Struers
Ensuring Certainty

Struers equipment, accessories and consumables

PRODUCT PORTFOLIO

Optimize your materialographic process with Struers



Cutting **Mounting** **Grinding** **Polishing** **Verification** **Service** **Training**

ENSURE CERTAINTY WITH A COMPLETE SOLUTIONS PARTNER

Whatever your material and your preparation goal, discover new opportunities to optimize your materialographic process. With our high quality equipment, consumables and a systematic approach, Struers can help you get the perfect result



Optimize towards your specific goal

What preparation requirements do you have for your analysis? Do you have a high throughput or just the occasional specimens? Do you work with one kind of material or many? Our complete range of equipment and consumables covers every need – for any material, any preparation goal, and any lab setup – to ensure accurate and reliable results, while improving your process speed, efficiency, and safety.

With so many variables to consider, we know that changing your materialographic process might feel like a hassle or a risk. We take a systematic approach to methods, so you can have full confidence in the quality and reproducibility of your materialographic process. Our application specialists can recommend and help you implement an optimized method for your material and preparation goal.

Ensure certainty with a complete solutions partner

Minimize your supply chain risk and ensure uptime with high quality consumables, reliably delivered when you need them. No matter your material, there is a Struers solution for you. Struers provide equipment, consumables and accessories for all other steps of your materialographic process – from cutting to mounting, polishing, and verification.

In fact, you get a complete solution with Struers. Our equipment and consumables are designed to work together to ensure accurate and reproducible results. You can also increase your skills and knowledge with onsite and online training, and maximize uptime with Struers service and support. We call this ensuring certainty – and it is why we are the partner of choice for thousands of materialographic and hardness testing professionals worldwide.

“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 specimen to only 11 minutes.”

– Mikael Berggren, Laboratory Technician, Siemens Industrial Turbomachinery



DISCOVER OUR CUTTING SOLUTIONS

A good metallographic cutting process is essential to the efficiency and quality of your materialographic quality control. Our cut-off machines, consumables and accessories are designed to ensure an efficient, reproducible and precision cutting process, regardless of the material or size of workpiece.

- **Constant feed speed** – the patented movement of the cut-off wheel ensuring high and uniform cutting quality
- **ExciCut** – for easy and fast cutting of the hardest materials
- **OptiFeed** – to ensure the fastest possible cutting without damage to the specimen or wheel
- **AutoStop** – for unattended cutting
- **MultiCut** – for automatic serial cutting of parallel sections
- **AxioCut** – for cutting very large workpieces
- **AxioWash** – the automatic cleaning program



Minitom

Automatic, low-speed precision cut-off machine ideal for delicate cutting applications in small laboratories.
Footprint: W280 mm x D400 mm (11”- 15.7”’)
Cut-off-wheel: 75-125 mm (3”- 5’’)

Explore more on Struers.com/Minitom



Accutom-10/-100

High precision automatic cut-off machines with intuitive user interface for higher productivity. Grinding mode is also available on Accutom-100.
Footprint: W650 mm x D750 (25” x 30.9”)
Cut-off-wheel: 75-150 mm (3.9”- 5.9”)
Grinding cup wheels: 100-150 mm (3”- 6”)

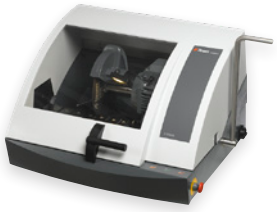
Explore more on Struers.com/Accutom



Secotom-6/-20/-60

Universal, automatic, table-top precision cut-off machines for cutting all types of workpieces.
Footprint: W640 mm x D780 mm (25.7”x 27.6”)
Cut-off-wheel: 75-203 mm (3”- 8”)

Explore more on Struers.com/Secotom



Labotom-5

Manual cut-off machine with easy to use control panel and ergonomic handle for fast and easy cutting.
Footprint: W700 mm x 760 mm (27.6”x 30”)
Cut-off-wheel: 250 mm (10”)

Explore more on Struers.com/Labotom-5

Cutting consumables

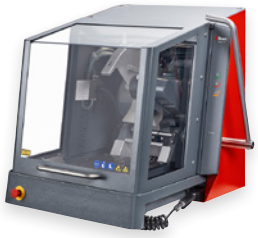


Selecting the right cut-off wheel will help ensure a fast cut-off process, without causing structural changes to the wheel or specimen due to overheating or deformation – and improve cut-off wheel wear to help reduce costs. All our cut-off wheels, blades, additives and other cutting consumables are specially developed for metallographic cutting, including state-of-the-art abrasive wet cutting techniques and precision cutting.

Cutting accessories



Precision metallographic wet cutting requires high stability and good cooling control to avoid heat deformation. From cutting tables and clamps to cooling units and pumps, our range of accessories is designed to ensure you get a high-quality specimen in the shortest possible time.



