

Struers cutting equipment

CUT RIGHT TO THE POINT

Get minimal deformation with Struers accurate and efficient cutting solutions



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GET CLOSER TO THE POINT OF INTEREST

To analyze your material, a specimen must first be cut from your workpiece. The more accurately this is done with minimal damage, the faster and more reliable your process becomes.



A cutting solution for every setup

Struers cutting equipment is trusted worldwide for efficient cutting solutions. We provide a comprehensive range of equipment, clamping tools, and consumables designed for every lab setup, from precision cutting machines that can handle small and delicate workpieces, to robust models that can handle even the largest and most complex workpieces.

However, no matter which model is right for you, each delivers class-leading process standardization, speed, and throughput, with easy operation that meets all safety standards. This ensures an efficient and fast preparation process, saving you valuable time for subsequent tasks, such as grinding and polishing.

Ensure certainty with a complete solutions partner

We help you to save time and cost as a single supplier with a complete range of materialographic solutions, including all servicing requirements and consumables and accessories that work flawlessly with your equipment. This means you always get the right results from day one 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 preparation process. We call this ensuring certainty, and it is the reason we are the partner of choice for thousands of materialographic professionals worldwide.

“We have always experienced extremely repeatable and consistent, high-quality results. The consistency and reliability of our Struers cutting machines was instrumental in our decision to install a similar Struers system in our plant in Indonesia.”

- Grinding Media, Moly-Cop (Australia)
Glenn Sullivan, Technical Developments Manager





WE UNDERSTAND YOUR CHALLENGES

For decades, Struers has supported businesses like yours with materialographic solutions designed for each lab’s individual needs.

Before your material can be prepared for analysis, a suitable specimen must be cut from your workpiece. The more accurately this is done with as little damage to the surface of the material as possible, the faster and more reliable your process becomes.

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

Cutting is the first step of the preparation process. The goal is to cut as close as possible to the point of interest with minimal deformation of your specimen.

Cutting



Our cutting solutions use a variety of cutting modes, clamping tools, and cut-off wheels to get as close to the point of interest as possible with minimal deformation.



Thermal damage and deformation

The intense heat produced during cutting can cause thermal damage and deformation to your specimen. This is an important concern for most labs. It may require longer process time to remove the damaged material as well as more consumables during grinding and polishing – or even a completely new specimen.

Mounting



Grinding/ polishing



Verification





Accuracy

It is important that your machine cuts at exactly the place you need it to with as little deformation as possible. This is why you need the right setup for your specific requirements, including the appropriate machine, cut-off wheels, clamping tools, and cutting modes.



Throughput

Labs like yours need a reliable way to deliver the promised number of specimens per time unit, which can be challenging if you do not have the right equipment, including the optimal clamping solution. This is particularly important for manufacturers that need to produce workpieces in large numbers.



Time

For many labs, time is a limited resource. That's why you need a cutting solution that is simple and efficient, so you get the right results in the shortest possible process lead time. Much of the time used for cutting is spent on clamping your workpiece. With the right clamping solution, you can save time for grinding and reducing the risk of burns on your specimen.



Reproducibility

Reproducibility isn't only achievable through automation. With an intuitive workflow and the right setup, there is less risk of error affecting the results. This way you are able to standardize your process for a more reliable process.



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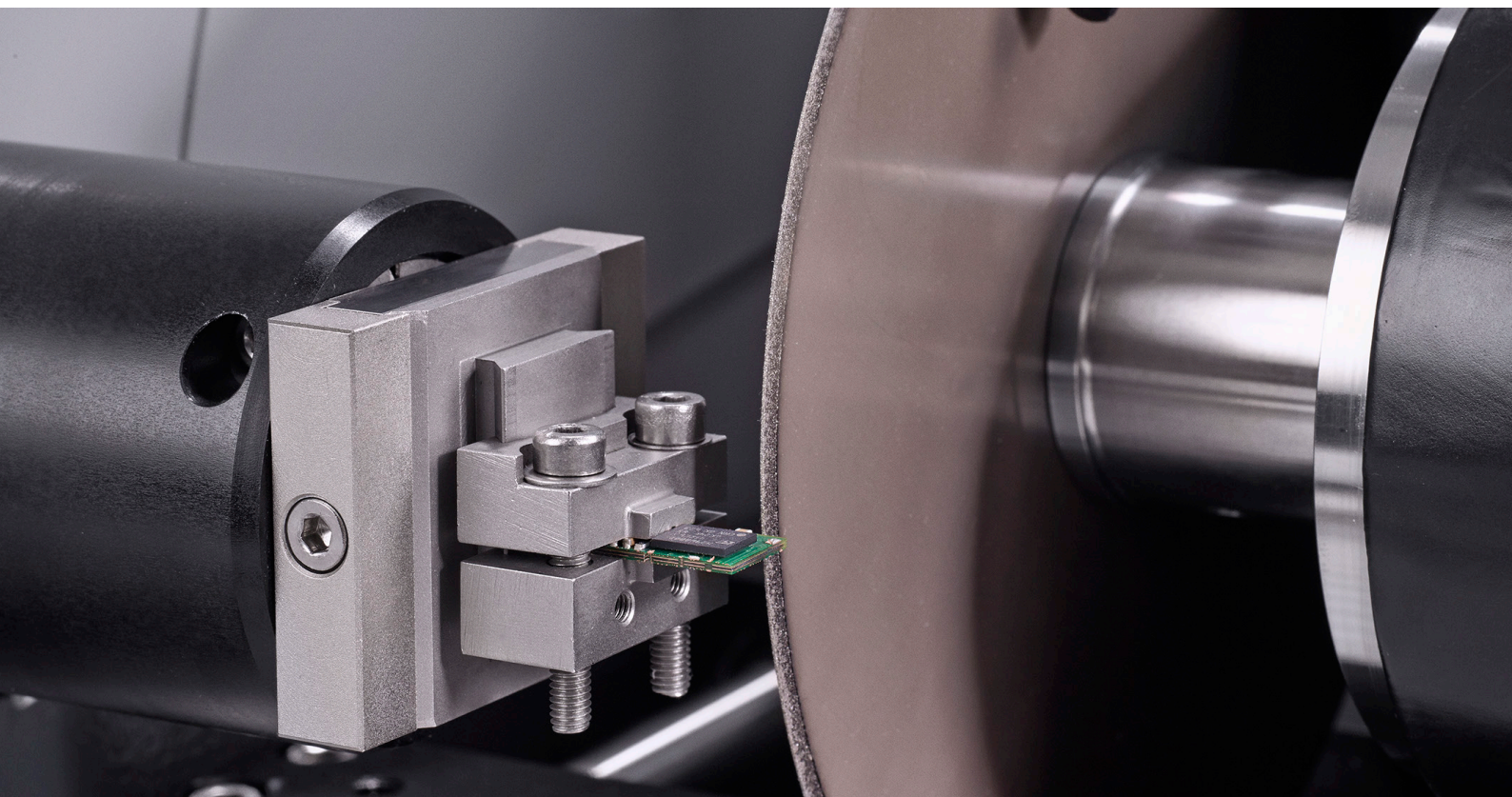
EXCELLENCE WHATEVER YOUR CHOICE

All our cutting machines have essential core functionalities built in to optimize your process and get you as close as possible to your point of interest. So, no matter which you choose, you can be sure it meets the same uncompromising standards for quality and performance.



Process standardization

The more your cutting process is standardized, the faster and more reproducible it becomes. Our equipment is designed to deliver exceptionally consistent results with minimal deformation. This is supported by multiple cutting modes, laser guides for accurate workpiece positioning when clamping, and high-quality consumables and accessories.





High throughput

Many labs need to prepare as many specimens per time unit as possible with zero production stops. Whatever your requirements, we make it quick and easy to work with workpieces of all sizes and shapes, using stable clamping tools, intuitive operation, and automated cleaning systems.



