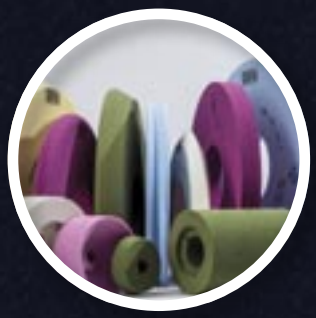
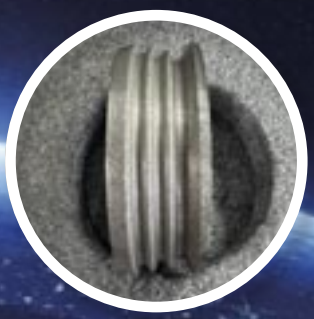
ADVANCED GRINDING SOLUTIONS

The Best of Europe's Grinding and Finishing Products From One UK Supplier





www.advancedgrindingsolutions.co.uk

Advanced Grinding Solutions is at the forefront of supplying the most advanced technology to the UK and Ireland's engineering industries, and our range of high precision machinery is drawn from Europe's leading machine tool manufacturers and incorporates the latest technological advances in machine tool design and process development.

Our UK team, backed by over 1,500 engineers from our major European Principals, provides the highest possible level of technical support, and we have an award-winning reputation for our proven ability to provide the most innovative and cost-effective turn-key production solutions. Industry relies upon us to deliver the best production solutions.

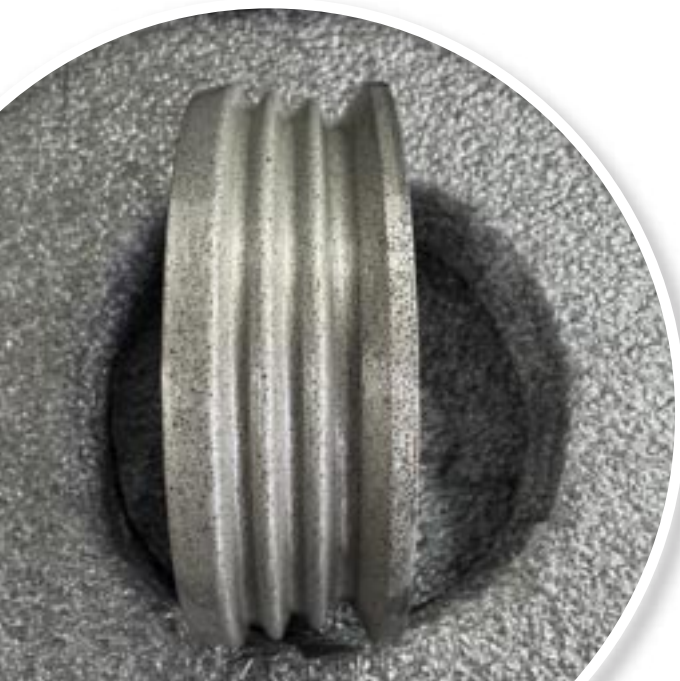
Here at AGS, we do not sell machines; we provide complete solutions, the very best solutions that ensure increased productivity and superior workpiece quality. AGS is your partner for providing truly innovative, economical, efficient, and world-class forward-thinking solutions to give you the crucial competitive advantages that you need.

Check out our new website and download information on all of our products!

A machine or a QR Code?

DIAMOND ROLLS

We provide high-performance diamond dressing rolls suitable for various grinding machines, which ensure optimal wheel conditioning, precision, and efficiency. These rotary diamond dressers are used in industries such as aerospace, automotive, and precision engineering and offer cost-effective, high-accuracy solutions.
Contact us for a quote.



SCHIEK

SCHIEK offer carbide grinding arbors; manufactured with a runout accuracy of <2 µm, these arbors meet the highest precision standards, catering to industries such as automotive, bearing, and transmission technology.

Scheik's alloy grinding arbors utilise advanced silicon and aluminum oxide alloys and are up to 80% lighter than conventional carbide versions. Benefits include reduced spindle wear, higher operational speeds, and minimal thermal expansion, making them ideal for high-speed applications.

