

Struers grinding and polishing equipment

PERFECTLY REPRODUCIBLE

Optimize your grinding and
polishing process with Struers



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EXCEPTIONAL GRINDING AND POLISHING SOLUTIONS

Whatever your material preparation requirements and lab setup, you can be certain that your Struers grinding and polishing equipment will deliver the reproducibility, accuracy, and throughput you need – every time.



Valid, accurate, and reproducible preparation results

Some laboratories require a preparation result suitable for microscope analysis whereas others may just need a hardness testing result. Struers customers range from laboratories with a large workforce to those that operate with just one individual.

Whatever your material, preparation goal, and lab setup, we have a grinding and polishing solution that fits. As the world's leading provider of grinding and polishing equipment, accessories and consumables, we offer everything from manually operated tabletop machines through to advanced, fully automated systems. This means you get the perfect result for your specific needs, every time.

Ensure certainty with a complete solutions partner

With Struers, you'll never need to spend time and cost managing multiple suppliers. We provide all necessary consumables and accessories, specifically designed to work flawlessly with our equipment at every stage of the process, which means you always get the right preparation result and the best value from your investment.

As your partner, we will also support you by sharing our extensive expertise and know-how through tailored services, helping you to create a faster, safer, and more cost-effective grinding and polishing process. We call this ensuring certainty, and it is the reason we are the partner of choice for thousands of materialographic professionals worldwide.

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“A Struers application specialist completely changed our method – and with that, we reduced our preparation time from up to 60 minutes for two to three samples to only 11 minutes.”

– Mikael Berggren, Laboratory Technician,
Siemens Industrial Turbomachinery



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WE UNDERSTAND YOUR CHALLENGES

For decades, Struers has supported businesses like yours with materialographic solutions tailored to each lab's individual needs.

We understand better than anyone else that your lab will have specific preparation goals and challenges. That's why we have developed a complete portfolio of grinding and polishing solutions that meet your needs today and as your demands evolve over time.

No matter if your focus is on throughput, speed, efficiency, process standardization, or a combination of all these factors, you can be sure you always have the right equipment and the right support no matter where you are in the world.





Throughput

Labs need a reliable way to deliver the promised number of specimens in time and with minimal stops. We address these goals through manual solutions that increase throughput by using multiple machines in parallel, or automated solutions that handle many specimens in a continuous flow with minimal operator involvement.



Speed

Whether specializing in failure analysis, research and development, or quality control, labs often need to process more specimens in a shorter time with lower consumption of consumables. Our equipment helps you to optimize your lab process by using the right methods and consumables to reduce the time taken to reach your desired preparation result.



Efficiency

Working more efficiently is about maximizing output per resource. This is especially important for labs that need to prepare many different materials or who have limited room for equipment. Our versatile solutions can cover any materialographic task, helping you to optimize your process and make best use of available space in your lab.



Process standardization

With a more intuitive workflow and limited operator input, there is less risk of human error affecting the results. Our solutions enable you to standardize your process for greater reproducibility, accuracy, and efficiency, as well as helping you to predict and plan for scheduled maintenance.



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EXCELLENCE WHATEVER YOUR CHOICE

From our manually operated equipment to our most advanced automated systems, all our grinding and polishing solutions have core functionalities built-in to optimize your process in the most effective, efficient, and user-friendly way. So no matter which you choose, you can be sure it will meet the same uncompromising standards for quality, reliability, and usability.



Process optimization

We can help you to not only achieve the right preparation results, but also to create the best methodology for your lab setup. Our solutions can help to optimize your process, either by providing a more intuitive workflow via our manual systems, or with automated solutions that help to guide your operators at every step.

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“We have not yet met a customer where we could not reduce their number of steps or reduce their preparation time.”

– Helle Michaelsen, MSc, Business
Solution & Application Director, Struers





Ease-of-use

With a common operating structure, all Struers' equipment is well known for its exceptional user-friendliness. If you already have experience with our grinding and polishing solutions, this means you will already know your way around any other that you use, without extensive training. If you do not have prior experience, you will find every aspect highly intuitive to streamline the process, freeing up time to focus on other tasks.



Safety

In every area of our business, safety is paramount. This can be seen across our entire grinding and polishing portfolio, which are CE marked and adhere to international regulations to ensure a safe working environment for your operators. Not only does this help to keep productivity high, but it also helps to maintain employee satisfaction and retention.



Uptime

Business continuity is crucial, which is why our equipment is built to work, and to last. Each is made using corrosion-resistant and impact-proof materials, then lifetime tested for durability to ensure long-term performance in even the most demanding environments. Not only this, but all our solutions are designed to make daily maintenance tasks, such as cleaning, faster and easier, which improves productivity while also helping to extend the lifetime of your investment.



Environmental footprint

For many businesses, finding better ways to reduce waste is a priority. This is particularly relevant for grinding, which can require a lot of water for cooling. To help you save costs and reduce your environmental footprint, our equipment features a recirculation system (either as an integrated function or a separate module) that greatly reduces the amount of water you use. This is also used to collect grinding debris so it is never flushed down the drain and avoids clogging.