Labotom-20

Manual cut-off machine with large cutting table, easy to use control panel and ergonomic handle for fast and easy cutting.
Footprint: W730 mm x D940 mm (28.9”x 37.1”)
Cut-off-wheel: 350 mm (14”)

Explore more on Struers.com/ Labotom-20



Discotom-100/-10

Automatic and manual cut-off machines with a large cutting table and spacious chamber ensuring exceptional cutting flexibility.
Footprint: W920 mm x D890 mm (36.1”x 34.9”)
Cut-off-wheel:
Discotom-10: 250 mm (9.8”)
Discotom-100: 300 mm (12”)

Explore more on Struers.com/ Discotom



Axitom-5

Automatic cut-off machine, designed for maximum user friendliness. X-large cutting chamber and MultiCut for automatic serial cutting of parallel sections.
Footprint: W1155 mm x D1305 mm (45.5”x 51.4”)
Cut-off-wheel:
Axitom-5: 350 mm (14”)
Axitom-5/400: 400 mm (16’’)

Explore more on Struers.com/ Axitom



Magnutom-5000

Magnutom-5000 is the largest machine in its field with four automated axes, as well as a rotary table, which enables a large variety of sectioning possibilities. The motor is so powerful that you can install two cut-off wheels and make parallel sections.
Footprint: W1866 mm x D1462 mm (73.5”x 57.6”)
Cut-off-wheel: 508 mm (20”)

Explore more on Struers.com/ Magnutom

DISCOVER OUR MOUNTING SOLUTIONS

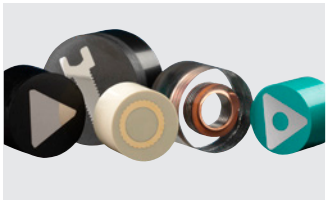
Hot and cold mounting protects fragile specimen and ensures good edge retention – giving you a more accurate final analysis. Our equipment, accessories and consumables for hot and cold mounting help you achieve a fast process and high-quality results.

Cold mounting consumables



Cold mounting resins include epoxy and acrylic resins as well as a consumable kit.

Hot mounting consumables



Hot mounting employs thermoplastic and thermosetting resins. You can choose several different resins, depending on your particular needs.



CitoVac

Vacuum impregnation machine for impregnation of porous specimens and for gluing specimens to slides for the production of thin sections. With CitoVac several specimens can be impregnated and embedded at the same time.
Footprint: W380 mm x D370 mm (14.9” x 14.5”)

Explore more on Struers.com/CitoVac



CitoPress-5

Single cylinder hot mounting press. Iincorporates advanced process control to optimize the mounting cycle. Innovative design results in ultra-short heating and cooling times.
Footprint: W480 mm x D560 mm (18.9” x 22”)

Explore more on Struers.com/CitoPress-5



CitoPress-15

Single cylinder hot mounting press with advanced productivity features. Automatic dosing system enables fast and easy dosing of resin. On-screen Hot Mounting Application Guide. Database option and Sensitive option for porous specimen.
Footprint: W480 mm x D560 mm (19” x 22”)

Explore more on Struers.com/CitoPress-15



CitoPress-30

High-capacity, dual cylinder hot mounting press. Automatic dosing system enables fast and easy dosing of resin. On-screen Hot Mounting Application Guide. Database option and Sensitive option for porous specimen.
Footprint: W550 mm x D560 mm (21.6” x 22”)

Explore more on Struers.com/CitoPress-30

Experience a healthier working environment with PuriFast

100 %

phenol free, made of propylene with wood and mineral filler



CitoDoser

Optional automatic dosing system, enabling dosing of a pre-set amount of mounting resin. The advantages are faster filling of the cylinders and less spilling of resins.



EasyDoser

The EasyDoser is attached directly on Struers 1 kg resin containers, meaning a dust free dosing of your hot mounting resins.

Explore more on Struers.com/ CitoDoser ›

DISCOVER GRINDING AND POLISHING



Xmatic

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.

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



AbraPlan / AbraPol



Tegramin



LaboSystem

			Low

Without LaboForce – manual preparation

AUTOMATED SOLUTION

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.

- **Maximum reproducibility** – efficiency with full automation
- **Improve workplace safety** – with minimal operator intervention
- **Eliminate human error** – process variation
- **High throughput**
- **Support process** standardization
- **Multiple cleaning options**



Xmatic

Xmatic comes with a high removal grinding station and MD grinding and polishing station along with a vertical conveyor to load your specimen holders. Recirculation is standard on the high removal grinding station and optional on the MD grinding and polishing station. Cleaning can either be high-pressure cleaning, high-pressure cleaning including alcohol, or high-pressure cleaning and ultrasonic cleaning.
Footprint: W2425 mm x D750 mm (95.5” x 29.5”)



Xmatic Compact

Xmatic Compact comes with or without the vertical conveyor. This includes an MD grinding and polishing station with speed up to 600 rpm for plane grinding on MD surfaces, with either a 250 mm / 10” or 300 mm / 12” dia. MD disc. Recirculation is optional, and cleaning can either be high-pressure cleaning including alcohol or high-pressure cleaning and ultrasonic cleaning.
Footprint: W1490 mm x D750 mm (58” x 29.5”)

Explore more on Struers.com/Xmatic


Struers
Xmatic

SEMI-AUTOMATED SOLUTION

Our semi-automatic grinding and polishing solutions are designed with functionalities built-in to optimize your process in the safest, most efficient, and user-friendly way to meet your preparation goal and need for throughput.