GPA INNOVA DLyte

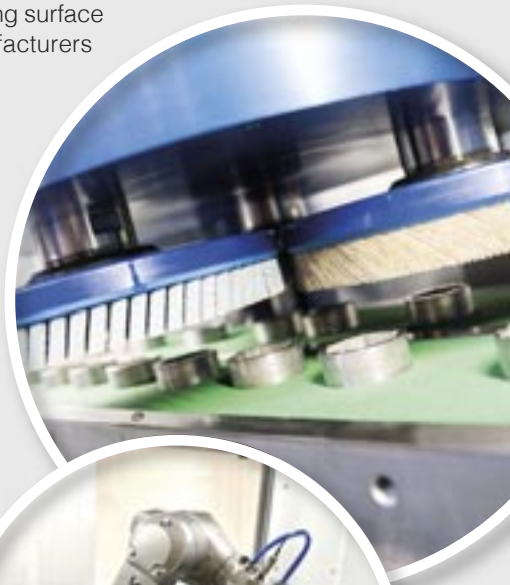
GPA Innova is the pioneer behind ***DLyte***, the **world's first dry electropolishing process**—offering a revolutionary, automated solution for polishing metal components with unmatched consistency and quality.

Unlike traditional liquid electropolishing, DLyte uses solid-state media to achieve **ultra-smooth, mirror-like finishes without altering part geometry**. The process is ideal for high-value components where dimensional accuracy and flawless surfaces are essential, such as those used in medical, dental, aerospace, and luxury goods industries.

DLyte excels in polishing complex, hard-to-reach geometries—making it **perfect for medical components** like orthopedic implants, dental prosthetics, and surgical tools. The process is ISO-certified for medical applications, ensuring compliance with the strictest industry standards.

GPA Innova offers a range of DLyte machines, all of which are available to view on the Advanced Grinding Solutions website, from compact bench-top models to fully automated systems capable of 24/7 operation. All of which have **fast cycle times and minimal maintenance**. DLyte machinesoffer a clean, sustainable, and highly cost-efficient alternative to traditional finishing methods.

Proven by their rapid growth, GPA Innova's dry electropolishing technology is transforming surface finishing and is used by top manufacturers worldwide.

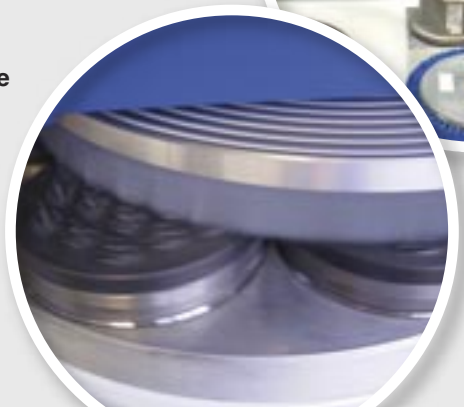


Gerber Maschinenbau Switzerland

Gerber is a leading manufacturer of **brush honing and deburring machines**, designed to deburr, polish, and edge-round components on one or both sides with exceptional precision.

Gerber's modular deburring machines make **precision deburring simple** by using a combination of abrasive brushes and intelligent controls to remove burrs consistently and efficiently. These systems are particularly suited to components requiring fine edge finishing and uniform surface quality, ideal for industries such as medical, aerospace, cutting tools, and precision engineering.

Each machine is customised to match your exact part geometry, material type, and production volume. With options for manual, semi-automatic, or fully automated part handling, Gerber deburring machines can be integrated into new or existing production lines with ease.



By automating the deburring process, Gerber helps **eliminate inconsistencies** associated with manual finishing while **reducing labour costs and scrap rates**. These systems are a reliable and cost-effective way to achieve repeatable, high-quality surface finishes, even on complex parts.

Gerber delivers Swiss-engineered precision with over 70 years of experience in high-end deburring solutions. Available as standalone units or multi-station configurations.

NOVA
GRINDING SYSTEMS

Nova manufactures grinding machines **for internal, external, and combined grinding operations**. Their machines offer precision roundness below 0.0005 mm and flexible high-volume production of complex parts with fast cycle times. These machines are ideal for grinding **roller bearing rings and tracks**. For components requiring multiple surfaces ground with tight tolerances, Nova's combination machines are equipped with multi-spindle turrets that enable internal, face, and external grinding in a single setup.

wick
JAG ROBOTICS

MF
magnetfinish

Wick, our Automation Partners work with customers to create **custom automation solutions**, including industrial, collaborative, and mobile **robot cells**. Partnering with **Magnetfinish**, they also offer turnkey robotic systems optimised for the **deburring and polishing of cutting tools**. Their integrated cells include automatic loading, deburring, demagnetising, cleaning, inspection, and assembly—ideal for parts in the medical, aerospace, and automotive sectors. The collaboration delivers high repeatability, reduced cycle times, and full process traceability. Their full product range is available on our website.