A SOLUTION FOR EVERY SETUP

You can be certain your needs are covered

Covering everything from manual to fully automatic solutions, our grinding and polishing equipment has been designed to facilitate every lab setup and preparation goal. Backed by a complete range of support services, consumables, and a huge database of methods, you have everything your lab will ever need.

There are several important factors to consider when choosing your grinding and polishing equipment. This diagram will start to give you an idea of how our portfolio is organized to meet your preparation, operational, and throughput requirements.

For a more detailed analysis about which equipment is best suited to your lab setup, speak to our experts who can help you to choose the right solution.



Xmatic
Discover more on [page 10](#)

PROCESS PRIORITIES

Level of automation		High
Process standardization Achieve preparation goals with less user input or know-how required		
High throughput Prepare many specimens per time unit		
Speed Shorter total process times		
Efficiency Maximum output per resource	Lab space needed	
	Range of materialographic tasks covered	
	Tasks covered by the equipment	
Operator Experience Need for a trained operator to ensure accurate, valid and reproducible results		



Maximum



Minimum



Xmatic Compact

Discover more on [page 10](#)



AbraPlan / AbraPol

Discover more on [page 14](#) & [18](#)



Tegramin

Discover more on [page 22](#)



LaboSystem

Discover more on [page 26](#)

Low



Without LaboForce –
manual preparation

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DISCOVER XMATIC AND XMATIC COMPACT

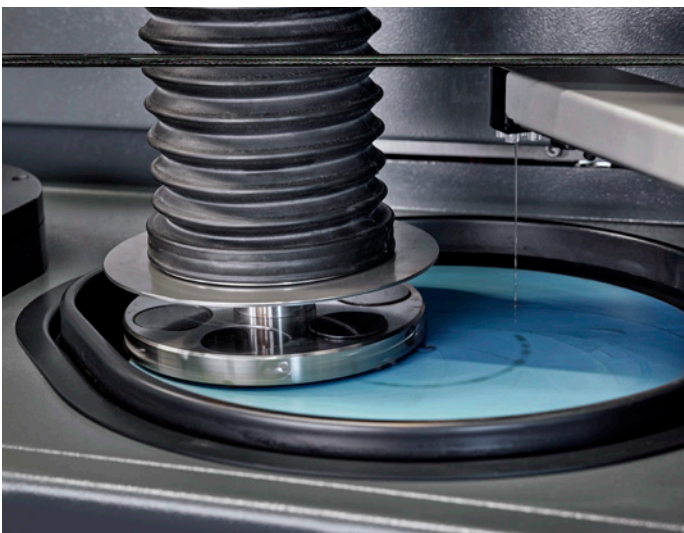
Xmatic and Xmatic Compact is a fully automated, end-to-end grinding and polishing solution. It has been designed for high-throughput labs that need the very best in terms of reproducibility, throughput, process standardization, and ease of use.

Xmatic is truly unique. Packed with our latest technology and a host of user-friendly features, it gives you exceptional process certainty, optimizing the entire grinding and polishing process and minimizing the risk of human error.

This results in a more efficient and accurate outcome that your lab and business can depend upon, while freeing up more time for your operators to focus on other tasks, such as specimen analysis.



Fully automated for maximum reproducibility

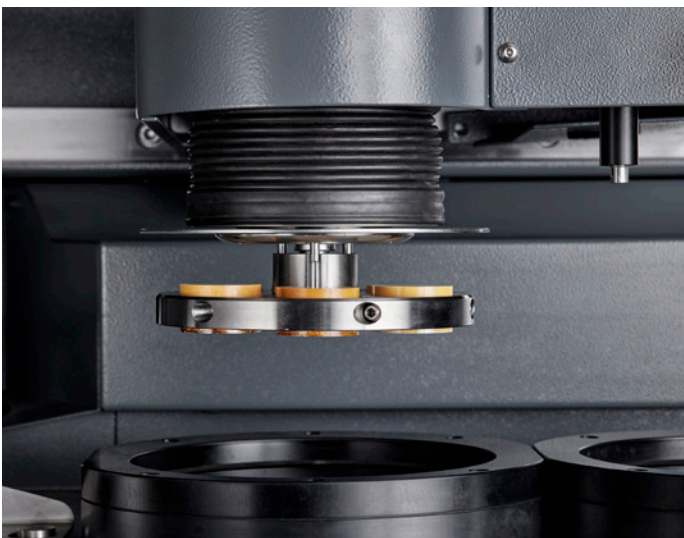


Xmatic has a broad range of automated technologies and features that help to give you the best possible reproducibility.

These include dressing of the grinding surface to help improve the efficiency, correct consumables detection, cleaning of dosing tubes to eliminate the risk of consumables contamination, and adjustment of force and dosing to match your desired number of specimens.

For you, this means greater accuracy and reproducibility for your preparation results.

Higher throughput



With Xmatic you get more dependable ways to deliver the promised number of specimens, in less time, with fewer hands, and with minimal production delays.

For example, Xmatic has rapid and simultaneous mechanical movements that reduce process time, with fast and efficient cleaning programs and up to eight specimen holders that can be loaded at any time.

Minimal contamination risks



Xmatic gives you multiple combination options for advanced cleaning and drying to minimize contamination between preparation steps, including ultrasonic, high-pressure water, soap, and alcohol.

