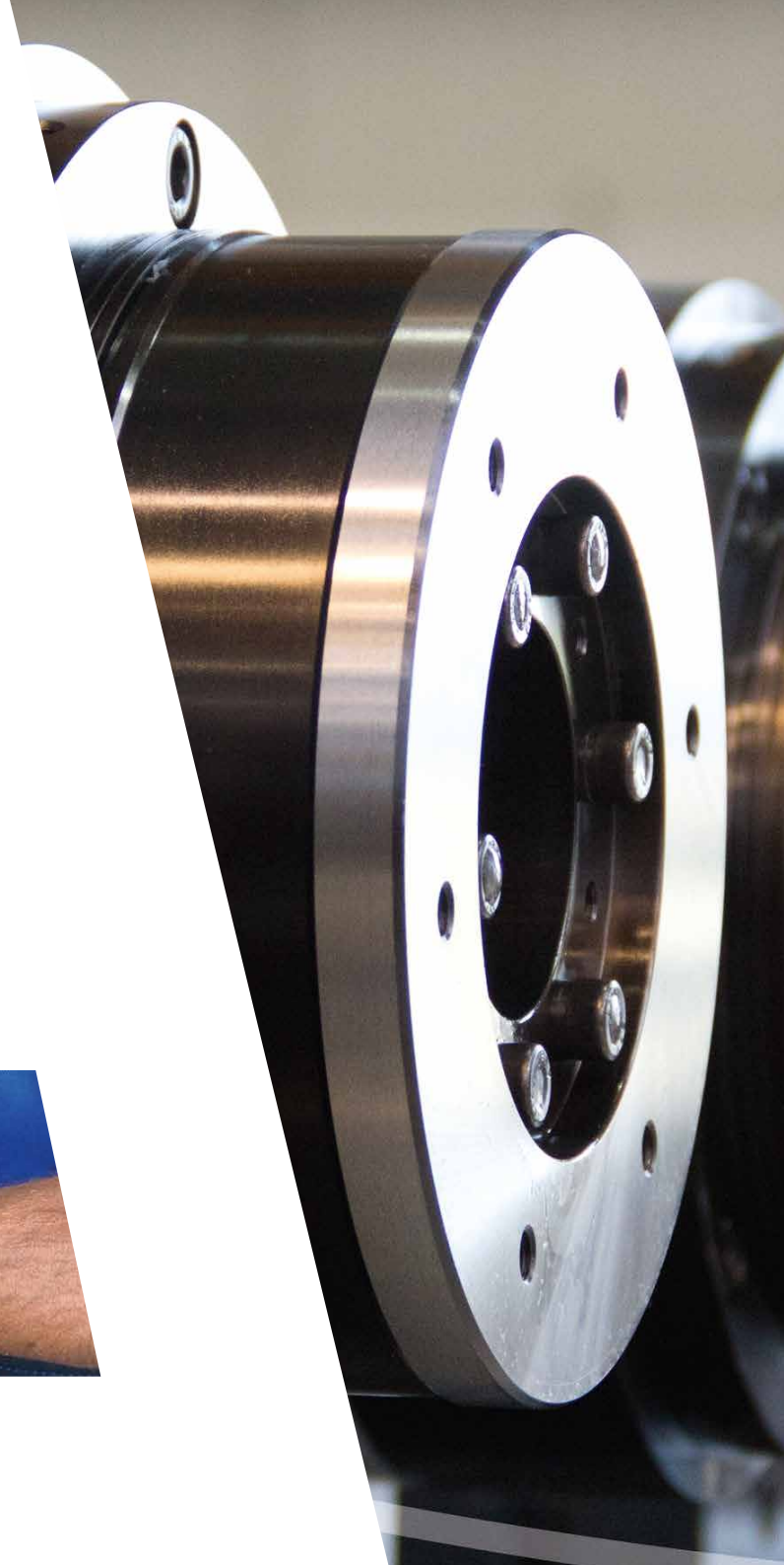
That's why we offer more than just basic maintenance and repair services. Our comprehensive

service package also includes targeted optimizations to bring your systems up to the state of the art, modernizations that increase efficiency and productivity, and complete retrofits that breathe new life into old machines.