Speed

If you specialize in failure analysis, R&D, or quality control, it's likely your lab will need to process more workpieces in a shorter time. For a faster cut, our manual machines produce the quickest results. Additionally, if you need to reduce the time it takes to go from one cut to the next, our clamping tools can provide the optimal solution.



Ease of use

It's vital that you don't need to spend time on operator training – not only to save costs, but also to ensure as many people as possible can use your equipment. As with all our materialographic solutions, our machines are as intuitive as possible to use, which means more people can operate them with less risk of error.



Safety

The health and wellbeing of your workforce is paramount, which is why all our cutting machines meet EU regulations and feature a variety of safety measures. However, for us safety is also about protecting the planet, which is why our solutions also minimize water consumption and limit debris being flushed into your drainage system, thereby reducing their environmental footprint.



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A SOLUTION FOR EVERY LAB SETUP

At Struers, we take every step to ensure your cutting solution is perfectly matched to your lab setup and needs.

A key part of this is choosing the right machine and clamping tools that match the size and geometry of your workpiece. The size of the machine’s T-slots lets you know which clamping tools can be added.

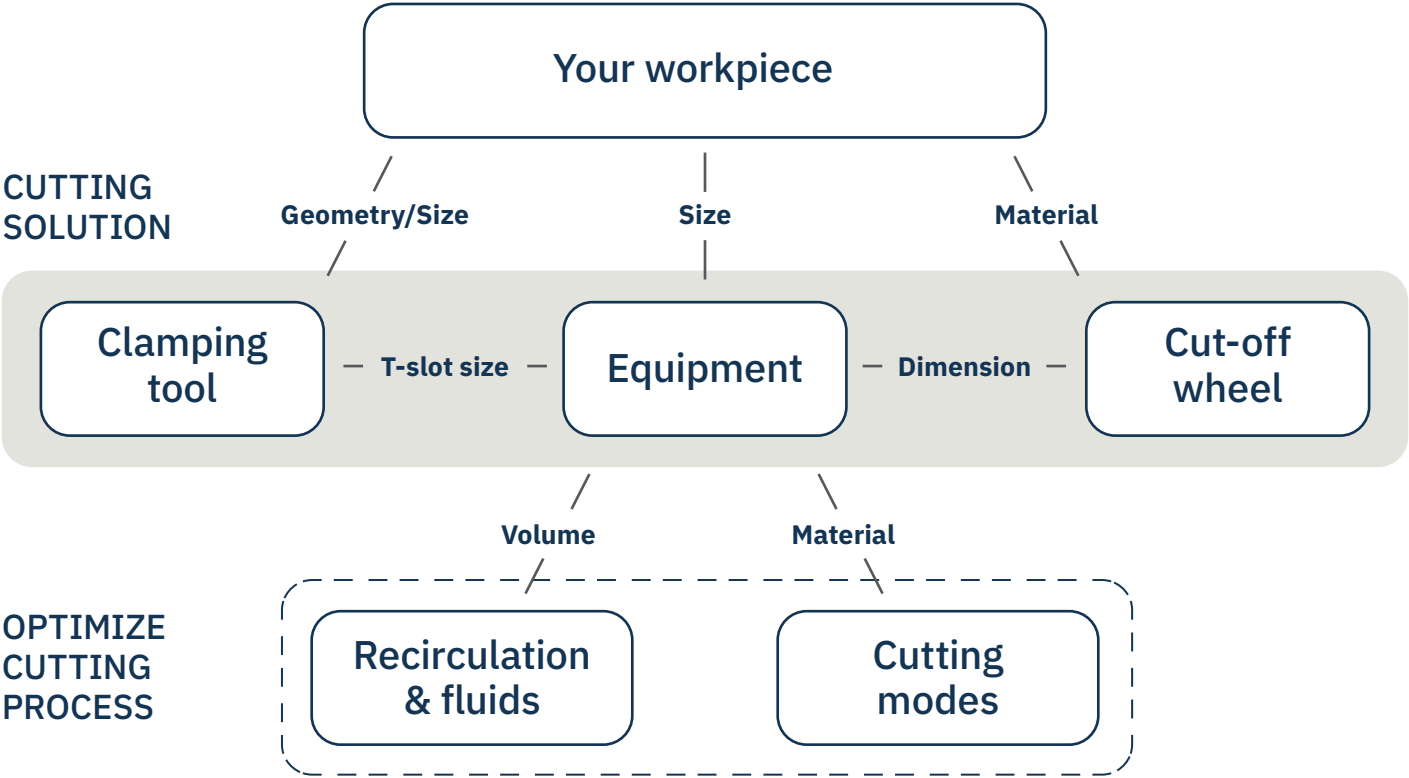
The size of your workpiece impacts your choice of cutting equipment to ensure it can fit in the cutting chamber. The dimension of the cut-off wheel ensures you can cut completely through your workpiece. For optimal performance, it is important to choose the right type of cut-off wheel depending on your workpiece’s material.

Our machines use water to reduce thermal damage to your workpiece and to protect your cut-off wheel. To help reduce water costs, you can add a recirculation system. The cutting fluids you add will inhibit corrosion and minimize the chance of fungus in the water, which increases the lifetime of your cutting machine and recirculation unit.

Lastly, the different cutting modes can be used to optimize your cut, minimize thermal damage, and protect your motor from overheating.

You will find more information about all this on the following pages.

YOUR CHOICE OF CUTTING SOLUTION CAN DEPEND ON SEVERAL FACTORS







A CUTTING MACHINE FOR EVERY NEED



Magnutom
Discover more
page 26

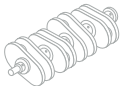
Covering every workpiece size, from as tiny as 30 x 40 mm (for example, a spring) up to 190 x 254 mm (for example, a crankshaft), our cutting machines have been designed to facilitate every lab setup and preparation goal. Backed by a complete range of support services and consumables you have everything your lab will ever need.

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

As well as choosing which cutting machine is best for your needs, it is also important to select the right clamping tools. Learn more on pages 28-33.

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



Max size of workpiece

190 x 254 mm
(7.5 x 10")

Clamping tools

Enables the handling of different workpiece shapes



Time

Time spent on clamping and cut per workpiece



Throughput

Cut specimens per time unit



Reproducibility

Standardize your process for more reliability

Automation



Movement of workpiece



Movement of cut-off wheel



Cutting modes



Cut-off wheels



Method (sequence of steps used for cut)



Steps (single parameters that can be adjusted for cut)



Accuracy

Close to the point of interest



Maximum



Minimum

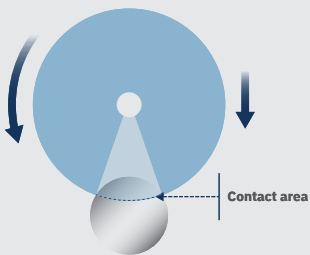


CUTTING MODES

Optimize your process for minimal deformation

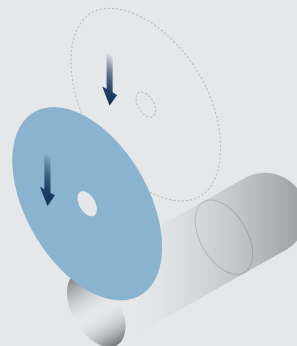
Different workpiece sizes and materials require different cutting modes to ensure as little thermal damage and deformation to your specimen as possible. At Struers, we are constantly refining our technology and methods to give you the highest-quality preparation results, every time.

DirectCut is the most widely used cutting mode, where the cut-off wheel is moved directly into the workpiece. However, for the improvement of the cut or expansion of the application range, other cutting modes can be beneficial to allow for faster cutting, or sectioning of harder materials.



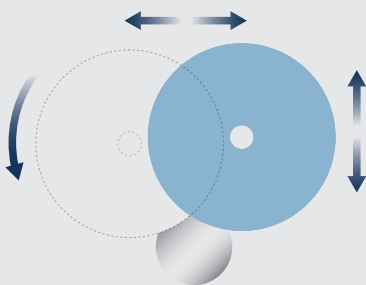
DirectCut

This is the standard cutting mode, where the cut-off wheel moves straight down into the workpiece using the pre-set feed speed. This is ideal for easy-to-cut, small or softer materials.