Not only does this result in greater reproducibility for your specimen analysis, but it also helps you to increase throughput.

Full process documentation



With Xmatic, you get full documentation data in log files that record multiple variables, including the amount of specimen holders that it runs, which methods are used, consumables consumption, and how many hours in service the machine has been running for.

This enables you to standardize your process for greater repeatability, optimize it for greater accuracy and efficiency, store records for future requests, and plan for scheduled maintenance.

Optimize footprint



Xmatic has been designed to minimize the floorspace it requires, for instance via a vertical conveyor that optimizes footprint.

However, for labs where space is particularly limited, Xmatic also comes in a smaller version called Xmatic Compact that does not include a high-speed plane grinding station. Instead, plane grinding can be done on an MD grinding and polishing station with speeds up to 600 rpm and with a variety of MD surfaces for all material types.

Highly intuitive and easy to use



With an intuitive user interface the entire user experience is simple. A redesigned Graphical User Interface (GUI) uses a screen that shows a complete representation of the machine, with a vertical conveyor to the left, suspension and lubricants on the bottom, and MD surfaces to the right (so-called 'embodiment').

In addition, a data matrix code on all consumables means Xmatic can automatically detect if you are using the correct consumable, which reduces the risk of error and the time it takes to set up the equipment. The bottles also feature Easy Connectors for quick changes and zero risk of spillage.

Explore more [➤](#)

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XMATIC GIVES YOU...

- ✓ Fully automated, end-to-end solution
- ✓ High throughput
- ✓ Maximum reproducibility
- ✓ Minimal risk of human error



DISCOVER ABRAPLAN

As the strongest high-speed machine for high removal grinding on the market, AbraPlan is ideal for high-throughput labs that need high and controlled surface removal for multiple, large, or very hard materials.

AbraPlan is a semi-automatic solution that guides your lab operators through the process. Featuring a dedicated plane grinding surface with high rotational speed, AbraPlan will help you to optimize your total process time by removing a lot of material in a short time, compared to plane grinding on an MD station.

AbraPlan also helps you to control your consumable costs by reducing stone wear by more than 60% by optimizing the dressing parameters.

For best throughput results, AbraPlan is designed to work together with AbraPol.



Ultra-fast plane grinding

Save up to
 **90 %**
of plane
grinding time

AbraPlan is your best choice for high speed plane grinding. In combination with Struers' grinding stones and diamond disc, you can reduce grinding times by up to 90% compared to similar materials (such as Silicon Carbide Foils and Papers or rigid discs like MD-Piano).

Result with carbides 30 mm dia mounted specimen

AbraPlan-30, diamond grinding disc 8D35 – time used	9 seconds
Standard equipment with rigid disc i.e. MD-Piano – time used	105 seconds

Time saved per holder when using AbraPlan	96 seconds = 91%
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Fast and controlled material removal



AbraPlan's grinding surface rotates at 1,450 rpm, ensuring a very high material removal. An accurate material removal sensor, ranging from 0.05 mm to 10 mm, allows you to pre-set the amount of material that needs to be removed, which can be completed in less than 30 seconds.

Powerful performance



AbraPlan is exceptionally stable and robust, with an extremely solid frame and powerful motors for grinding. The design limits vibrations, which is necessary when plane grinding at high speeds and forces.

Minimal training required



With an automatic diamond dresser, AbraPlan keeps the abrasive grinding stone plane and sharp, and an automatic surface detection function makes the dresser process fast and simple.

A removal rate graph also visualizes the removal rate of the stone to let you know when dressing is needed.

A special dresser key on the front panel gives you easy access to dress the stone at any time. The dresser automatically monitors the remaining thickness of the grinding stone at start-up and informs you when it must be replaced.

Explore more [➔](#)





ABRAPLAN GIVES YOU...

- ✓ Semi-automated solution
- ✓ Ultra-fast and very high material removal
- ✓ High efficiency and throughput
- ✓ An exceptionally stable and robust solution

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DISCOVER ABRAPOL

When it comes to high volume preparation of large specimens, AbraPol is best-in-class. Featuring a large working area with up to 350 mm (14") disc size and speed up to 600 rpm, AbraPol will meet all your throughput needs.

Efficient and durable, AbraPol can increase the force up to 700N, which means it can be used for extremely hard materials. AbraPol also minimizes your consumables spend by reducing surface wear up to 70% when the surface diameter is increased from 300 mm (12") to 350 mm (14"), and by using an innovative double dosing feature that gives the best possible consumables distribution.

AbraPol can be used as a standalone solution; however, it is designed to work together with AbraPlan for best throughput results.