Our aim is to maximize the functionality, efficiency and service life of your machine tools. With DISKUS WERKE grinding technology, you invest in the future of your production, ensure the quality of your work and increase the overall performance of your machinery.

The following is included in a retrofit:

- As-is inspection of the machine
- Replacement of all wearing parts
- Cleaning of mechanical parts
- New paintwork
- Siemens control system
- New electrics, new switch cabinet, EMC-tested
- New safety technology, new CE
- Commissioning with functional and quality certification training





Original assemblies

New or exchange

DISKUS WERKE Schleiftechnik stands for machines and assemblies that guarantee precision and durability in industry. Our products are developed to meet the high demands of modern manufacturing processes, with a focus on innovation and reliability.

Despite the high quality of our machines, continuous use can lead to wear over the years. In order to maintain the performance and efficiency of your systems, we recommend checking for signs of wear and tear and to

replace affected assemblies in good time. This not only prevents unwanted downtime, but also ensures the consistent quality of your production.

We are more than just a supplier; we are your partner for the maintenance and optimization of your grinding technology. Our experts are ready to support you in choosing suitable maintenance strategies and spare parts.

We are happy to replace the following assemblies:

- Main spindle drives
- Feed systems (slides for infeed axes)
- Dressing assembly and their workpiece feed/drive systems
- Disk changing aid
- Planetary gear
- Probe/position control



Overhaul of assemblies

Turning old into new – from classic car to new machine

With our comprehensive overhaul service, you invest in the future of your production equipment and extend its service life cost-effectively without having to replace entire assemblies. We carry out a thorough analysis of your systems, draw up a cost estimate tailored to your needs and refurbish your machines with minimal downtime.

We will restore your equipment to its original condition, taking into account the latest technologies. Rely on our expertise to maximize the performance of your systems and achieve a sustainable increase in value, which is reflected in improved production quality and operating efficiency.

We offer you an overhaul of the following assembly component:

- New motor spindle bearings
- New quills and grinding shafts
- Dressing assemblies
- Workpiece feed gearbox
- IONIC touch probe
- Position control system