FLP
MICROFINISHING

FLP Microfinishing offers a wide range of high-precision **twin and single-sided lapping and fine grinding** machines, from compact 380mm models to very large machines. These deliver extremely high accuracy, flatness, fine surface finishes, and repeatability across industries including automotive, aerospace, medical, and optics. FLP also provides the industry's largest selection of **lapping powders, oils, diamond compounds, and polishing fluids**, supporting every manufacturing requirement from small batches to large-scale production.

TSCHUDIN

Tschudin, one of the greatest names in grinding, continues to explore new advances in **centerless grinding technology**.

All machines benefit from Tschudin's **patented W-Axis**, whereby **the workrest blade is mounted onto its own CNC axis**. This allows parts to be safely and easily loaded onto the workrest blade outside of the machining zone. Should a part not be loaded correctly and fall off the work rest blade, it will do so outside of the grinding zone, where it cannot cause any damage.

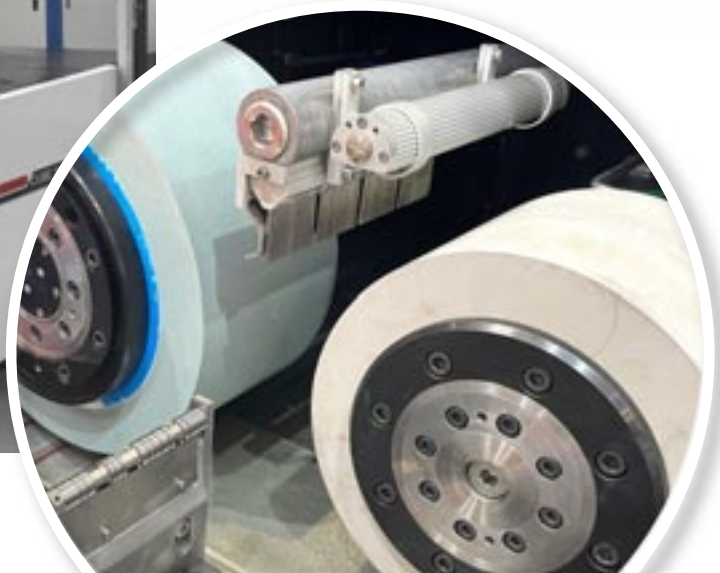
Tschudin's **Proline series** benefits further from another **patented feature** – a fourth CNC Y-axis that moves the regulating wheel vertically **to remove the need for an operator to adjust the workrest blade height** to keep the grinding geometry consistent as the grinding wheel wears. As this innovative feature is linked to the CNC programme, the regulating wheel height is moved automatically, allowing for consistent grinding without any intervention from an operator.

The **Tschudin Cube machine benefits from a radical modern design** that offers **unbeatable ergonomics**, thus ensuring fast and safe loading, and this machine is claimed to be the **world's easiest and fastest centerless grinding machine to set up**, as the grinding and regulating wheels can be changed in just 6 minutes. Despite its small footprint, the Cube grinds parts from 0.1mm to 20mm in diameter and plunge grinds components up to 205mm long. It is highly flexible and can be quickly changed over from plunge grinding to throughfeed grinding.

Tschudin's **400 machine** grinds parts of up to 150mm in diameter and 280mm long (when plunge grinding) with a choice of grinding spindles of up to 37 kW. The largest Tschudin **600 machine** that weighs some 24 tons and may be specified with a 60 kW grinding spindle completes the range and **will plunge grind 500mm long parts** with a diameter of up to 250mm, and, as with all Tschudin machines, **has an axis resolution of only 0.1µm**.

All Tschudin machines **benefit from having natural granite machine beds** that guarantee maximum thermal stability, and there is now an option of having (patent pending) **carbon fibre spindles**. These are designed to eliminate the heat transfer factor and further optimise dimensional stability. A time-consuming warm-up of the machine is no longer necessary. **Even if the machine stands still for days, it can immediately produce parts within a maximum dimensional deviation of 1 µm**.