- **Precise and powerful performance** – due to an exceptionally stable and robust design
- **Accurate** preparation result
- **Automatic dosing function** – precise dosing of diamond suspension and lubricant
- **High capacity** – for large specimens
- **Intuitive graphical user interface** – allows you to easily find the correct preparation method
- **Flexible working station** – adaptable for your changing needs



AbraPol-30

Advanced, semi-automatic machine for grinding and polishing of specimens in specimen holders. With double dosing of diamond suspensions and lubricants for better distribution, removal rate sensor and large disc area for short preparation time. Ideal for testing very large specimens or a high volume of specimens.
Footprint: W847 mm x D996 mm (33.3” x 39.2”)

Explore more on Struers.com/AbraPol



AbraPlan-30

Powerful semi-automatic plane grinding machine for plane grinding of specimens in specimen holders. AbraPlan-30 has a wide array of features and benefits, enabling users to optimize their grinding process to save time and consumables. Ideal for testing very large specimens or a high volume of specimens.
Footprint: W847 mm x D990 mm (33.3” x 38.9”)

Explore more on Struers.com/AbraPlan

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.



Tegramin-20

Sturdy 200 mm single-disc machine for the high quality preparation of all materials. Tegramin-20 has variable speed from 40-600 rpm, automatic dosing functions and a built-in database. Designed for the preparation of single specimens. Footprint: W600 mm x D650 mm (23.6" x 25.6")

Explore more on Struers.com/Tegramin-20



Tegramin-25

Durable 250 mm single-disc machine for high quality preparation of all materials. Tegramin-25 has variable speed from 40-600 rpm, and space for up to 7 dosing pumps. Designed for both single specimens and specimens clamped in holders. Footprint: W675 mm x D750 mm (26.6" x 29.5")

Explore more on Struers.com/Tegramin-25



Tegramin-30

Sturdy 300 mm single-disc machine for intensive, high quality preparation of many or large specimens. Tegramin-30 has variable speed from 40-600 rpm, and can be equipped with up to 7 pumps for dosing of suspension and lubricant. Designed for both single specimens and specimens clamped in holders. Footprint: W675 mm x D750 mm (26.6" x 29.5")

Explore more on Struers.com/Tegramin-30

MANUAL AND SEMI-AUTOMATED SOLUTION

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.

- **Shorter** total process times
- **Small footprint**
- **An adaptable solution** – match your needs



LaboPol-20

Grinding and polishing machine for 200 mm diameter disc with variable speed from 50 to 500 rpm.
Part of the adaptable LaboSystem.
Footprint: W400 mm x D673 mm (15.7” x 26.5”)



LaboPol-30

Grinding and polishing machine for 300 mm diameter disc with variable speed from 50 to 500 rpm.
Part of the adaptable LaboSystem.
Footprint: W510 mm x D765 mm (15.20” x 30.1”)



LaboPol-60

Grinding and polishing machine with two discs, 250 or 300 mm diameter discs with variable speed 50-500 rpm. It is possible to use one disc for manual and the other for semi-automatic preparation. Part of the adaptable LaboSystem.
Footprint: W950 mm x D775 mm (37.4” x 30.5”)



LaboDoser-10

Dosing unit with adjustable drip mechanism. For use with Struers’ standard 500 ml/1000 ml bottles with diamond suspension, lubricant and all-in-one products. Part of the adaptable LaboSystem.

Explore more on Struers.com/LaboSystem

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.



LaboDoser-100

Automatic dosing unit for specimen preparation with LaboPol-30/-60. With 4 peristaltic pumps for dosing of diamond suspension, lubricant and all-in-one products. Part of the adaptable LaboSystem. Footprint: W165 mm x D350 mm (6.5" x 13.8")



LaboForce-100

Specimen mover for semi-automatic preparation of specimens on LaboPol-30/-60. For 1-6 single specimens or specimen holder. Part of the adaptable LaboSystem.



LaboForce-50

Specimen mover for semi-automatic preparation of specimens on LaboPol-20. For 1-4 single specimens. Part of the adaptable LaboSystem.

DISCOVER AUTOMATIC CLEANING SOLUTION

Lavamin

Lavamin is an environmental friendly solution with no cleaning agents as the rinsing process using only ultrasound and water, Users are spared from the effects of soap and alcohol, while the environmental impact of cleaning is minimized.

Lavamin

A fully automatic cleaning unit, uses a patent-pending and entirely automated process combining ultrasound and water rinsing together with high-speed spin-drying of the specimen holder/mover plate. Lavamin is compatible with Struers specimen holders and mover plates with a diameter up to 160 mm. Footprint: W313 mm x D605 mm 12.3” x 23.8”



Explore more on Struers.com/Lavamin



Discover our specimen holders and mover plates

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 holder



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 plate



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.

Explore more on Struers.com/specimenholders ›

GRINDING AND POLISHING CONSUMABLES

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.



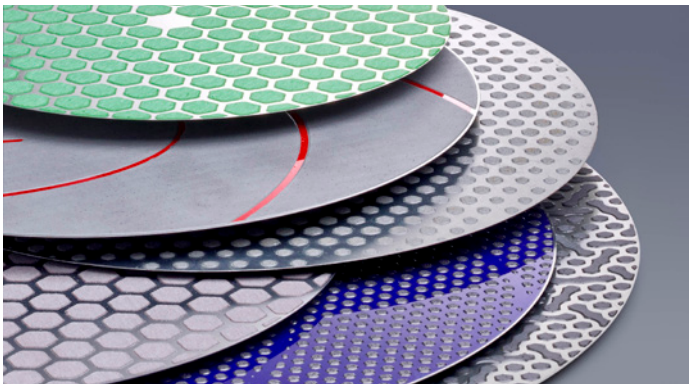
A customer working for the mining industry reduced preparation times by over