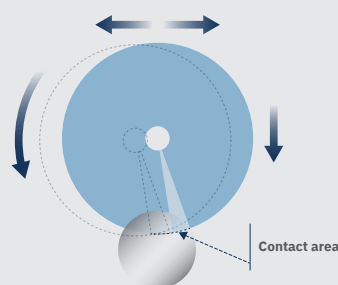
MultiCut

MultiCut is used for automatic serial cutting of parallel sections. It allows users to cut slices of the same, or varying, thickness or to cut precisely in specific positions. This means even irregular workpieces can be sectioned accurately and in a short period of time.



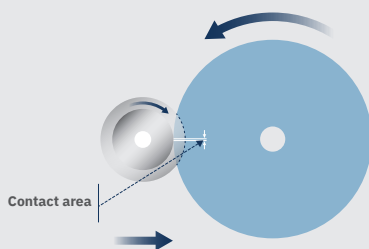
AxioCut

AxioCut is used for cutting very deep workpieces and is commonly featured on our floor models. Depending on the model, either the table or cut-off wheel moves back and forth or up and down. This minimize the contact area and avoid thermal damage and excessive wear on the wheel.



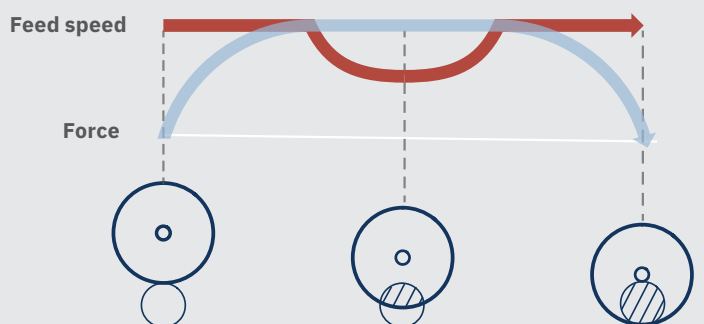
ExciCut

ExciCut is ideal for cutting hard materials. It uses an oscillating movement for the cut-off wheel to reduce the contact area between it and the workpiece, thereby minimizing thermal damage.



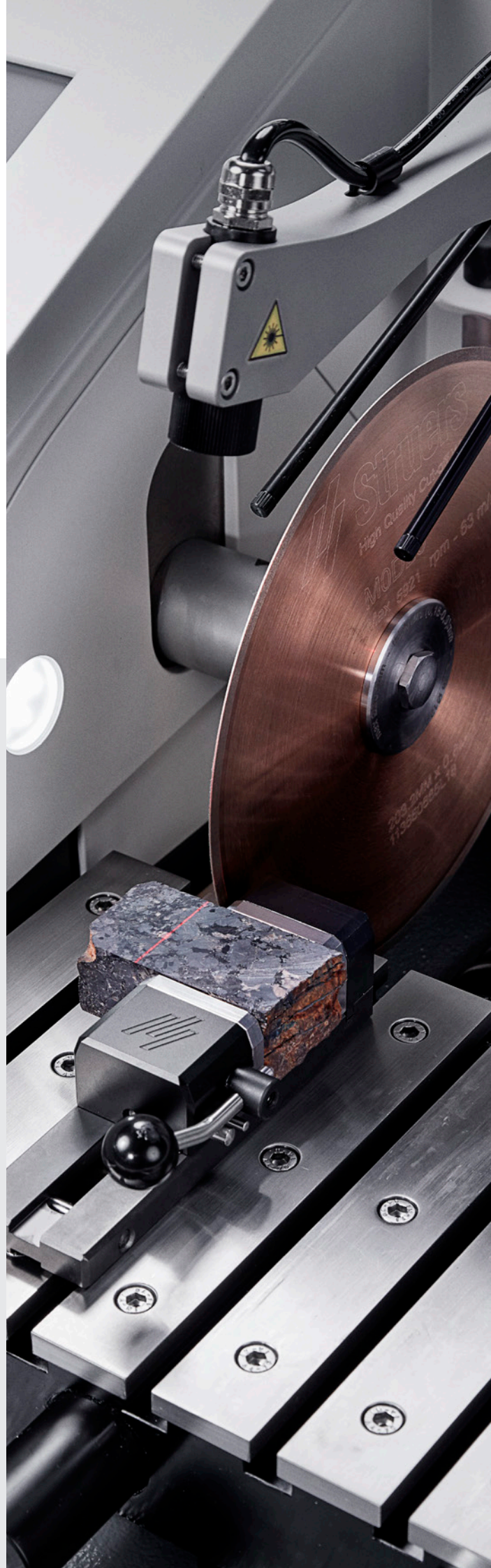
Rotational / Oscillating cut

This uses an oscillating movement of the cut-off wheel to reduce the contact area between it and the workpiece, thus ensuring that even very hard materials can be cut without the risk of thermal damage.



OptiFeed

With OptiFeed the feed speed is automatically reduced if the pre-set force limit is reached to avoid damage to the workpiece, the motor, or the cut-off wheel. The feed speed is automatically optimized without sacrificing the quality of the cut or wheel economy. As the contact area gets larger or smaller, the force increases or decreases to maintain the feed speed.



TABLETOP PRECISION CUTTING MACHINES

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DISCOVER MINITOM

Low-speed precision cutting machine for gentle sectioning

Minitom is a compact, low-speed, semi-automatic tabletop precision cutting machine for sectioning small and delicate workpieces with minimal thermal damage.

Minitom is designed with accuracy and efficiency in mind. The machine is simple to use and the process can be set to stop automatically once finished to give you more time to work on other tasks.

A gravity feed design allows for highly accurate sectioning of different materials. A variety of specimen holders also allows greater workpiece flexibility.

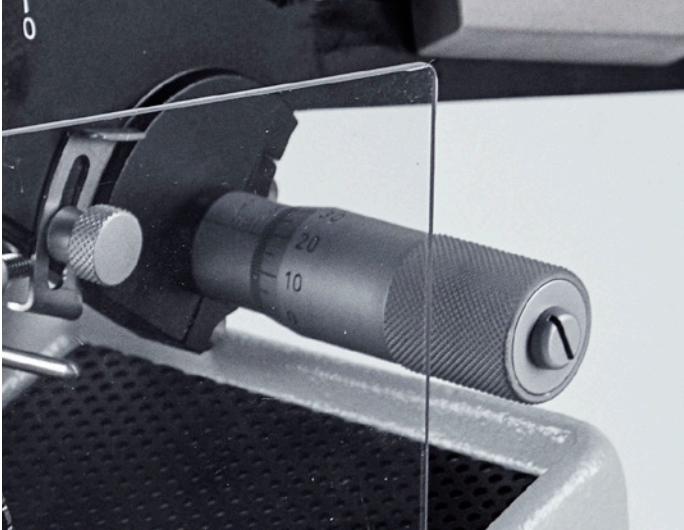


Accurate and virtually deformation-free



Minitom enables you to section workpieces to an accuracy of ± 0.01 mm in thickness by using the movable specimen holder arm and micrometer screw. This makes it ideal for small and delicate workpieces where deformation must be kept to a minimum. The machine also ensures constant cut-off wheel speeds, no matter the load, to help protect your workpiece.

Precise and simple to use



Minitom helps you to save time by being exceptionally precise, so you can cut very close to the target. It only takes a few minutes to clamp the workpiece, set the cutting press, and cut-off wheel rotational speed, which further shortens the overall process time.