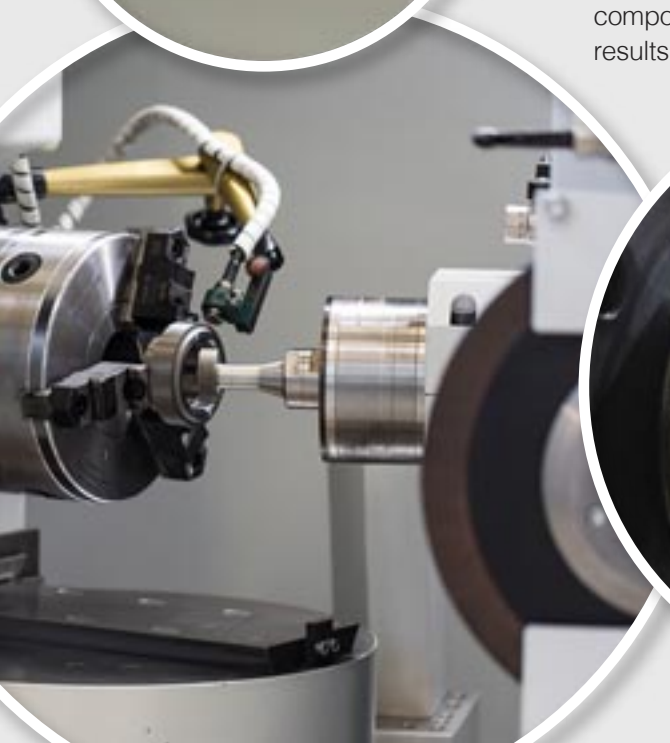
Many **other options** are available for these machines to bring process advantages to end-users, including high-pressure wheel cleaning devices, programmable CNC coolant delivery systems, and pre-process and post-process gauging.



DANOBAT

INTERNAL GRINDING

Danobat's internal grinding machines combine advanced kinematics with high-speed spindles and rotary axes to machine complex internal geometries in a single setup. Their compact design, user-friendly interface, and fast tool change capabilities make them well-suited for both high-volume production and flexible manufacturing environments. These machines offer excellent roundness, surface finish, and repeatability, making them ideal for **fuel injection parts, hydraulic components, and high-precision bores**.



COMBINED GRINDING

Danobat's external grinding machines are engineered for precision, speed, and versatility from the smallest to the largest components in industries such as **automotive and aerospace**. Built with hydrostatic guideways, linear motors, and direct-drive spindles, models such as the **LG and HG series** achieve outstanding surface finishes and geometrical accuracy and are suited for high volume and flexible batch production. These machines are characterised by their flexibility and quick changeovers. The durability and stability, even under heavy-duty, high-volume production conditions, can produce components such as shafts, axles, and other cylindrical components with exceptional results.

EXTERNAL GRINDING

Danobat also has machines capable of **combined grinding**. The **ID series** is able to **integrate internal, external, and face grinding in a single setup**, significantly reducing cycle times and enhancing part concentricity. These machines are tailored for complex components such as **transmission gears, pump bodies, and aerospace casings** that demand multiple grinding operations with tight tolerances. Featuring high-speed multi-spindle operations, rotary B-axes, and multi-tool configurations, they have the flexibility to deal with a wide range of grinding tasks. The all-in-one design reduces part handling and improves throughput while maintaining consistent quality.

Comat is a specialist manufacturer of high-quality filtration systems for the management of metal working cutting oil.

These super-filtration systems deliver ≤3µm filtration quality throughout the entire working cycle; maximising the quality of parts produced on machines whilst minimising lifetime running costs and maintaining coolant consistency. The systems are customised to meet specific needs allowing for maximum efficiency of the filtration process. Oil is filtered to a better quality than new unused oil on Comat systems.

The remote monitoring of the performance of their filtration systems from Comat's HQ ensures effective after sales support with systems monitored in real-time during manufacturing processes to ensure that the optimum filtration is always obtained. Today, more than 30,000 machines use Comat Filter units, with more than 135,000,000 litres of metal working oil being super-filtered every minute. Comat operates globally and have a 30-year history in developing the most advanced filtration systems.

Oil filtered by Comat units does not need to be replaced and users report that they have not changed the oil for up to 20 years (save top-ups due to oil loss). From small systems to support a single grinding machine up to centralised units that can cater for up to 10 grinding machines or 45 lathes; Comat have the solution for you.

Studies have shown that Comat systems are considerably cheaper to run than other systems that use candles or a series of cartridge type filters whose running costs are up to 4 times greater

For Grinding, Honing, Lapping and Polishing Machines

Model	C60	C120	C180	C240	C360
For Machines	1	1	2	2	2-3
Capacity l / Min	60 litres	120 litres	180 litres	240 litres	360 litres

Model	C480	C600	C720	C840	C960
For Machines	4-5	5-6	6-8	7-9	8-10
Capacity l / Min	480 litres	600 litres	720 litres	840 litres	960 litres

For Straight Cutting Oils (No Emulsions)

For Filtering out: Carbide, HSS, PCD, Cermet, Precious metals, Cast Iron, Copper & Iron Alloys, Ceramics, Aluminium, Plastics etc.