40%

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

Grinding consumables

MD system

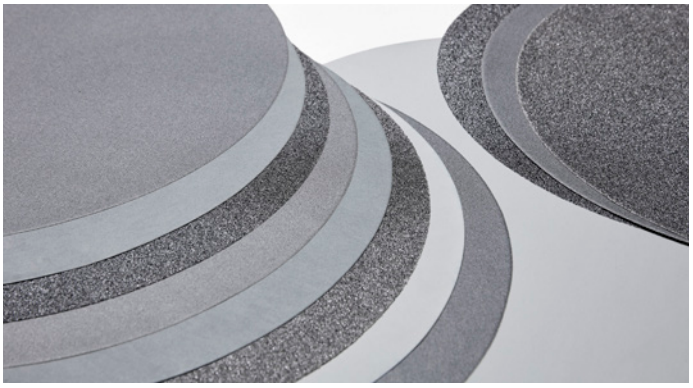


For high-quality results optimized to your material

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 on Struers.com/MD-Grinding

SiC Foils and Papers

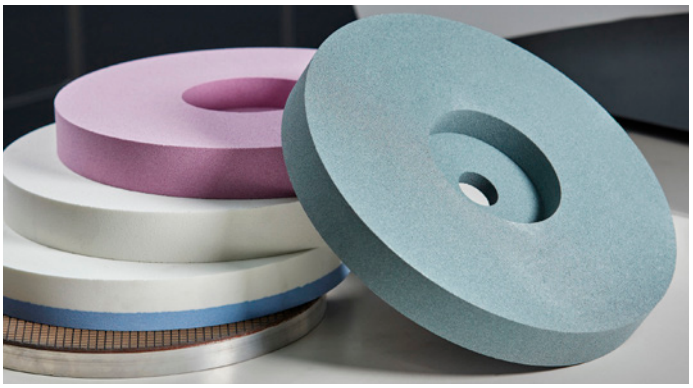


For an all-round flexible and reliable solution

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 on Struers.com/SiC

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 on Struers.com/Grinding-Stones

Polishing consumables

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 on Struers.com/DiaPro

DiaDuo-2 All-in-One diamond solution

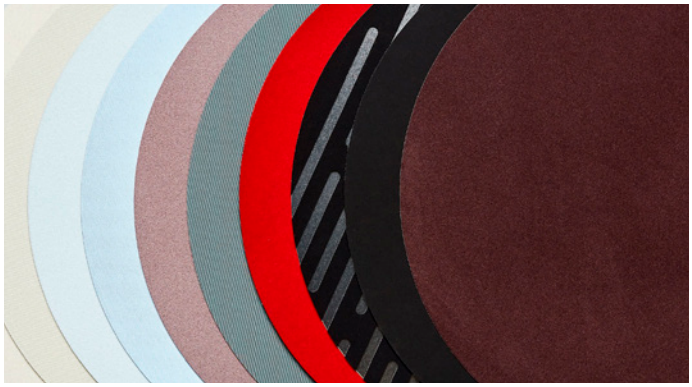


For a simpler, user-friendly setup

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 on Struers.com/DiaDuo-2

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 on Struers.com/Polishing-Cloths

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 on Struers.com/DP-Products

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 on Struers.com/OP

DISCOVER HARDNESS TESTING

Hardness testing, or verification, is a crucial part of the materialographic process. No matter what material you work with, with Struers you can be sure your lab has the right setup to meet the standards you need, with optimal reproducibility and repeatability of results.

Struers provides a broad range of hardness testing equipment suitable for every material and method, ranging from tabletop solutions to heavy-duty floor models.

The Struers line of hardness testers are state-of-the-art software-controlled devices which enable Vickers, Knoop, Brinell and Rockwell hardness tests to be performed rapidly, accurately and reliably.

Our hardness testers are equipped with a wide test load range, covering many applications.

Easy-operation features such as automated test procedures, automatic illumination adjustment, integrated image analysis and large color touch-screen help personnel to work faster and more accurately. Thus measured values are no longer dependent on the experience of the operator and on day-to-day variations in operator accuracy.

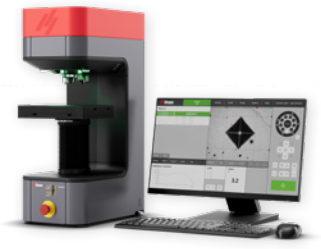
The various models are scaled for small to large volumes of specimens to meet the full range of micro indentation hardness and macro indentation hardness testing requirements.



Duramin-4

Manual tester available as micro with 10 gf – 2 kgf and as macro with 1 kgf – 62.5 kgf load range, for simple verification applications.Manual evaluation with eyepiece.
Footprint: W278 mm x D478mm (10.9” x 18.8”)

Explore more on Struers.com/ Duramin-4 ›



DuraVista-40

Automatic and semi-automatic micro/ macro tester system for Vickers, Knoop and Brinell, with unique test load range from 0,1 gf to 62.5 kgf, covering many applications.
Autofocus and automatic hardness evaluation minimize operator influence.
Footprint: W278 mm x D478 mm (10.9” x 18.8”)

Explore more on Struers.com/ DuraVista-40 ›



DuraVista-80

Advanced micro/macro tester system for Vickers, Knoop and Brinell, with dual displacement z-axis and load range from 0,1 gf to 62.5 kgf, covering many applications.
High quality optics, touch autofocus and automatic hardness evaluation for highest repeatability and reproducibility.
Footprint: W325 mm x D575 mm (12.8” x 22.6”)

Explore more on Struers.com/ DuraVista-80 ›



DuraVersa-100

Automatic micro/macro/universal hardness tester in three load configurations from 10 gf to 250 kgf, 750 kg, or 3000 kg, covering many applications.
Featuring a 9-position turret with touch autofocus and automatic hardness evaluation for highest repeatability and reproducibility.
Footprint: W315 mm x D615 mm (12.4” x 24.2”)

Explore more on Struers.com/ DuraVersa-100 ›

Accessories



The Struers hardness testers come with a wide selection of accessories designed to help you with your particular hardness testing operations. A broad range of objective lenses, indenters and additional anvils in various sizes and shapes are available.