Explore more [➔](#)



- ✓ A high-precision tabletop machine
- ✓ Low speed protects against heat deformation
- ✓ Accuracy of ± 0.01 mm for precise results
- ✓ Workpieces up to 30 x 40 mm (1.2 x 1.6")
- ✓ 75-125 mm (3-5") CBN and diamond cut-off wheels



TABLETOP PRECISION CUTTING MACHINES

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DISCOVER ACCUTOM

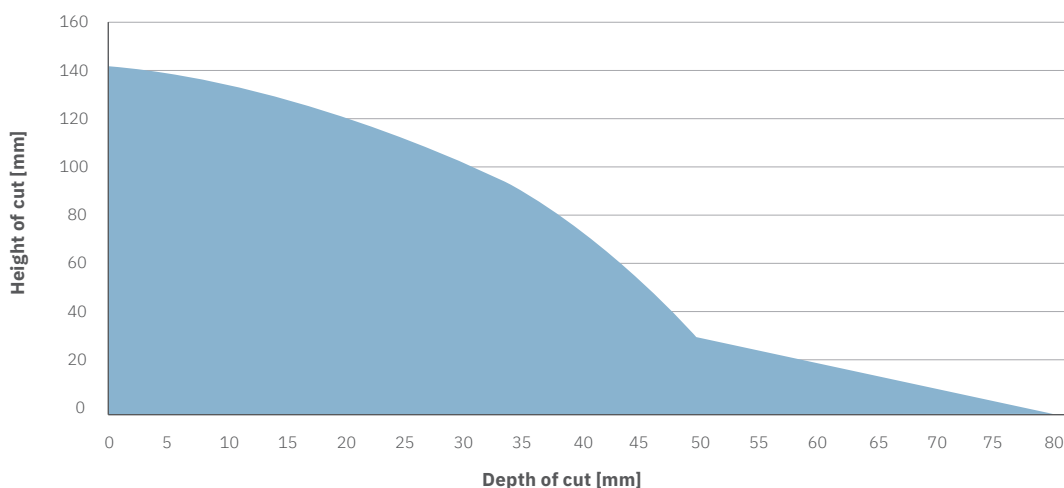
High-precision cutting and grinding machine

World-class precision makes Accutom ideal for delicate applications such as teeth, otoliths, microelectronic components, PCBs, painted layers, minerals, and concrete with no risk of thermal damage.

With at least three levels of cutting force, Accutom allows you to cut very fragile workpieces as well as those containing different phases or inclusions with different hardness. A MultiCut feature allows up to ten identical or different high-quality slices in a single workflow, while the grinding mode allows for very accurate material removal.

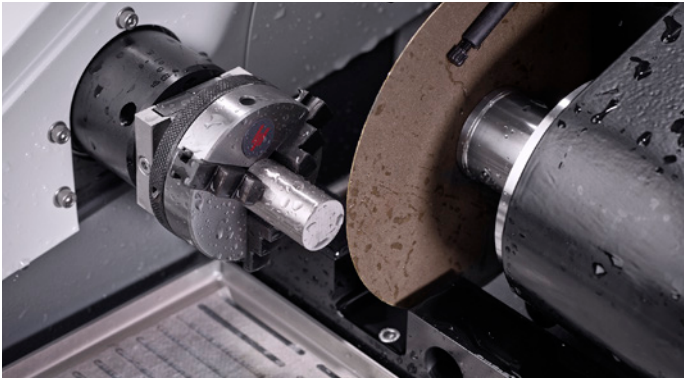


Cutting capacity Accutom-10/-100



We offer a variety of models with different capabilities, depending on your requirements.

Precise cutting



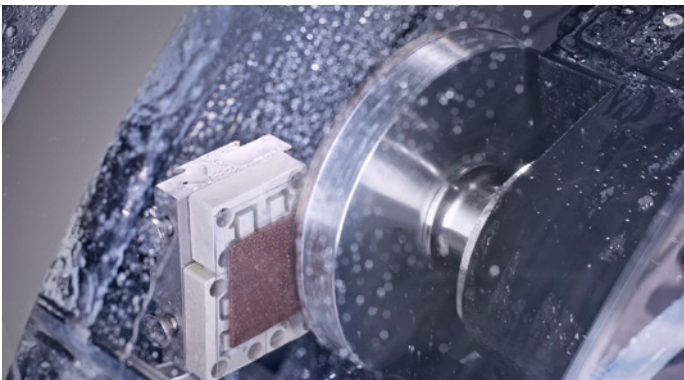
Struers has optimized the Accutom-100, cut-off wheels, flanges, clamping tools, etc., to enable you to get the most precise and parallel cutting result, including the ability to mount the specimen holder directly onto the X-movement arm.

Comprehensive method database



Accutom gives you full access to our method database and allows you to create and save your own methods, such as speed and force for the cut-off wheel. This helps to maximize reproducibility and enables you to setup your machine in the shortest possible time.

Increase efficiency



Accutom allows you to rotate and oscillate the specimen holder, reducing the cutting time for workpieces with awkward shapes.

Accutom features two grinding modes that can be used for all types of materials, featuring multiple bi-directional sweeps between movements in the X-direction to ensure perfect planeness. There is also a tray for collecting your specimens, automatic speed control features, and a large variety of clamping tools, making the machine perfect for many different cutting tasks.



- ✓ A high-precision tabletop machine with X-movement arm for precision and parallelism
- ✓ Rotation and oscillation for shorter cutting time
- ✓ Grinding mode with multiple bi-directional sweeps between steps for perfect planeness
- ✓ 35 x 80 mm (1.4 x 6.5") cutting capacity
- ✓ Accutom-10: 75-150 mm (3-6") diameter cut-off wheels and
Accutom-100: 100-150 mm (4-6") diameter cut-off wheels and cup wheels

Explore more [➤](#)

TABLETOP PRECISION CUTTING MACHINES

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DISCOVER SECOTOM

An all-purpose precision cutting machine

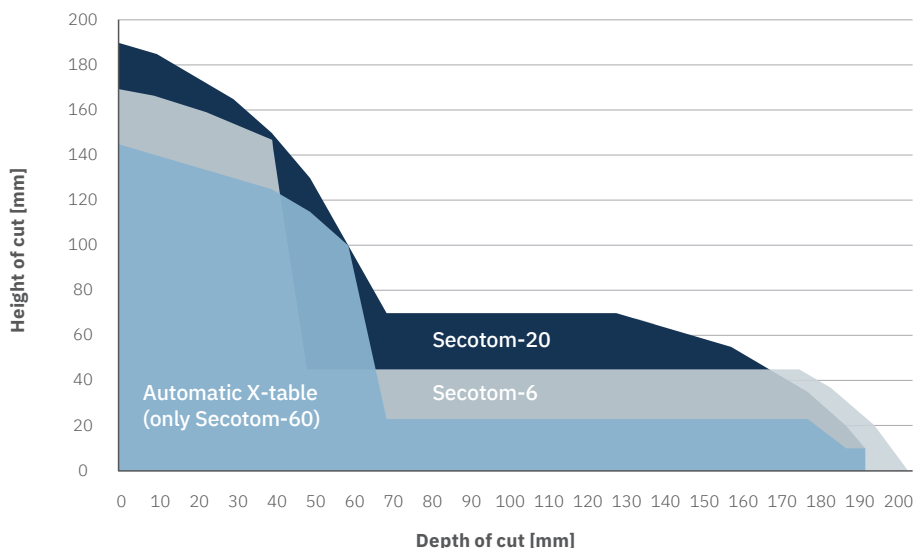
Secotom is an all-purpose and versatile precision tabletop cutting machine that delivers exceptional reproducibility in a compact package.

Secotom requires virtually no training, allowing more operators to use the cutting machine, and with less risk of error. A movable T-slot table combined with a variety of clamping tools enables you to cut as close to the point of interest as possible, and access to our method database means you never need to reset parameters for each cut.

Secotom also houses additional features that help to ensure the perfect preparation result, such as a laser to position the workpiece correctly, an optional manual dresser, and ExciCut mode for hard materials.