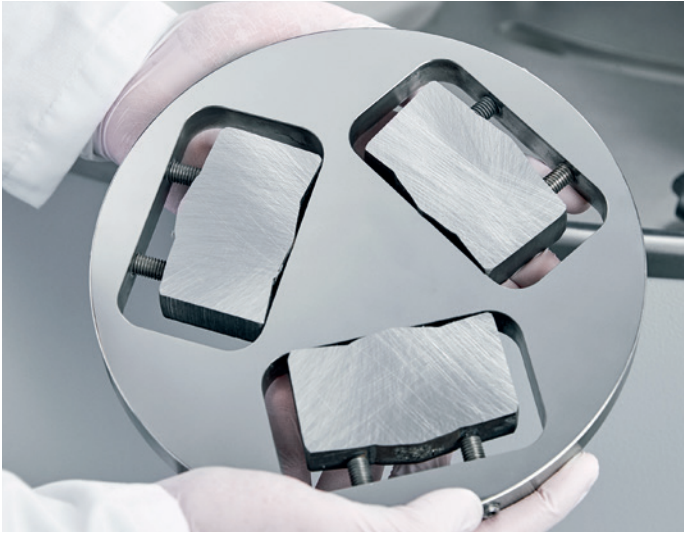
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“We were impressed with the intuitive and icon-based user interface on the AbraPlan-30 and AbraPol-30. It was evident how optimized and precise the machines operated.”

- Dennis Traut, Lab Manager Materials Engineering, BGH Edelstahl Siegen GmbH



Maximize throughput and efficiency



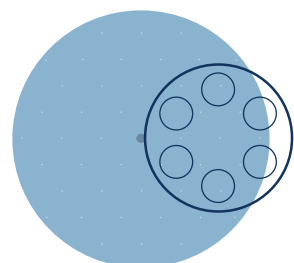
When double dosing and a 350 mm (14") disc are combined, you get the best possible distribution on the polishing surface. The double dosing system makes the machine suitable for preparing specimens on up to 350 mm (14") dia. surface using a 200 mm (8") dia. specimen holder.

With up to 600 rpm on the surface and 300 rpm on the head, AbraPol also helps you to increase throughput by speeding up the process depending on your material. In addition, controlled and accurate material removal allows you to preset stock removal, which saves further time.

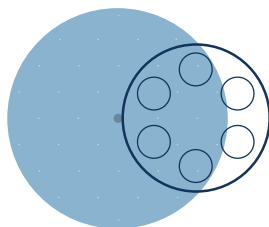
Optimize your preparation area

AbraPol gives you the option to increase your preparation area by 35% if you upgrade your disc size from 300 mm (12") dia. to 350 mm (14") dia.

For best results, we recommend combining a 350 mm (14") dia. disc with a 200 mm dia. specimen holder.



350 mm (14") dia. disc
200 mm dia. specimen holder



300 mm (12") dia. disc
200 mm dia. specimen holder

**Increase your
preparation
area by**

↑ 35 %

Reliable, valid results



AbraPol has an extremely solid frame and powerful motors to give you outstanding reproducibility and reliability of results. In addition, its unique design limits vibrations, which makes it possible to work all day with large and heavy specimen holders.

Explore more [➤](#)





Struers

AbraPol-30

Method E: 100 Cr 6 - Step No. 3 *

☒ MD-Dac	☒ Off
☒ DiaPro Dac3	☒ 3/10
☒ 180 N	☒ Time
☒ 150 rpm	☒ 150 rpm
Set step time	3:00 mess

Previous step Next step New step Save

F1

F2

F3

F4

ABRAPOL GIVES YOU...

- ✓ Semi-automated solution
- ✓ High throughput and maximum efficiency
- ✓ Double-dosing feature and speed up to 600 rpm
- ✓ Optimized preparation area (350 mm (14") dia. disc available)

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DISCOVER TEGRAMIN

Tegramin's compact design, integrated specimen mover head, automated process control, and user-friendly operation makes it a reliable, all-purpose grinding and polishing solution that delivers highly reproducible results.

Tegramin is an all-around machine but is ideal for labs that have different materials and need to adjust parameters from preparation to preparation, for example those working with R&D and failure analysis. It is easy for operators to insert and remove specimens, since the mover head always stops in the same position as it was started. At the touch of a button, the specimen mover plate also rotates 180 degrees for easy access.

These features are not only made for a simpler operating process, but they enable you to use the whole surface area, and thereby making your consumables last longer.



Exceptional reproducibility



Tegramin features a sturdy and durable design. A dual column construction supports the specimen mover head to ensure you prepare perfectly plane specimens, and an aluminum base eliminates vibrations to help you achieve more reproducible results.

Tegramin also helps to minimize contamination between steps with a special pump function that reverses slightly to retract the suspension / lubricant from the dosing nozzle when you move to a finer grinding or polishing step.

Advanced dosing functions



Precise dosing of diamond suspension and lubricant is an important factor for increasing the reproducibility of your preparation results. Tegramin features optional pumps with a calibration function to ensure constant dosing levels and the same dosing of consumables throughout the lifetime of the machine.

This feature also helps you to know how much suspension is left in the bottle, so you can be sure there is always enough for your preparation steps.



Greater control and efficiency



Tegramin has many special features you can adjust and fine-tune to match your exact preparation process.

These include force as low as 5N to help you avoid damaging small or sensitive specimens, which can be increased or decreased gradually while the speed of preparation surface and mover plate ramps up and down. It is also possible to change the direction of the specimen mover head for optimal use with different materials and consumables, and a start-stop control helps you minimize any potential specimen damage.

Tegramin also helps to improve process efficiency by minimizing grinding time while ensuring sufficient removal of material with a built-in sensor that measures removal in the 50-5,000 μm range.