DuraVigo-150

Dedicated Rockwell tester with test load range from 3 kgf to 250 kgf, covering many applications.
Footprint: W220 mm x D530 mm (8.7” x 20.9”)

Explore more on Struers.com/ DuraVigo-150



Duramin-600

Semi-automatic universal tester with test load range from 1 kgf to 3000 kgf, covering many applications. Autofocus and automatic hardness evaluation for highest repeatability and reproducibility.
Footprint: W380 mm x D685 mm (14.9” x 26.9”)

Explore more on Struers.com/ Duramin-600



Duramin-650

Semi- and fully automatic universal tester with test load range from 1 kgf to 3000 kgf, covering many applications. Autofocus and automatic hardness evaluation for highest repeatability and reproducibility.
Footprint: W368 mm x D615 mm (14.5” x 24.2”)

Explore more on Struers.com/ Duramin-650



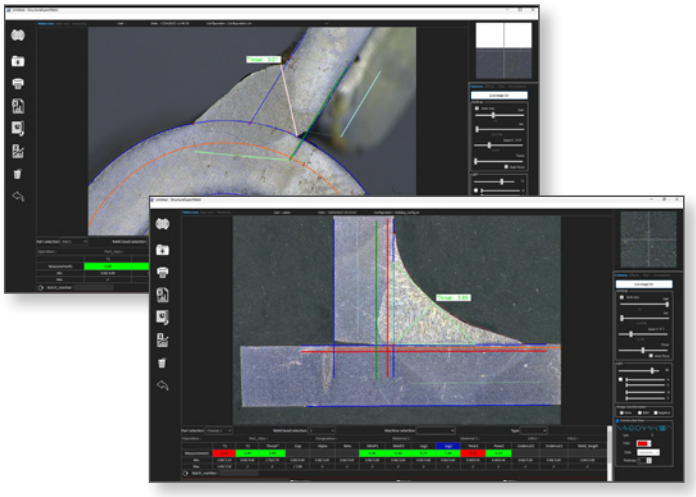
Duramin-3000

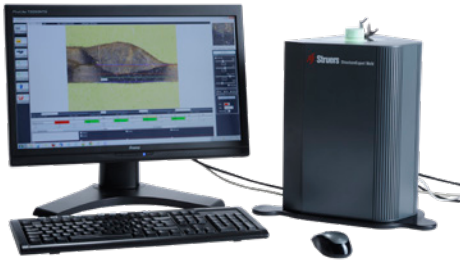
Single task Brinell tester with test load range from 62.5 kgf to 3000 kgf, covering many applications. Autofocus and automatic hardness evaluation for highest repeatability and reproducibility.
Footprint: W350 mm x D645 mm (13.8” x 25.4”)

Explore more on Struers.com/ Duramin-3000

DEDICATED IMAGE VERIFICATION

Challenging conventional technology, Struers offers two dedicated Weld verification systems that do away with time consuming positioning and adjustments. The unique inverted optical system, automatic lighting, focus and calibration eliminate time-consuming, manual processes and measurement errors. These stand-alone dedicated imaging tools give you a simple way to ensure precise and cost-efficient inspection/verification, measurement and reporting – all in one solution.

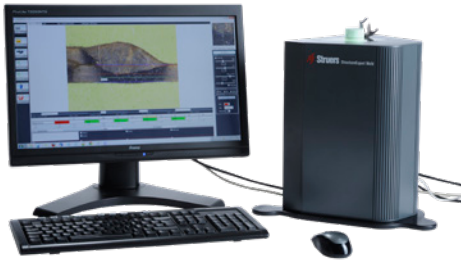




StructureExpert Weld-6

Dedicated imaging system for inspecting standard industrial welding applications (MIG/MAG), featuring AI-based automatic measurement.
Consists of compact housing, LED lighting system, digital camera with motorized zoom and dedicated software for measurement and reporting.
Footprint: W248 mm x D220 mm (9.8” x 8.7”)

Explore more on Struers.com/StructureExpert-Weld



StructureExpert Weld-12

Dedicated imaging system for high-precision inspection of laser welds and small seam measurements.
Consists of compact housing, LED lighting system, digital camera with motorized zoom and dedicated software for measurement and reporting.
Footprint: W248 mm x D220 mm (9.8” x 8.7”)

Explore more on Struers.com/StructureExpert-Weld

BRING YOUR IDEAS TO LIFE



Validating product designs takes more than the best tools and consumables, it takes insight and knowledge that only 150+ years of metallographic expertise can provide.

ENSURING CERTAINTY

SPECIAL SOLUTIONS

Mineralogical Preparation

Do you need an efficient system for preparation of mineralogical, geological or ceramic specimens? We offer the equipment and consumables required for producing thin sections or polished sections.

Mineralogical specimen often contain both hard and soft phases, requiring specially adapted preparation methods. We acknowledge these particular requirements, and provide appropriate equipment and consumables for slide mounting, embedding and impregnation, and finally, lapping and polishing.