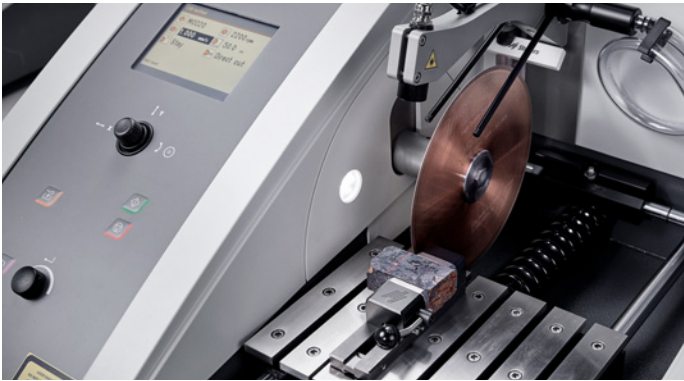


Cutting capacity Secotom-6/-20/-60



We offer a variety of models with different capabilities, depending on your requirements.

Efficiency and precision



Secotom makes your cutting process quick, easy, and efficient. A versatile cutting table is ideal for sectioning a broad range of different workpieces, while 8 mm T-slots, a wide range of clamping tools, and a laser guide ensures exceptional precision.

Ease and speed



A simple user interface allows for ultra-easy operation. All you need to do is set the parameters with a multifunction knob, then use the joystick for fast positioning of the workpiece.

Secotom's variable cut-off wheel rotational speed ensures the best quality of cut. With three programmable stop position modes, you can also adapt the method to your workpiece for a faster process.

Explore more [➤](#)



- ✓ Ultra-flexible T-slot table for multi-purpose precision cutting
- ✓ Optional automatic X-movement for cutting in series
- ✓ Laser guide for precise positioning
- ✓ 50 x 165 mm (2 x 6.5") cutting capacity
- ✓ 75-203 mm (3-8") diameter cut-off wheels
- ✓ 8 mm (0.31") T-slots



TABLETOP CUTTING MACHINES

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DISCOVER LABOTOM

Ultra-fast manual machine with cut-and-go efficiency

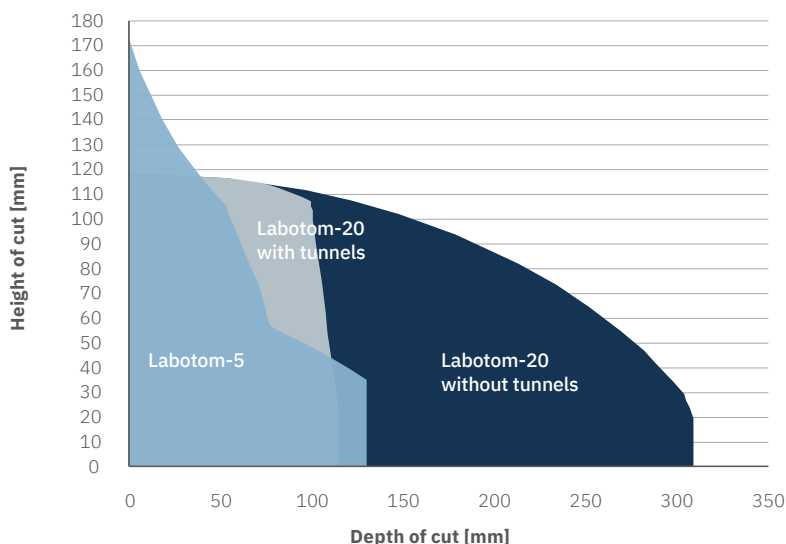
Labotom is a simple-to-use and powerful tabletop cutting machine for ultra-fast manual cutting. An optional extension tunnel makes it ideal for extra-long workpieces.

Labotom features a compact, ergonomic, and space-saving design. It is a highly dependable, cut-and-go workhorse that can be used by any operator with minimal training and a reduced risk of error.

The machine also protects users from harm with an innovative safety guard that slides upwards to allow access to the cutting table from three different angles (only for Labotom-20). This helps operators to cut as close to the point of interest as possible.



Cutting capacity Labotom-5/-20



We offer a variety of models with different capabilities, depending on your requirements.

Usability and flexibility



Zero programming is required and there are just three buttons: Start, Stop and Flush. This makes Labotom quick and easy to operate, even for inexperienced users.

Labotom's large cutting table has 10 mm T-slots for flexible clamping, an optional extension tunnel for long workpieces, and a fixed cooling nozzle to reduce the risk of burns and to eliminate the need to place nozzles manually.

Fast and simple cleaning

Cleaning can be one of the most time-consuming parts of the cutting process. To minimize cleaning time, Labotom includes an integrated flushing gun and large drain, which means debris can be quickly washed away. There are also no corners or spaces that could otherwise accumulate dirt over time.

Built-in user safety

Labotom has an ergonomic design and a bended handle that minimizes operator strain during the cutting process. This helps to make sure you do not overexert yourself or cause unwanted damage to the specimen's surface.

Explore more 



- ✓ Ergonomically correct cutting handle for controlled sectioning
- ✓ Integrated flushing gun for easier maintenance and greater uptime
- ✓ 62 x 250 mm (2.5 x 9.8") cutting capacity
- ✓ 250 or 350 mm (10 or 14") diameter cut-off wheels
- ✓ 10 mm (0.39") T-slots

TABLETOP CUTTING MACHINES

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DISCOVER DISCOTOM

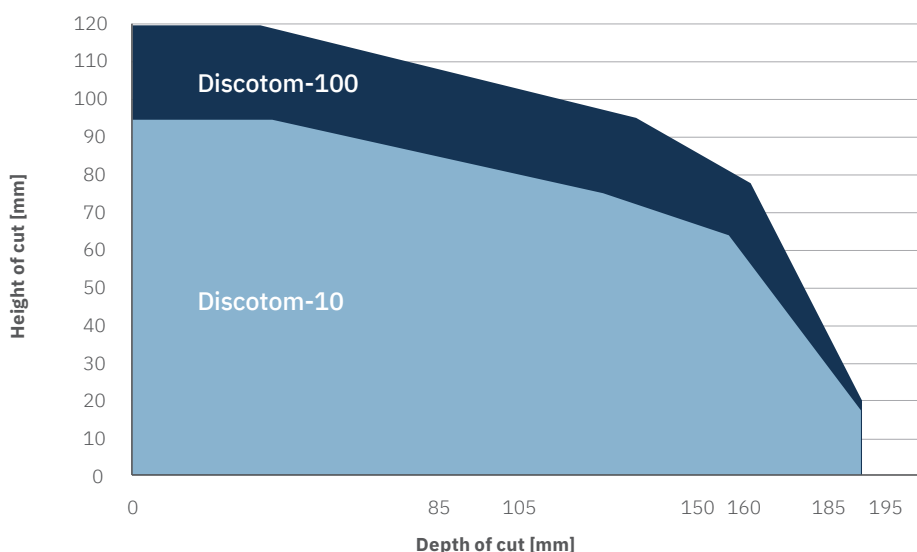
Exceptional versatility and productivity

Discotom is a highly versatile tabletop cutting machine that helps you to expand your cutting capabilities and streamline your process.

Spacious, versatile, and easy to use, Discotom has a flexible design with multiple cutting and clamping options that allow you to cut multiple workpieces with minimal risk of deformation.



Cutting capacity Discotom-10/-100



We offer a variety of models with different capabilities, depending on your requirements.

Flexible and fast



Discotom is extremely flexible and can be used as either a manual or semi-automatic solution. If speed is your priority, using it in manual mode saves you time as you do not need to set up all the parameters first. However, if quality is more important, the semi-automatic mode can help to ensure the least possible deformation for your specimen.

Discotom also features intelligent speed adjustment to protect your workpiece and motor, and to ensure fast and accurate results. Simply select the hardness of the material, and Discotom automatically sets the correct speed to ensure the right result for your preparation goal.

Exceptional versatility



Discotom gives you a variety of cutting modes depending on your needs or situation, allowing you to cut different workpieces with greater control and less deformation. For example, ExciCut is ideal for harder materials, where DirectCut is used for softer materials.