For Turning Machines

Model	TM400	TM1000	TM1800	TM3600	TM5400
For	4 - 5 Lathes	8-10 Lathes	15-20 Lathes	30-40 Lathes	50-60 Lathes
Capacity / Day	430 litres	1,000 litres	1,800 litres	3,600 litres	5,400 litres

For Straight Cutting Oils (No Emulsions) - we have other Comat filtration systems for Emulsions!

For Filtering out: Brass, Steel, Alloys, Cast Iron, Copper and Iron Alloys, Aluminium, Precious Metals, Plastics, Titanium.

- Stable flowrate over time
- Higher quality of machined workpieces
- Increased lifetime of machines, wheels and tools
- Industry 4.0

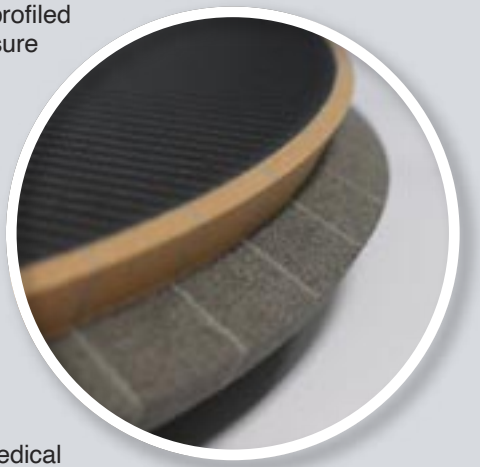
Krebs & Riedel is one of the leading German grinding wheel manufacturers with over 250 employees. Founded in 1895, the company, which is still family-owned, operates globally with distributors in over 30 countries.

The product range includes **conventional internal and external grinding wheels** up to 915mm in diameter, manufactured using aluminium oxide and silicon carbide with ceramic and synthetic resin bonds for most industrial grinding applications.

Krebs & Riedel Vitrified CBN and Diamond grinding wheels with ceramic bonds have been produced for over 40 years and have a working speed of up to 200m/s for internal, external, and special grinding processes, and new types of wheels with improved grain structures and novel bonding systems that optimise performance are being created. These offer extended wear rates, hold profiles for longer, and are easy to dress and to profile. CBN wheels are hard to machine high alloy hardened steels as from 54 HRC or nickel-based alloys, etc. Diamond wheels are mostly used for **grinding carbide, ceramics, glass, or parts with special coatings**.

One area where Krebs & Riedel excels is in **conventional and also CBN wheels for gear and thread grinding** applications to suit machines manufactured by Gleason, Oerlikon, Kapp-Niles, Hofler, Liebherr, Maag, Samputensili, and Reishauer, etc. Profiled or unprofiled wheels for grinding modules from 0.5 to 12 with various pressure angles are available.

Jig Grinding is a process which we sell a lot of wheels for, both Diamond and CBN, with wheels being pre-mounted on carbide or HSS sticks or unmounted according to the customer's wishes.



Krebs & Riedel also excels at providing diamond and CBN wheels **for double disc (duplex) grinding, fine grinding, and lapping machines**, and they have their own test machine for proving out the best wheels for your application.

For many years, Krebs & Riedel has been active in the medical industry, supplying wheels for grinding femorals and other parts, such as rasps with dressable carbon fibre bodied CBN wheels being an attractive option.

Across industry, Krebs & Riedel has **optimum solutions** for every process, such as **cylindrical grinding, surface grinding, centerless grinding, creep feed grinding, special profile grinding**, and many more.

AGS holds wheels in stock at our works in Coventry that are held under Kan-Ban arrangements for our UK customers who want instant supply. We also supply wheels for immediate drawdown by our customers who hold stock wheels at their works and pay upon their use, not upon supply. Please contact us and we can discuss your grinding applications, and **we can supply no-obligation, free-of-charge test wheels for you to try out**.

Advanced Grinding Solutions Ltd

Unit 80, Hotchkiss Way, Binley Industrial Estate, Coventry, West Midlands CV3 2RL

+44 (0) 2476 22 66 11 • info@advancedgrindingsolutions.co.uk • www.advancedgrindingsolutions.co.uk