Multiple models to fit your needs



To make sure you have the right set-up for your lab requirements, Tegramin comes in three models:

- Tegramin-20 – disc size 200 mm (8”), for use with mover plates. This is the best solution for labs with few specimens but with a high requirement for reproducibility.
- Tegramin-25 – disc size 250 mm (10”), for use with mover plates and specimen holders. This is the best solution for labs with a high requirement for reproducibility and flexibility.
- Tegramin-30 – disc size 300 mm (12”), for use with mover plates and specimen holders. This is the best solution for labs with many specimens and a high requirement for reproducibility and flexibility.



TEGRAMIN GIVES YOU...

- ✓ Semi-automated solution
- ✓ Exceptional reproducibility
- ✓ Options for a wide range of materialographic tasks
- ✓ Better process standardization

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DISCOVER LABOSYSTEM

LaboSystem is ideal for labs requiring a manual or semi-automatic grinding and polishing solution that is quick to set up and use, and that delivers the endurance and speed required to keep up with throughput demands.

As a modular system with a small footprint, LaboSystem is highly flexible and adaptable to grow as your needs evolve. You can choose to use it as a manual station or with additional add-ons as a semi-automatic solution that includes a specimen mover head and an automatic dosing system.

LaboSystem also helps you to optimize specimen preparation times with disc sizes up to 300 mm (12") dia., and increase throughput by using up to two stations in a single system or by having multiple systems in parallel.



Higher throughput and efficiency



As a manual solution, LaboSystem can grow alongside your lab's needs and throughput demands. In addition, with no setup time you can begin processing specimens right away.

Speed up your process



For a faster process, you can run either a 250 mm (10") dia. or a 300 mm (12") dia. disc, which represents a 44% increase in surface area. Maintenance is also made faster due to a unique cone disc system and a special liner that makes it easier to clean the machine.

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**"The new LaboPol-60
was nearly**

50 %

**faster than our old
polisher, enabling us
to prepare specimens
in half the time."**

- R. Dubois, Process inspection
A8, Audi AG, Neckarsulm



Adaptable for your changing needs

LaboSystem's modular design gives you the reassurance that your needs will be met as they evolve over time. For example, you can upgrade your LaboPol with a semi-automatic LaboForce specimen mover head and an automatic LaboDoser, depending on your preparation goals.

		Specimen mover heads			Dosing units	
Equipment						
		-50	-100	-Mi*	-10	-100
LaboPol-20 200 mm dia. disc 		LaboForce-50 Up to 4 40 mm dia. specimens			LaboDoser-10 - 1 x bottle (man.)	
LaboPol-30 250 / 300 mm dia. disc 		LaboForce-50 Up to 4 40 mm dia. specimens			LaboDoser-10 - 1 x bottle (man.)	
		LaboForce-Mi* Up to 8 30 mm dia. specimens			LaboDoser-10 - 1 x bottle (man.)	
		LaboForce-100 Up to 6 40 mm dia. specimens			LaboDoser-100 - 4 x bottles (aut.)	
LaboPol-60 2 x 250 / 300 mm dia. disc 		LaboForce-50 Up to 4 40 mm dia. specimens			LaboDoser-10 - 1 x bottle (man.)	
		LaboForce-Mi* Up to 8 30 mm dia. specimens			LaboDoser-10 - 1 x bottle (man.)	
		LaboForce-100 Up to 6 40 mm dia. specimens			LaboDoser-100 - 4 x bottles (aut.)	

* For mineralogy preparation.

LaboUI

Control panel for manual preparation



Extra stand

for LaboDoser-10



Explore more [➤](#)



LABOSYSTEM GIVES YOU...

- ✓ Manual / semi-automated solution
- ✓ Shorter total process times
- ✓ Small footprint
- ✓ An adaptable solution to match your needs

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PERFECT AND FAST CLEANING WITH LAVAMIN

Cleaning specimens between preparation steps is important when you need high throughput with zero risk of contamination, or when you want your results to be as reproducible as possible. Cleaning can be done manually; however, it can be a time-consuming process, which is why an automated process is often the ideal solution.

Some of our grinding and polishing equipment has cleaning systems built-in, such as Xmatic, but for those that do not, Lavamin provides the perfect solution. Lavamin is a compact, stand-alone cleaning unit for specimens in specimen holders or mover plates of 140 mm to 160 mm in diameter, for use with several of our grinding and polishing machines.

Lavamin gives you fast, fully automated cleaning perfection every time, while removing the need to replace preparation surfaces due to accidental contamination.



EP3134717B1 / US pending

Multiple cleaning programs for better results



Lavamin uses patented, automated process that combines ultrasound and water rinsing, followed by high-speed spin drying. A choice of three programs enables you to choose the best procedure, depending on your grinding or polishing steps.

Up to 20% faster



As an automated process, Lavamin saves up to 20% of the total preparation time and eliminates the need to move specimens to the sink for manual cleaning. This leaves time for you to change the preparation surface and be ready for the next step in the process.

Eliminate chemical cleaning



A reliable rinsing process using only ultrasound and water, followed by high-speed spinning, enables effective cleaning without the use of cleaning agents and alcohol. This helps to make the process safer and lowers your lab's environmental impact.