Mechanical overhaul

Old becomes almost new

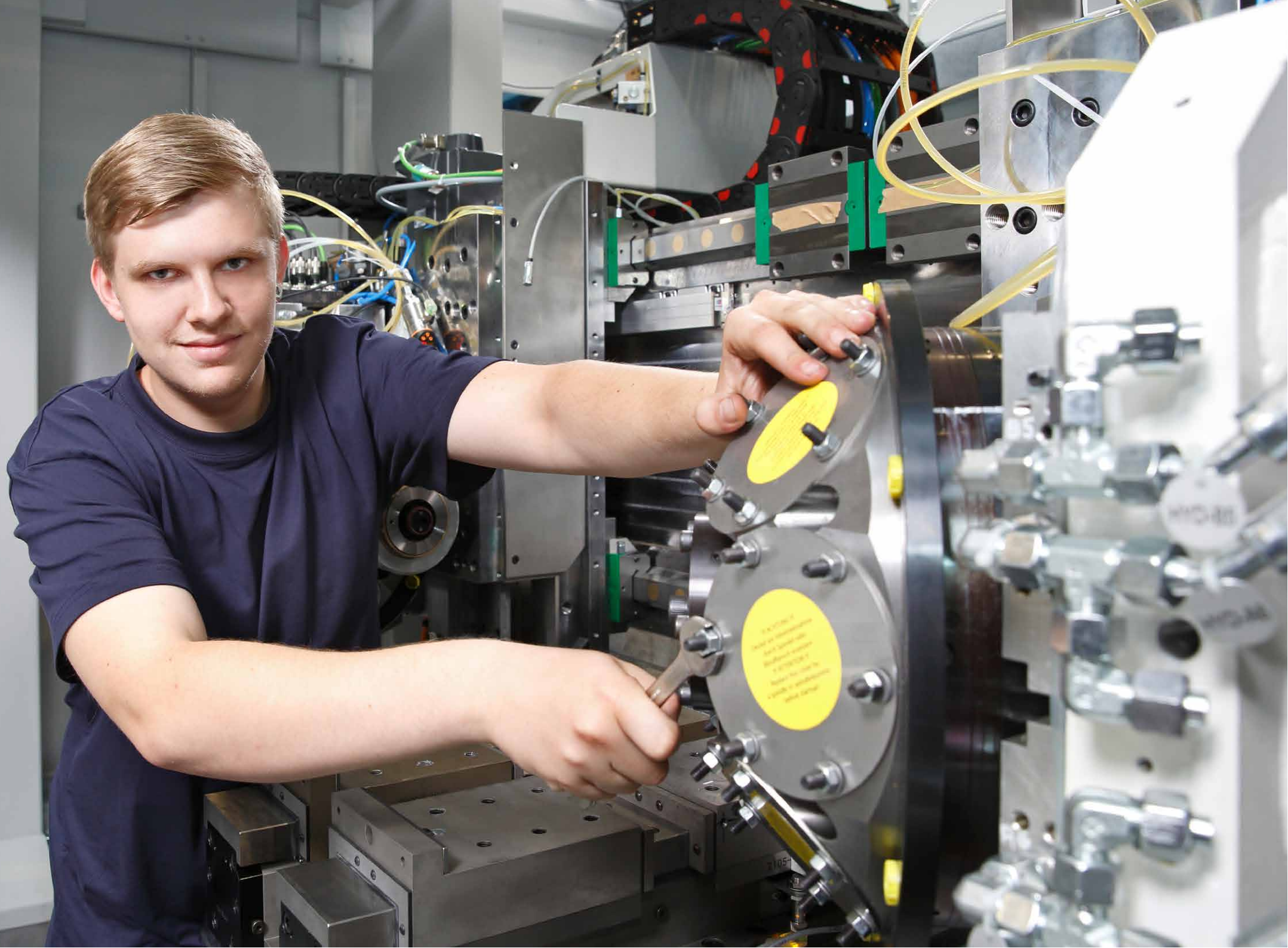
Discover our mechanical overhaul service for a comprehensive renewal of your systems. We start with a detailed inventory, replace all wear parts and clean and repaint the mechanical components. Careful commissioning and final functional and quality checks ensure that your machines run optimally. Our targeted process guarantees improved performance and an extended service life for your systems.

Our process not only ensures the restoration of machine performance, but also helps to minimize future downtime and increase the efficiency of your production line. By using state-of-the-art techniques and materials in the overhaul, we ensure a sustainable increase in the value of your systems. In this way, you benefit in the long term from reliable and efficient machinery that meets the requirements of your business.

The basic mechanical overhaul includes the following work steps:

- As-is inspection of the mechanics
- Replacement of all wearing parts
- Cleaning of the mechanical parts
- New paintwork
- Commissioning with proof of function and quality







Remote diagnostics and maintenance

Maximize machine performance

Use our remote maintenance and save time and money. Integrating and carrying out remote maintenance is easy, even with older CNC control systems. Simply connect your machine via your telephone line or via the Internet (wired or Wi-Fi). In addition to checking the electrical components, our remote maintenance also enables us to carry out a compre-

hensive software analysis. By detecting faults in real time, downtime can be significantly reduced. There is no need for customer service and technicians on site, which leads to considerable cost savings. Rely on remote maintenance from DISKUS WERKE Schleiftechnik and get the maximum performance and availability out of your machines.

ERROR DETECTION IN REAL TIME, REDUCES DOWNTIME





Quick support

Fast and uncomplicated support

Are you facing challenges with your DISKUS machine? We understand that efficient solutions are crucial. Our dedicated technical staff are available by phone to provide quick and straightforward support. Whether

technical questions, malfunctions or optimization options, we are here to help you and make sure your DISKUS machine is working optimally.