The preparation of thin sections for examination by transmitted light requires highly specialised equipment. Struers offers a system incorporating precision cutting and grinding in a single machine. A grinding accuracy of 2 microns can be achieved in preparation of multiple specimens.

Struers provides both manual and semi-automatic mineralogical specimen preparation equipment to cater for individual variations in volume of specimens and manning.



Accutom-10/-100

High precision automatic cut-off machines with intuitive user interface for higher productivity.
Grinding mode also available on Accutom-100.
Footprint: W650 mm x D750 (25” x 30.9”)
Cut-off-wheel: 75-150 mm (3.9” - 5.9”)
Grinding cup wheels: 100-150 mm (3” - 6”)

Explore more on Struers.com/Accutom



LaboPol-30

Grinding and polishing machine for 300 mm diameter disc with variable speed from 50 to 500 rpm.
Part of the adaptable LaboSystem.
Footprint: W510 mm x D765 mm (15.20” x 30.1”)

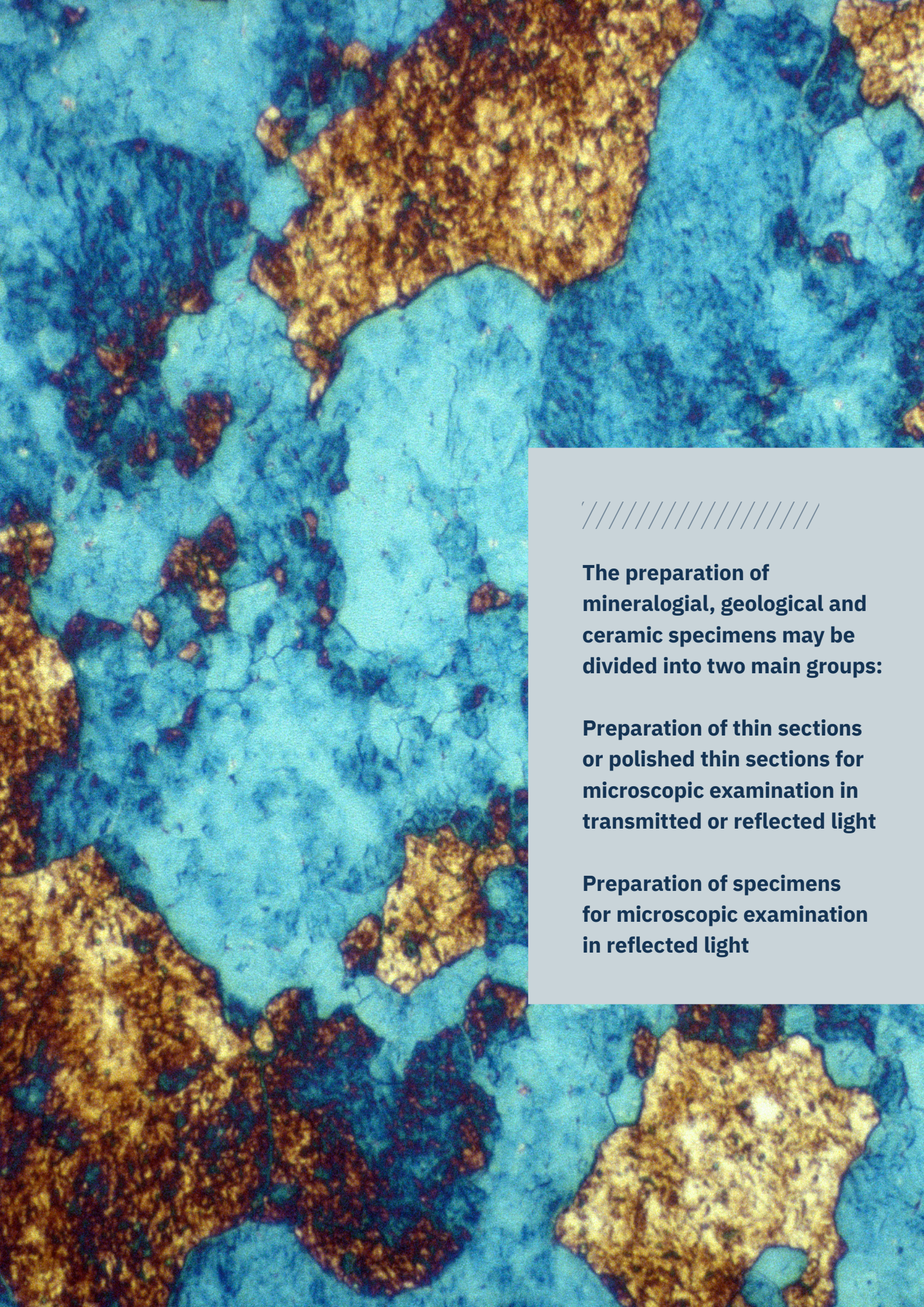
Explore more on Struers.com/LaboSystem



LaboForce-Mi

Automatic specimen mover for preparation of mineralogical specimens on LaboPol-30/-60.
Part of the adaptable LaboSystem.

Explore more on Struers.com/LaboSystem



The preparation of mineralogial, geological and ceramic specimens may be divided into two main groups:

Preparation of thin sections or polished thin sections for microscopic examination in transmitted or reflected light

Preparation of specimens for microscopic examination in reflected light

Discover ViaKit

High-precision toolkit for preparation of up to 36 PCB coupons at a time, making your coupon preparation process much easier. Ensuring that the exact centre of the via are reached on all coupons in just three preparation steps.