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KEEP YOUR SPECIMENS IN PLACE

Our specimen holders are designed for all specimen shapes and sizes. They are interchangeable between most machines and save you time when making the perfect preparation.

We offer a broad range of specimen holders and mover plates, including for both mounted and unmounted specimens. With a host of features, such as hole types and shapes, construction material, and diameters, each one has been specifically designed to support an efficient and reliable result from your grinding and polishing machine.

We have placed the holes in our specimen holders as close as possible to the edge of the holder. This helps to make better use of the grinding and polishing surface in order to extend their operational lifetime.

Uniforce



If your specimen is not clamped properly, it will be very difficult to create a reproducible result. Uniforce is an easy-to-use levelling device that enables you to clamp your specimens quickly, correctly, and securely in your specimen holders, providing the necessary conditions for fast and accurate levelling. This ensures your specimens are clamped in the best possible way from the start and thereby shortens the plane grinding step.

Specimen holders



We provide specimen holders for almost any specimen size and shape, including individually tailored solutions. Each specimen holder is optimized to reach the edges of the grinding and polishing surface, which ensures better utilization and process efficiency. Our holders are available in stainless steel if you need more durability, or in aluminum if you need a lighter solution.

In addition, most specimen holders have the same type of coupling, which makes them interchangeable for most Struers machines.

Specimen mover plates



Our broad range of specimen mover plates gives you all the options you need for your preparation requirements.

Furthermore, you can place single or multiple specimens in the mover plate in any way, even in odd numbers, and it is ready to go with no need for clamping.

No matter your need, Struers has the ideal solution

Specimen mover plates

	Hole size	Holes / Shape		
Tegramin-20 / LaboForce-50	-	0	—	
	25 mm	4	●	
	30 mm	4	●	
	40 mm	4	●	
	1"	4	●	
	1.25"	4	●	
	1.5 "		●	
	Coupling used to all (Tegramin-20 / LaboForce-50) mover plates			
Tegramin-25 / LaboForce-100	-	0	—	
	For Accustop 30	3	●	
	25 mm	6	●	
	30 mm	6	●	
	40 mm	6	●	
	50 mm	3	●	
	1"	6	●	
	1.25"	6	●	
	1.5"	6	●	
	2"	3	●	
	Coupling used to all (Tegramin-25 / LaboForce-100) mover plates			
	Tegramin-30	-	0	—
25 mm		6	●	
30 mm		6	●	
40 mm		6	●	
50 mm		6	●	
1"		6	●	
1.25"		6	●	
1.5"		6	●	
Tegramin-30	2"	6	●	
	20 x 30 mm	6	■	
	For Accustop 30	3	●	
	For Accustop 40 and TYNDS	3	●	
	Coupling used to all (Tegramin-30) mover plates			
	LaboForce-MI	25 mm	8	●
30 mm		8	●	
40 mm		4	●	
60 mm		4	●	
20 x 30 mm		8	■	
Coupling fixed on the mover plates				

Specimen holders

		Hole size	Holes / Shape		Material			Hole size	Holes / Shape		Material		
Tegramin-25 / LaboForce-100	Diameter 140 mm	-	0	—		Aluminum	AbraPlan / AbraPol	Diameter 200 mm	-	0	—		Stainless steel
		29-32 mm	6	●		Aluminum			-	0	—		Aluminum
		10-32 mm	6	●		Stainless steel			29-32 mm dia.	12	●		Aluminum
		10-32 mm	6	●		Aluminum			38-40 mm dia.	8	●		Aluminum
		25-40 mm	4	●		Stainless steel			49-52 mm dia.	6	●		Aluminum
		25-40 mm	4	●		Aluminum			25-50 mm	6	●		Stainless steel
Tegramin-30 / AbraPlan / AbraPol	Diameter 160 mm	25-40 mm	6	●		Stainless steel	Xmatic	RFID*, diameter 140 mm	53 x 90 mm	3	■		Stainless steel
		25-40 mm	6	●		Aluminum			10-32 mm dia.	6	●		Stainless steel
		13-25,5 mm	12	●		Stainless steel			10-32 mm dia.	6	●		Aluminum
		10-25 x 34 mm	6	■		Stainless steel			25-40 mm dia.	4	●		Stainless steel
		20-40 x 68 mm	3	■		Stainless steel			25-40 mm dia.	4	●		Aluminum
		Max 24 x 52 mm	3	⬡		Stainless steel			-	0	—		Aluminum
		-	0	—		Stainless steel	Xmatic	RFID*, diameter 160 mm	13-25.5 mm dia.	12	●		Stainless steel
		-	0	—		Aluminum			10-25 x 34 mm	6	■		Stainless steel
		29-32 mm dia.	8	●		Aluminum			20-40 x 68 mm	3	■		Stainless steel
		38-40 mm dia.	6	●		Aluminum			-	0	—		Stainless steel
		50 mm dia.	4	●		Stainless steel			-	0	—		Aluminum
									25-40 mm dia.	6	●		Stainless steel
									25-40 mm dia.	6	●		Aluminum
									50 mm dia.	4	●		Stainless steel

Explore more

* RFID technology enables Xmatic to automatically track the specimen holders

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ALL THE CONSUMABLES YOU'LL EVER NEED

Whatever your material or preparation goal, our complete range of high-quality consumables work perfectly with our grinding and polishing equipment to optimize your process and deliver the best possible results.