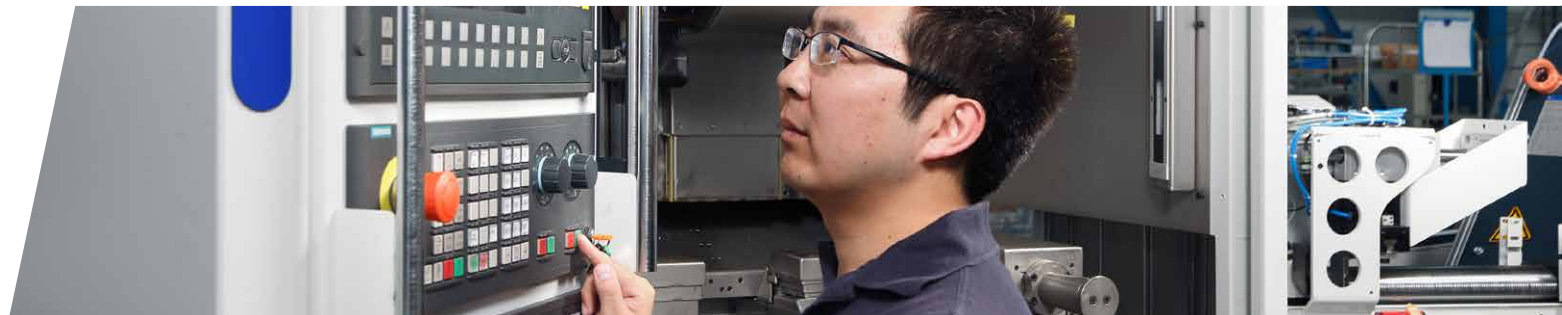
Contact our specialist staff by phone for quick initial support.

Quick support includes:

- Support during the grinding process
- Support for technical problems
- Troubleshooting
- Support for IONIC
- Online support (if remote diagnosis is available)

Advantages:

- Fast support
- Uncomplicated processing
- No further ordering processes necessary in your company



Talk2M

Your hardware for secure and efficient remote access

Talk2M is at the forefront of innovation in secure industrial cloud remote maintenance platforms, ensuring unparalleled reliability, efficiency and security for remote monitoring and maintenance of your DISKUS machines through an extensive global server infrastructure. With an impressive number of user accounts, Talk2M ensures that users benefit from a seamless and fully documented connection history, making the platform an indispensable tool in the advanced Industry 4.0.

Since its launch in 2006, Talk2M has steadily cemented its position as a central link in the digital value chain, helping to increase efficiency and productivity in numerous use cases. Our commitment to innovation and customer support is second to none, and we strive to provide our users with not just a platform, but a comprehensive solution tailored to their specific needs.

We offer extensive support for your existing Talk2M integration and are happy to advise you on implementing Talk2M into older DISKUS machines to improve their functionality and performance. Our team of experts are on hand to support you every step of the way to ensure that you realize the full potential of Talk2M.

Don't hesitate to contact us for a personalized consultation and to learn more about how Talk2M can revolutionize remote maintenance of your equipment. Discover with us today the future of industrial remote maintenance and how Talk2M can help to optimize your operations and increase your competitiveness.





Remote maintenance

Expert support with just one click

In many cases, the deployment of a service technician directly on site proves necessary, but the advanced remote maintenance technology from DISKUS WERKE Schleiftechnik often makes it possible to avoid the associated high time and cost expenditure. The remote maintenance solutions offer you the flexibility to realize significant savings in terms of time and money. Modernizing your older CNC controls, which can be done either via your existing telephone line or directly via the Internet, opens up new dimensions in machine maintenance and optimization.

Our comprehensive remote maintenance system allows you to carry out a detailed diagnosis and inspection of both the electrical components and the installed software. Based on your specific approvals, our qualified service technician is able to carry out necessary system updates and optimizations remotely.