An automatic X-table option allows you to access MultiCut mode to cut slices of the same or varying thickness, or cut precisely in specified positions, without the need for reclamping.

Explore more [➤](#)

Save time



An automatic speed setting lets you use the same wheel for different materials, improving wear and avoiding time-consuming wheel changes.

Cleaning is also made more efficient thanks to our AxioWash system, and quick changing between manual and automatic cutting is enabled by the motorized cutting arm locking system.



- ✓ OptiFeed intelligent feed control to avoid motor overload
- ✓ AxioWash for fast and easy cleaning
- ✓ ExciCut for very hard materials, protecting your workpiece from deformation
- ✓ Avoid long reclamping times with MultiCut serial cutting
- ✓ 105 x 102 mm (4.1 x 4") cutting capacity
- ✓ Discotom-10: 250 mm (10") diameter cut-off wheels and Discotom-100: 300 mm (12") diameter cut-off wheels
- ✓ 10 mm (0.39") T-slots

FLOOR CUTTING MACHINES

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DISCOVER AXITOM

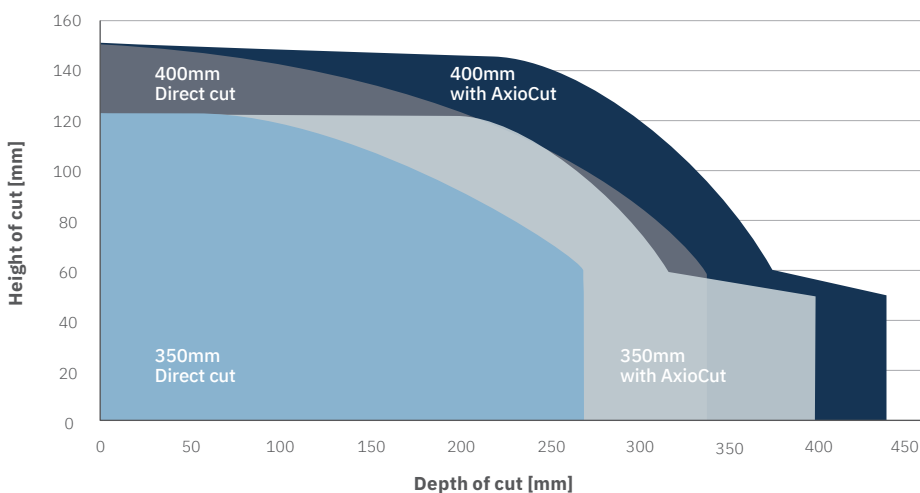
Perfect for large, hard, or complex workpieces

Axitom is an automated cutting machine with the largest cutting table and chamber in its class, which is why it is often used by labs that work with large or complex workpieces, such as those in the automotive industry.

Axitom is highly robust and versatile, with a powerful motor and sophisticated usage monitoring features that help to maximize efficiency and uptime. An automated table can move in X and Y directions, allowing for precise positioning, clamping, and sectioning.



Cutting capacity Axitom-5/-400



We offer a variety of models with different capabilities, depending on your requirements.

Built for uptime



Axitom's overload protection and OptiFeed intelligent feed control systems safeguard against motor damage and unplanned downtime. The machine is also incredibly sturdy and robust, minimizing vibration when cutting large workpieces and helping to extend its operational lifetime.

Ideal for tough workplaces



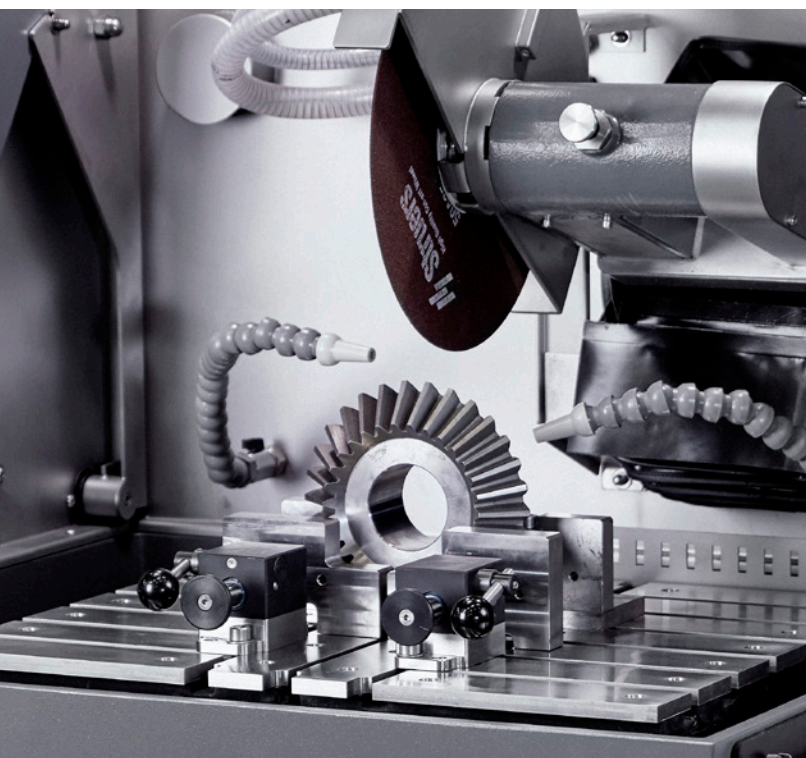
Axitom's controls are easy to use even when wearing heavy-duty working gloves, making it perfect for all kinds of industrial production environments.

Ready for your workpiece

Axitom allows you to handle exceptionally large and complex workpieces with ease, using a cutting table that measures 591 x 492 mm (23.3 x 19.4") and two automatic tables that allow for movement of 100 mm (4.0") in the X-direction and 150 mm (5.9") in the Y-direction.

In addition, a large space underneath the cut-off wheel enables you to clamp high workpieces up to 200 mm (8.0").

Explore more [➤](#)



- ✓ High-volume cutting machine for greater control and less deformation
- ✓ Spacious cutting chamber for large and irregular workpieces
- ✓ Automatic serial cutting
- ✓ 125 x 290 mm (5 x 11.5") cutting capacity
- ✓ 350 or 400 mm (14 or 16") diameter cut-off wheels
- ✓ 12 mm (0.47") T-slots

FLOOR CUTTING MACHINES

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DISCOVER MAGNUTOM

The largest cutting machine in our portfolio

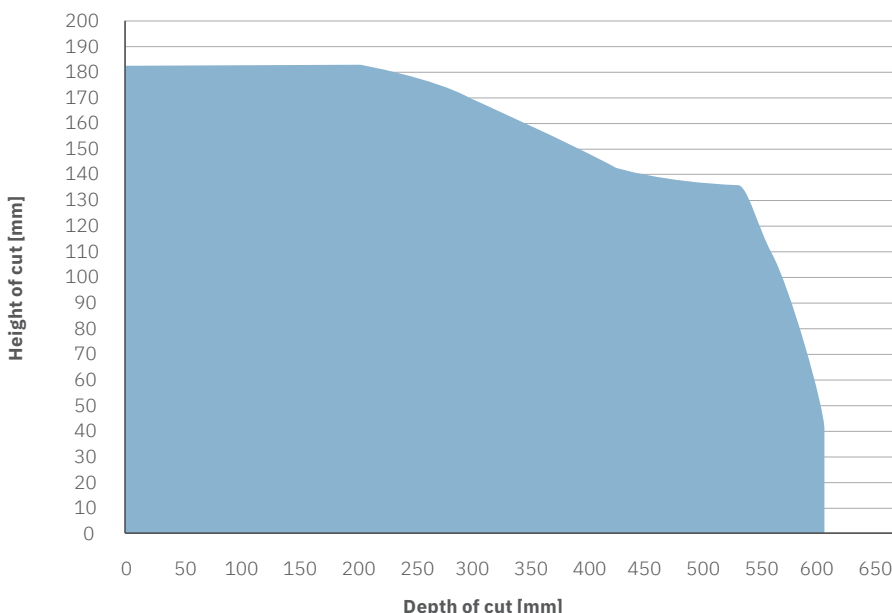
Magnutom is our largest cutting machine and houses some of our most advanced simulation technologies.