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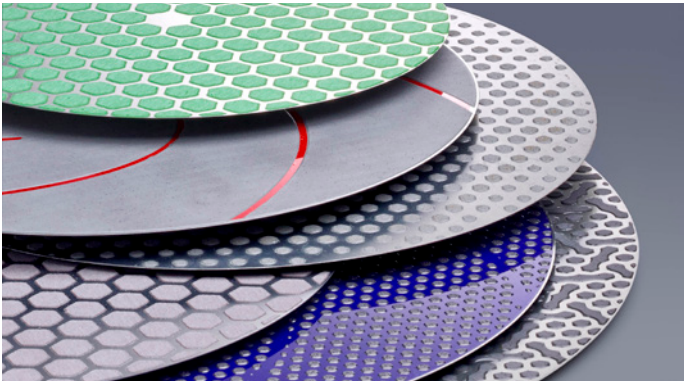
**A customer working
for the mining industry
reduced preparation
times by over**

 **40%**

using Struers methods, polishing
cloths, and DiaPro All-in-One
diamond solutions

Grinding consumables

MD system

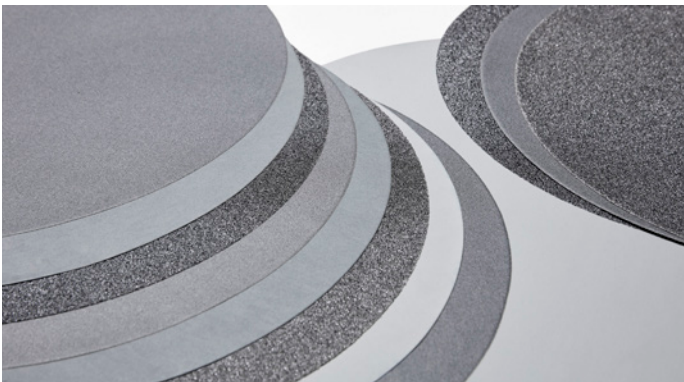


For high-quality results optimized to your material

Our MD grinding surfaces are made to the highest quality and are ideal if you work with full and semi-automated setups. Our broad range of different surfaces help you to achieve a plane specimen with virtually no artifacts, in a short amount of time.

[Explore more](#) >

SiC Foils and Papers



For an all-round flexible and reliable solution

Our SiC Foils and Papers provide an all-round solution, which is perfect for manual grinding and if you have many different types of materials.

[Explore more](#) >

High removal grinding surfaces



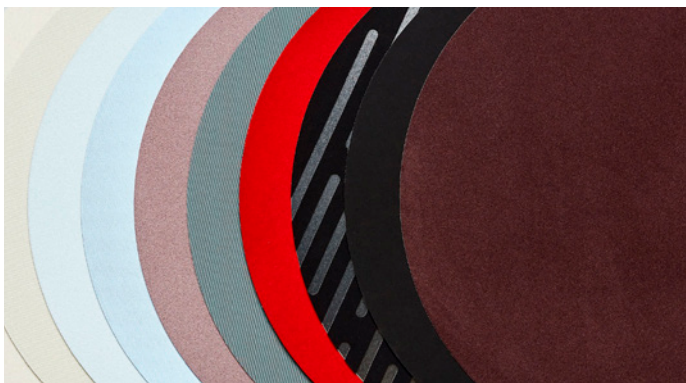
For high removal and ultra-fast plane grinding

Our grinding stones and diamond grinding discs are optimized to provide consistent removal with low deformation and are designed for labs that need a very high throughput.

[Explore more](#) >

Polishing consumables

Polishing cloths



For any material, goal, or task

All our polishing cloths deliver high reproducibility and fast preparation no matter your preparation requirements. For automatic dosing or reproducible results, combine them with either a dedicated DiaPro All-in-One diamond solution or DiaDuo-2 All-in-One diamond solution, or you can use DP-products and DP-Lubricants.

[Explore more](#) >

DiaPro All-in-One diamond solution



For a standardized process with unbeatable speed and quality

The DiaPro All-in-One diamond solution is simply the best you can get, especially if you work with a specific material and automated dosing. It is designed to work with a dedicated polishing cloth to deliver the highest-quality preparation results with maximum reproducibility in the fastest possible time.

[Explore more](#) >

DiaDuo-2 All-in-One diamond solution



For a simpler, user-friendly setup

Our water-based DiaDuo-2 All-in-One diamond solution contains monocrystalline diamonds that maximize yield for high-throughput labs. It is ideal when efficiency and value are a priority and is also the perfect choice for those who want an easy-to-use, multi-purpose solution.

[Explore more](#) >

DP-Product and DP-Lubricants



Full flexibility for different material types

Our DP-Product and DP-Lubricants ranges consist of a diamond product that comes in suspension, stick, spray, or paste for any material type. Combine them with our wide range of polishing cloths for maximum efficiency and quality.