Our remote maintenance solution also enables you to carry out proactive maintenance. Through regular monitoring and predictive maintenance, potential problems can be identified and rectified at an early stage before they lead to major downtime. This type of maintenance helps you to maximize the operational readiness of your systems and ensures smooth production processes.

At DISKUS WERKE Schleiftechnik, we understand that every minute of downtime can result in considerable costs. That is why we strive to offer you solutions that not only increase your efficiency, but also ensure the long-term reliability and performance of your machines.







SCHLEIFTECHNIK GMBH



IONIC, spare and wear parts in original quality

Highest fitting accuracy

Quality is our top priority: Our spare parts, wear parts and accessories offer not only a precise fit, but also the proven durability of DISKUS WERKE Schleiftechnik. Each part has been specially developed to meet the requirements of your machines. Original quality is not only an investment in the present, but also in the future. It helps to minimize downtime and maximize the uptime of your DISKUS machines. For the IONIC, a process control device for computer-aided control of the finished dimensions of workpieces during grinding, we

not only offer a replacement in the event of failure, but also the option of a replacement device or a loan IONIC. Our experts are ready to repair your devices and probes quickly and reliably in the event of a defect. This comprehensive service ensures that your IONIC is always ready for use and that you can rely on the precision of your measurements.

QUALITY ENSURES LONGEVITY AND MINIMIZES DOWNTIME





Spare parts, wear parts & accessories

You can rely on our expertise

We are optimally equipped to ensure maximum availability and minimum downtime for your DISKUS machines. We only use parts of original quality to ensure that your machine continues to work precisely and reliably after a repair.

DISKUS WERKE Schleiftechnik offers you tailor-made components for a long service life. Installation is carried out by our experienced team with a full functional warranty.

We offer all essential components for your DISKUS machine, including:

- Bearings
- Support and grinding wheels
- Grinding shafts
- Rotary inlets
- Motor spindles
- Measuring master
- Bellows
- Quills
- IONIC probes / measuring probes
- Table plates and hold-down devices
- Transport disks
- Spare parts package
- Probe tips



Process optimization through IONIC

Available as a replacement or loan device

The DISKUS WERKE "IONIC18" process controller is specially designed for precise measurements in machines with in- or post-process applications. Its versatile functions include the acquisition and evaluation of measurement signals for the control of surface grinding machines, including CNC signal output for process control. The IONIC18 is available in two versions: as a stand-alone device and as an integrated solution in the machine.

In addition, the integrated network connection offers the option of seamless integration into your network. If a problem is detected during maintenance, we offer you a loan device for the duration of the repair, as well as replacement devices.

Discover the features of our IONIC unit:

- Integrated monitor
- Plausibility check of inputs
- Hardware upgrades possible
- Screen displays in menu form
- Input lock available via key switch
- Optionally available with adapter for older versions





SCHLEIFTECHNIK



Training and process optimization

Maximum efficiency through customized training

Double-sided grinding or double face grinding is a highly specialized and complex process. To get the most out of a DISKUS machine, a thorough understanding of this process is crucial. Our customized training courses not only provide you with a basic understanding of the grinding process and machine settings, but also deep insights into the intricacies of this specific process.

In addition to training, we offer detailed process optimization. By thoroughly analyzing the possibilities and identifying performance reserves in your existing process, we provide you with a precise assessment of the potential. This individual approach enables you to increase the efficiency of your production and improve the quality of your end products at the same time.