The spacious 1,000 mm wide cutting chamber and sliding front door make it possible to use a forklift or crane to load heavy workpieces, using a hinge side door for easy access. The motor is so powerful that you can install two cut-off wheels and make parallel sections.

Magnutom is exceptionally safe, versatile, and adaptable, making it a perfect choice for producers of very large and irregular-shaped products.



Cutting capacity Magnutom-5000



We offer a variety of models with different capabilities, depending on your requirements.

Simulate before cutting

Magnutom can map out complex sequences and then, with the patented simulator function, simulate all individual sections for you to correct or validate before proceeding. During programming, an easy-to-use joystick and laser allow you to select your sectioning points with a high degree of accuracy, so the exact position can be logged into the sequence.

You only need to decide whether to move or cut, which means no time or materials are wasted on trial sections.

Save consumables

Magnutom adapts its speed automatically via rpm-optimization as the cut-off wheel wears down. This means 31% more sections per cut-off wheel can be produced in certain situations by using our high-quality consumables.

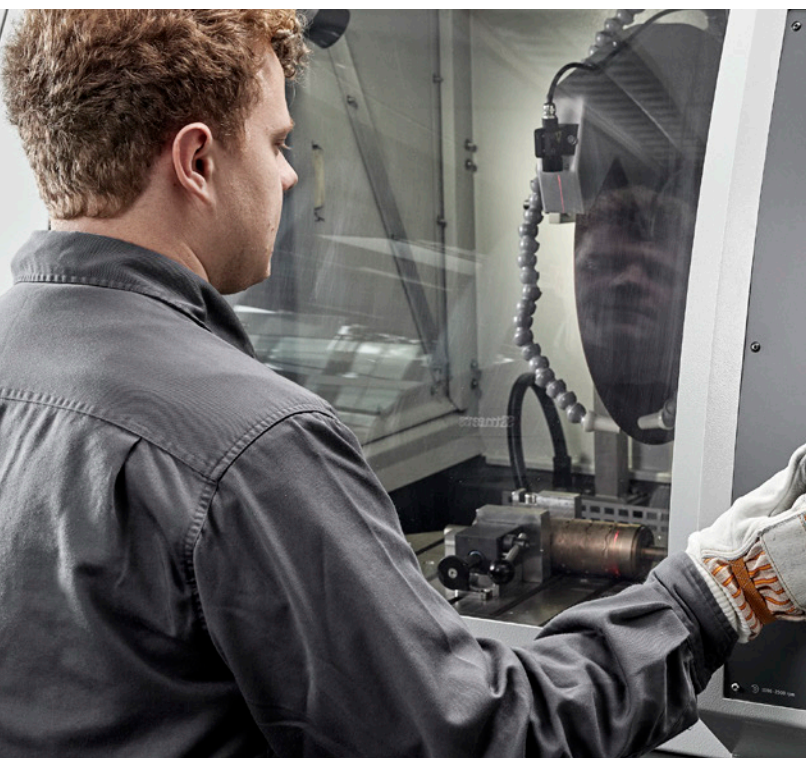
On the Magnutom-5000 XYZ and XYZR models, built-in sensors will monitor the wear of the cut-off wheel to increase its yield. When a wheel does need to be changed, it can be done quickly using a special spindle lock.

Automated rotary table



Magnutom uses four automated axes, including a rotary table, saving you significant time, and less re-clamping is needed. Automatic sequences then make it quick and simple to carry out a series of parallel or angled sections of the same or varying thicknesses.

Explore more [➤](#)



- ✓ Simulator function to ensure you always make the right cut
- ✓ Hinge side door for better ergonomics and accessibility to the chamber
- ✓ Automatic XYZR movements for cutting complex workpieces and to avoid reclamping time
- ✓ 190 x 254 mm (7.5 x 10") cutting capacity
- ✓ 432 or 508 mm (17 or 20") diameter cut-off wheels
- ✓ 12 mm (0.47") T-slots

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CLAMPING TOOLS FOR ACCURACY AND FLEXIBILITY

Clamping is essential to ensure your workpiece doesn't move during cutting; however, it can be the most time-consuming part of the process. Not only this, but it is important to use the right clamping device to cut as close to the point of interest as possible.

Uneven sectioning causes deformations and heat damage that changes the structure of the specimen and can damage the cut-off wheel. With the right clamping solution, you can minimize these issues, saving time for grinding and reducing the risk of burns on your specimen.

**A customer reduced the
time to cut 18 sections
by more than**

 **60 %**

**with a customized
Struers clamping tool.**



Accuracy

The right clamping tool keeps your workpiece stable and allows you to use a thinner cut-off wheel, enabling you to cut as close to the point of interest as possible.

Time

The right clamping tool can speed up your process if you need to cut to a very specific point, as you can avoid clamping, cutting, and reclamping multiple times. Instead, you will only need to clamp once even if you need to do multiple cuts on your workpiece.

Flexibility

Our range of clamping tools gives you the flexibility to clamp regular or irregular workpieces with ease, no matter how large, small, or complex.

Standardization

We make it easy to repeat the same clamping process, so you can make the same cut in the same place, every time. This saves you time and helps to make your results as reproducible as possible.



A complete range of clamping options

Whatever type, size, or shape of workpiece you need to cut, we have a clamping solution for you.

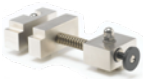
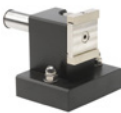
When choosing your clamping solutions, there are several important factors to consider. This guide will help you to understand your options; however, note that this does not show our full range of products. For all manual and automatic solutions, as well as left- and right-side tools, please contact our experts.

First, think about your process priorities. For example, is flexibility and speed most important, or standardization and accuracy? Combine this with your workpiece characteristics and you will find the clamping solution that will give you the best results.

Lastly, make sure your clamping tool is suitable for your machine's T-slots on the cutting table.

We can always support you in unusual requirements with customized clamping solutions designed and built to your specifications.

	FLEXIBILITY & SPEED				
Your challenge	Multiple specimen geometries to clamp				Multiple cuts or
Workpiece size	Large / small		Large		Large /
Clamping tool type	Quick clamp		Vertical clamp		Baseplate
Tool and accessories for different geometries and types	Tool	Accessories	Tool	Accessories	Tool
	 Regular		 Different geometries		
	 Round/oval		 Vertical clamping		
	 Tube/coating		 Large odd shapes		
	 Adjustable stop		 Support kit		
			 Adjustable support		
Available for cutting table with T-slot size	8 mm 10 mm 12 mm		8 mm 10 mm 12 mm		8 mm 10 mm 12 mm