Explore more [➤](#)

OP-Suspensions



For the perfect finish

Our OP-Suspensions provide completely scratch- and deformation-free specimens quickly and efficiently plus non-dry versions designed to prevent clogging up of tubes in automatic equipment.

Explore more [➤](#)



A METHOD FOR ANY MATERIAL

Optimize your process – minimize your waste

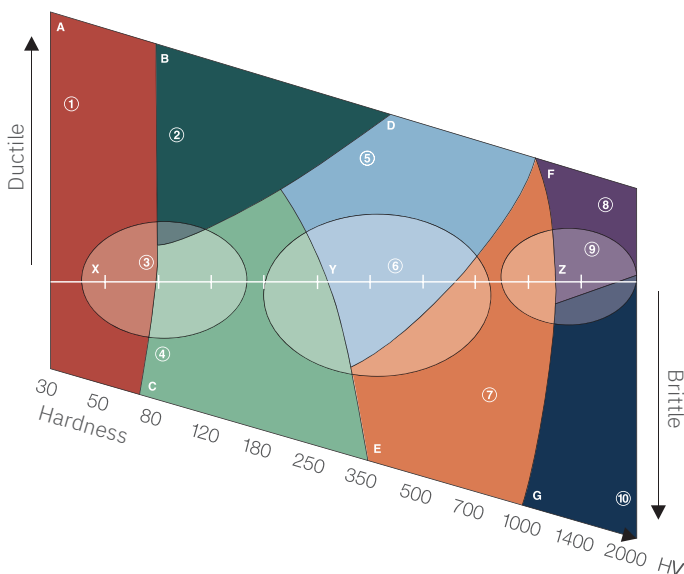
Are you looking for perfect results from your true structure? Or perhaps a few artifacts are acceptable as long as they do not disturb your analysis? Whatever your preparation goal, we will help you optimize your grinding and polishing process – without over-processing. This means increasing the quality of your specimen by eliminating artifacts such as deformation, edge rounding, scratches, and pull-outs, while minimizing process waste with fewer, shorter steps.

Take a systematic approach

Based on extensive academic training and hands-on experience, our materialographic experts have developed optimized methods for any material. Simply tell us your preparation goal, and we will customize our standard method to your equipment, requirements and operator capabilities, whether your focus is on quality, safety, speed, or efficiency.

A systematic approach is key to achieving accurate, repeatable results and makes troubleshooting easier. High-quality consumables will also maximize your reproducibility. Our stringent in-house quality control ensures our consumables deliver the same performance every time to absorb sensitivity to changes in conditions.

Find the optimal process for your material



Find the hardness of your material on the X-axis, then move up or down the Y-axis, depending on its ductility. Learn more and see optimized methods for your material at [Struers.com](https://www.struers.com)



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500+

**predefined and
proven methods for
your polishing process**

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CHOOSE A PARTNER, NOT JUST A SUPPLIER

Maximize uptime with consumables on delivery

We'll help you to reduce your risk and keep inventory costs down with our robust global supply chain. For fast, reliable delivery, we have distribution centers across the U.S., Japan, China, Germany, and Denmark.

Our ISO 9001-certified LEAN production and strict quality control ensure all consumables perform as promised and contribute to a safer workplace. You can also minimize your environmental impact thanks to our ISO 14001 certification for environmental management and commitment to low-carbon shipping.

Get total support – whenever you need it

Polishing and grinding is just one part of the story. There are Struers consumables and equipment for every stage in the process. These are designed to work together so you get the most out of your investment. Furthermore, our materialographic experts will help you optimize your end-to-end process through Value Stream Mapping.

In fact, we are here to help you with every aspect of materialography. Whether you need to boost your skills with onsite and online training or maximize your uptime with service and support, we offer a complete solution for ensuring certainty.

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**98% of consumables
are shipped within**

48 hrs



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GET NON-STOP PEACE OF MIND WITH SERVICEGUARD

We are here to support you in ways that add value far beyond simply class-leading products and equipment. ServiceGuard gives you a complete solution for ensuring certainty at every stage, including a comprehensive annual service review and access to spare parts for ten years, even after the equipment has been discontinued.

ServiceGuard is your best way of maintaining productivity and high-quality results through service plans, start-up packages, installation, training, and knowledge sharing. It also ensures you get the best out of your investment through a global support network and expertise that delivers greater availability, predictability, and uptime for the lifetime of your Struers equipment.

Explore more [➤](#)



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“I have always had great support from the Struers service team – they keep our equipment in the best condition and always give great advice.”

- Bill Taylor, Materials and Forensics Engineer, John Crane



Ensuring certainty

Materialographic preparation and testing demands consistent, reproducible results. These come not only from your laboratory process, operators, and equipment, but from your supply chain and your partner. As a Struers customer, you benefit from high-quality design and engineering of equipment and consumables, but just as much from our unique knowledge base, robust global supply chain, and expert service and applications support – where and when you need it. We call all this ensuring certainty.

Struers remains dedicated to making the world a better place through the pursuit of deep scientific insights and ground-breaking technology. Today, we're your trusted partner in a fast-changing world, sharing our expertise and practical experience on a global scale. This gives you innovative solutions that help you face the future with confidence. We continue to lead the way in materialographic products and services, and to shape future developments towards a better society.