TriPod

Specimen holder for fast precision polishing of non-encapsulated specimen such as electronic devices. Only a single adjustment screw is necessary for levelling of the specimen. TriPod comes in two models, one for cross-sectioning and one for parallel polishing.



AccuStop and AccuStop-T

Specimen holder for controlled manual grinding of individual materialographic specimens on SiC grinding paper. A wear-resistant ceramic base allows grinding to stop at a preset depth of the specimen, and ensures that the specimen surface is kept totally plane.



AccuMeter

The AccuMeter Measuring Station was developed especially for use with AccuStop-T. The AccuMeter provides easy measurement of the tilt angle and has a micrometer measuring range is 0-25 mm in steps of 10 µm. The AccuMeter can also be useful together with AccuStop 30.

Non-destructive Materials

For many applications it is either required or more economical to carry out the testing in a non-destructive way in the field.

By means of Struers lightweight portable equipment and advanced replica technique, a high quality replica of the prepared surface can be achieved, allowing a complete evaluation of the surface.

For examination of microstructures we can provide a complete range of portable equipment for non-destructive preparation, from basic grinding through mechanical or electrolytic polishing and etching.

The Transcopy replica technique can transfer the micro-structure from flat surfaces, while the RepliSet system can be used for examination of 3D geometry as well.

A microstructure or 3D geometry can be examined directly using a small portable microscope. On-site materialographic preparation and examination are particularly applicable to quality control, inspection- and failure analysis in power stations, aircraft, chemical plants etc.



PSM-5/-10

The PSM-5 and PSM-10 are compact and portable microscopes for use in the field. PSM-5 provides up to 400x magnification, and PSM-10 up to 600x. Both are ideal for examination of prepared surfaces provided by Transpol-5 and Movipol-5.



Digital camera with C-mount

Digital camera for use with PSM-2/-5/-10 Microscope. All in one imaging solution for portable microscope: High resolution camera with Sony sensor, 10'' inches touchscreen tablet, large live image for easy focusing, interactive software for image capturing and automatic scale bar measurements.



Movipol-5

MoviPol-5 is a portable electrolytic metal polishing and etching machine. It is compact and robust and can be used anywhere.

Explore more on Struers.com/Movipol-5



Transpol-5

Transpol-5 is a portable, metallographic grinding/polishing machine built to withstand rugged field conditions.

Explore more on Struers.com/Transpol-5

RepliSet System



RepliSet is excellent for examination of 3D geometry in general or in relation to corrosion, fractures or cracks.

The RepliSet system can even produce replicas which are dimensional correct, and have ultra fine detail reproduction as well as a plane back.

RepliSet has no shrinkage.

Explore more on Struers.com/RepliSet

Electrolytic Preparation

Avoid mechanical deformation and still maintain efficiency in the preparation of metallic specimen. Electrolytic polishing gives you optimal deformation-free specimen preparation and is well suited for homogeneous materials. In the electrolytic polisher the specimen is configured as the anode in a suitable electrolyte, and material is removed by controlled metal dissolution. Electrolytic polishing can be followed by an etching process to bring forth contrasts in the microstructure of the metal.

Using Struers electrolytic preparation you can achieve electrolytic polishing and etching with just one machine. And we also cater for electrolytic thinning, especially suitable for preparation of specimen for TEM (Transmission Electron Microscopy).

Save time by using Struers unique scan function to determine the correct polishing voltage. And maximise reproducibility with Struers micro-processor control and built-in database of preparation methods, giving consistent preparation parameters.



TenuPol-5

For automatic, electrolytic thinning of specimens for examination in a transmission electron microscope. The specimen is polished from both sides simultaneously, thus providing a structure with a minimum of deformation in just a few minutes.
Control unit Footprint: W385 mm x D350 mm (15.2” x 14.2”)
Polishing unit Footprint: W270 mm x D180 mm (10.6” x 7.1”)

Explore more on Struers.com/TenuPol



LectroPol-5

For automatic, micro-processor controlled electrolytic polishing and etching of metallographic specimens.The unique scan function and built-in methods give short preparation times and high reproducibility. Ideal for fast quality control.
Control unit Footprint: W385 mm x D350 mm (15.2” x 14.2”)
Polishing unit Footprint: W220 mm x D350 mm (8.7” x 14.2”)

Explore more on Struers.com/LectroPol



Electrolyte A2

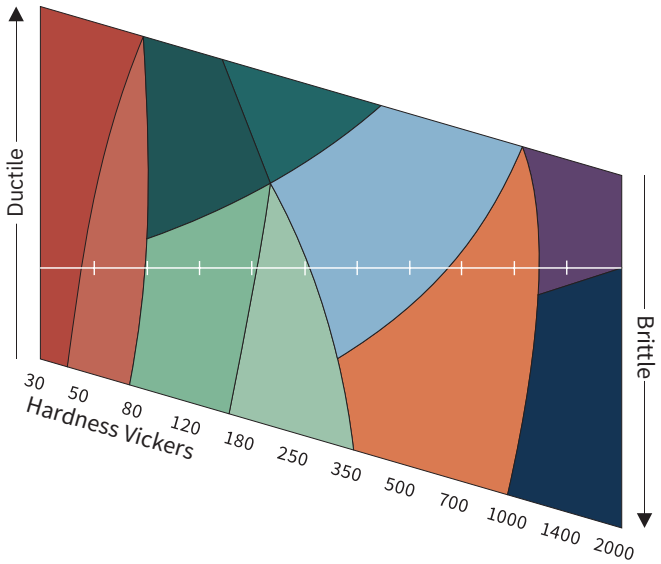
For electrolytic polishing of steel, stainless steel, aluminium and aluminium alloys, nickel alloys, tin and titanium.