TRAINING OPTIMIZES THE EFFICIENCY





Sound understanding thanks to practical training

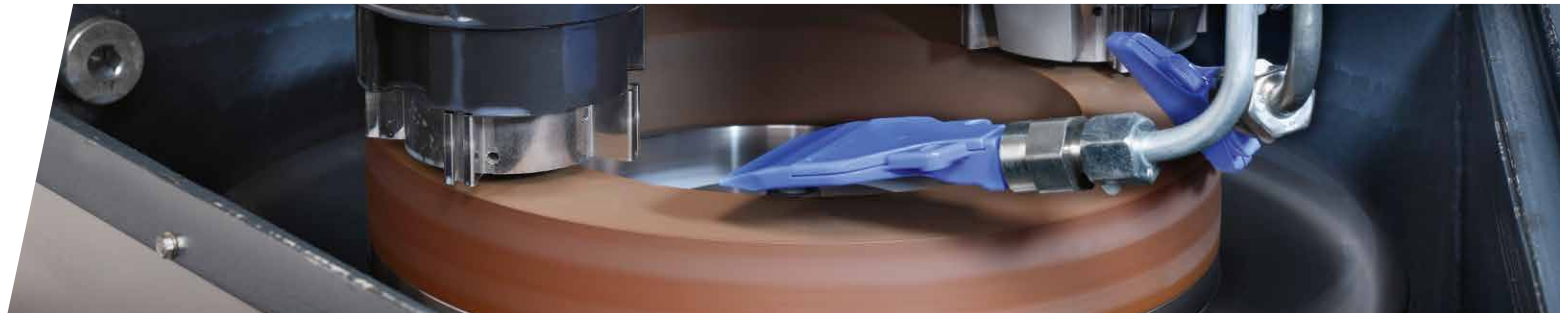
“DISKUS-SCHLEIFEN” Basic training

A sound understanding of the specialized double-sided grinding process is crucial to getting the most out of your DISKUS machine to its full potential. Our course will provide you with in-depth insights into the technical details, settings and intricacies of this process to maximize the efficiency and quality of your machining. You will learn the theory behind the grinding process, the selection of abrasives, the importance of coolants and how to adjust process parameters to optimize production and ensure quality.

Through a mixture of theory and practice, you will not only become familiar with the double-sided sanding process, but also acquire practical skills for effective machine set-up and operation. This leads to increased production efficiency, improved product quality and reduced operating costs. The course prepares you to expand your production capacity and strengthen your market position.

With our training module you will learn:

- Basic knowledge of grinding wheel selection
- What happens in the grinding zone?
- What are the tilt angles?
- What influence does the tilt have?
- What influence do speeds have?
- What influence does the dressing contour have?
- How do I avoid beveling?
- How do I influence the grinding pattern?
- When do I dress?



IONIC Training

"DISKUS-SCHLEIFEN" Advanced course

The DISKUS-IONIC enables precise production measurements directly in the machine for in- and post-process applications. It includes measurement signal acquisition, data analysis for surface grinding machine control and CNC signal output for process optimization. Our training course teaches you how to use the IONIC effectively in order to exploit its full potential. You will learn how to accurately collect and analyze measurement

data to control machine performance and adjust the production process. The training also covers CNC parameter adjustment to increase efficiency and product quality. Practical exercises will strengthen your ability to use the IONIC for continuous process improvements, resulting in increased machine performance and improved product quality.

With this training module you will learn:

- Basic knowledge and function of the IONIC process controller
- Fine adjustment of the IONIC on the set-up process
- Automatic and manual correction





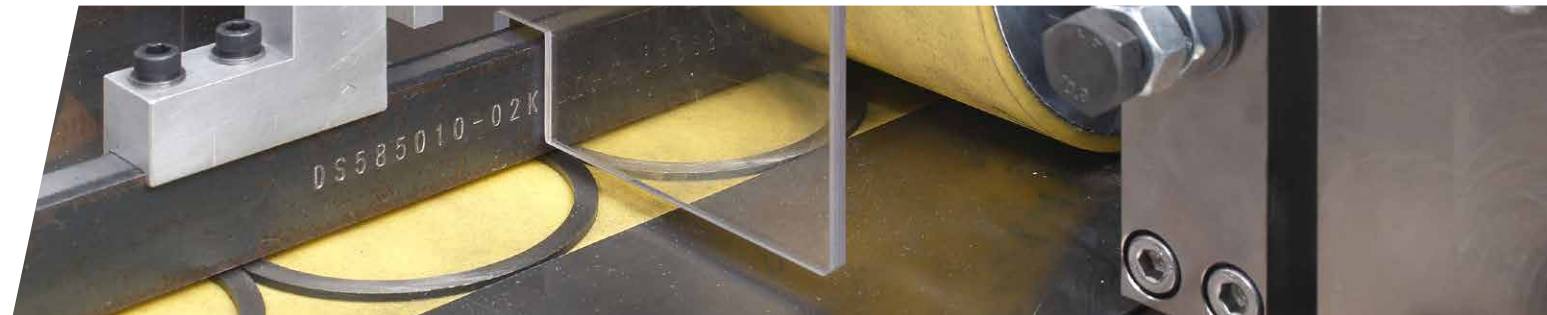
Process optimization

Produce workpieces even more economically

Performance reserves for high-performance double grinders through optimization of:

- Process parameters
- Machine settings
- Tools

Send us a video and quality measurement data and receive an expert assessment of the potential and a cost estimate directly from the manufacturer.



Grinding tests

We provide the proof for your requirement

Do you want to verify your product in terms of quality and cycle times? Or are you planning to secure your investment decision and test new technologies? We offer you grinding trials directly on your machine to test and optimize your surface grinding challenges. You can rely on our expertise.

Do you have an inquiry and want to ensure that your offer meets quality and cycle time requirements?

Or do you want to secure your investment decision and test new technologies?





Production support

We support you in setting up new processes

New machine and new workpieces? Do you want to ensure a smooth start to production? Even trained employees need time to feel confident using a new machine. Adjusting dressing intervals, training for part

changeovers and understanding control messages and manuals are crucial – we support you in this.

We offer you:

- Accompaniment up to 10 hours/day
- Shift supervision
- Support for the production team during start-up
- IONIC training





Contact us:



DISKUS WERKE Schleiftechnik
Johannes-Gutenberg-Straße 1
63128 Dietzenbach
Deutschland

Tel. +49 (0) 6074 48402-0
service@diskus-werke.de
dvs-technology.com/diskus-werke

Members of the DVS TECHNOLOGY GROUP

DVS MACHINE



BUDERUS Schleiftechnik GmbH | dvs-technology.com/buderus-schleiftechnik
I.D. grinding – O.D. grinding – Bore honing – Hard turning



PITTLER T&S GmbH | dvs-technology.com/pittler
Vertical turning center and Pick systems – Gear cutting for complete machining



PRÄWEMA Antriebstechnik GmbH | dvs-technology.com/praewema-antriebstechnik
Gear honing – Gear grinding – Hobbing/Fly-cutting – Chamfering



rbc robotics GmbH | dvs-technology.com/rbc-robotics
Camera-guided robot automation systems

DVS INTERNATIONAL SALES & SERVICE



DVS Technology America, Inc. | dvs-technology.com
DVS Sales & Service in USA, Canada & Mexico



DVS Technology (Taicang) Co., Ltd. | dvs-technology.com
DVS Sales & Service in China

DVS SERVICES & TOOLS



DVS TOOLING GmbH | dvs-technology.com/dvs-tooling
Tool solutions and technology support for PRÄWEMA gear honing



NAXOS-DISKUS Schleifmittelwerke GmbH | dvs-technology.com/naxos-diskus
Conventional grinding tools – CBN and diamond tools



Werkzeugmaschinenbau Ziegenhain GmbH | dvs-technology.com/wmz
Motorspindles & Components



DVS Service GmbH | dvs-technology.com/dvs-service
Maintenance – Complete overhauls – Repairs



DISKUS WERKE Schleiftechnik GmbH | diskus-werke.dvs-gruppe.com
Face grinding – Double face grinding – Special machining

DVS PRODUCTION



DVS Precision Components (Taicang) Co. Ltd.
Precision powertrain components in series production for passenger cars and trucks on DVS machines