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? No matter your preparation goal, we will help you optimize your grinding and polishing process – without over-processing. This means increasing the quality of your specimen up to your goal by eliminating artifacts such as deformation, edge rounding, scratches or pull-outs, while minimizing process waste with fewer, shorter steps.

Find the optimal process for your material based on its hardness and ductility

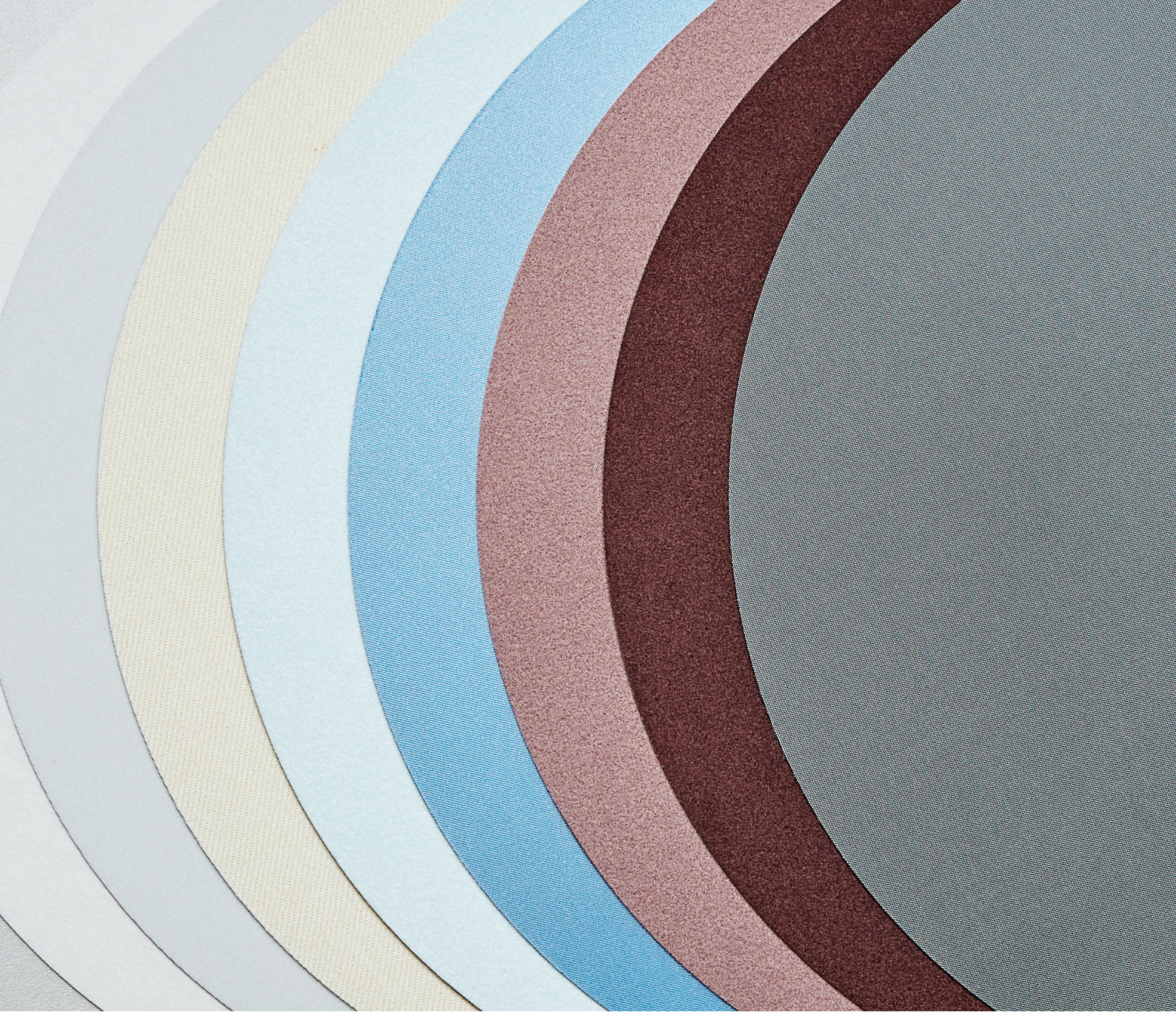


Find the hardness of your material on the X-axis, then move up or down the Y-axis, depending on its ductility. Learn more and see optimized methods for your material at Struers.com

Take a systematic approach to accurate, reproducible results

Trial and error is neither an accurate nor efficient 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. Struers also helps you minimize random errors and maximize your reproducibility. Our high quality consumables deliver the same performance every time and help to absorb sensitivity to changes in conditions. We also provide training in methods and techniques with onsite and online courses.



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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

Hardness testing 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.



DEDICATED TO UPTIME AND EFFICIENCY



Our service commitment is built around your needs, giving you complete confidence in the performance of your Struers equipment and the efficiency of your preparation process.

ENSURING CERTAINTY

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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.

www.struers.com

Struers
Ensuring Certainty