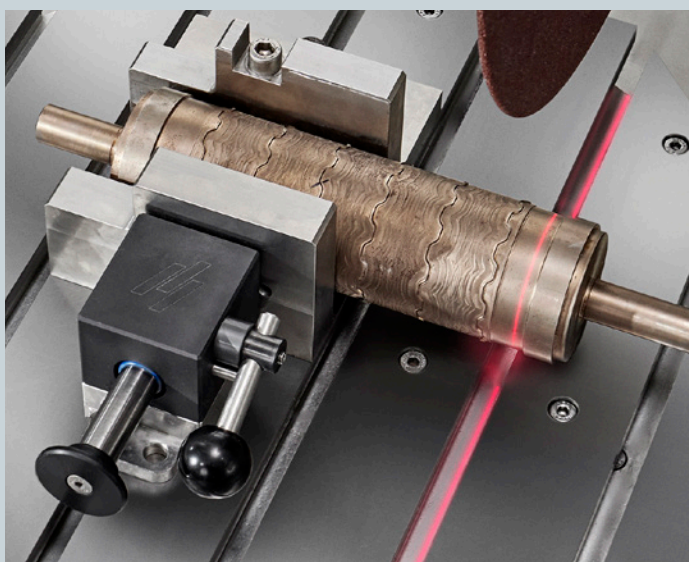
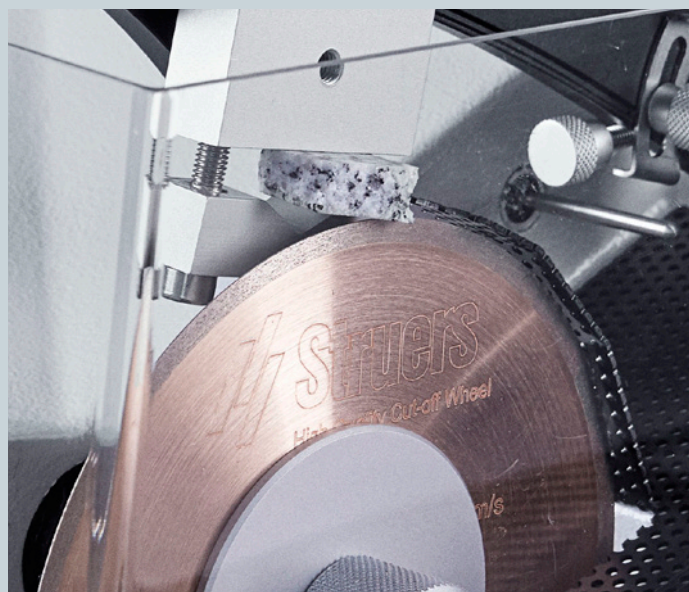
		STANDARDIZATION & ACCURACY			
high demands on time for cutting process		Challenging workpiece or high requirements for cut		Specific cutting line or point of interest	
small	Large / small	Small	Large	Large	Small
clamp	Spring clamp	Fixed stand	Pinch reduction	Support block	Bolt clamping device
Accessories  Regular  Round/oval  Tube/coating	Tool 	Tool  Accessories  Round/square  Adhesive mounting  Cylindrical  Goniometer  Regular  Irregular  Cylindrical  To tilt or angle workpiece	Tool  Workpieces with internal stress	Tool*  Accessories  Different geometries  Bolt/fasteners *To be used with a vertical clamp to support fixation of irregular workpieces	Tool  Bolt/fasteners
	8 mm 10 mm 12 mm	8 mm 10 mm	10 mm 12 mm	8 mm 10 mm 12 mm	8 mm 10 mm

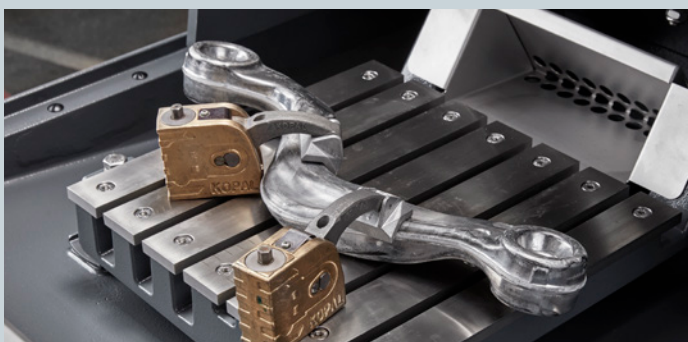
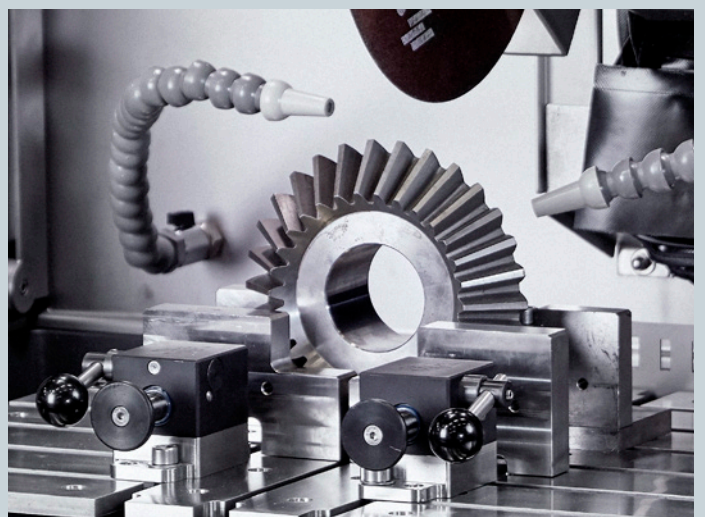
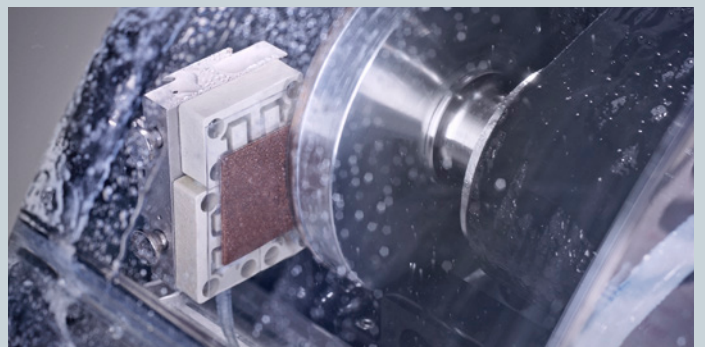
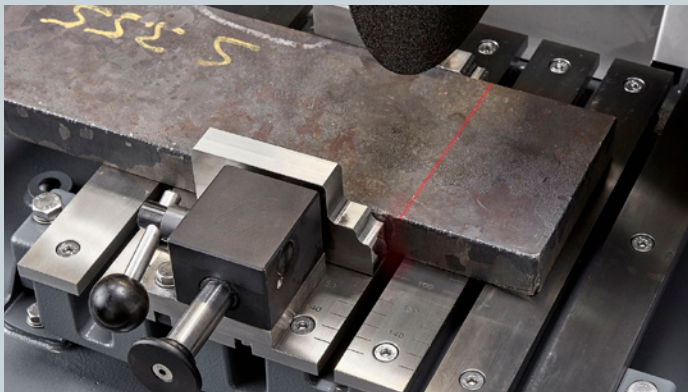
Special for Minitom

	STANDARDIZATION & ACCURACY						
Your challenge	Challenging workpiece or high requirements for cut						
Workpiece size	Small						
Clamping tool type	Specimen holder arm						
Tool and accessories for different geometries and types	Tool 	Accessories  General use  Round  Long workpiece  Irregular  Round/square  Adhesive mounting					

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CLAMPING TOOLS FOR EVERY NEED





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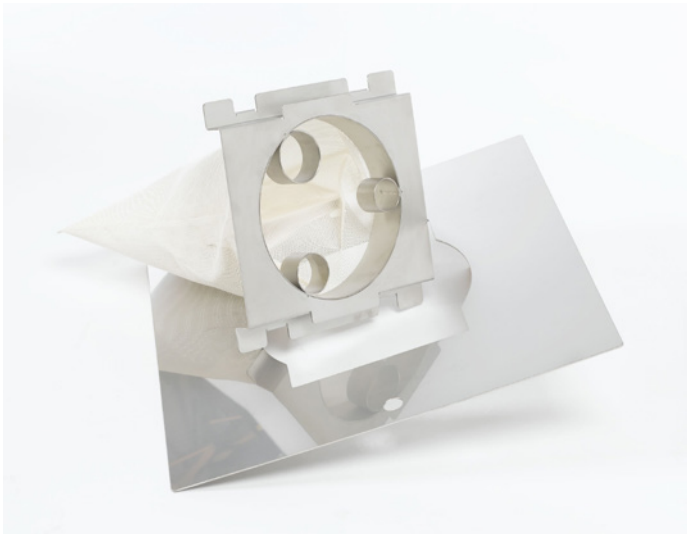
EFFICIENT AND RELIABLE FILTERING

Our efficient filtering systems ensure that your waste debris is never flushed into the environment and your cutting process stays clean and safe.

The Struers cooling system ensures efficient recirculation of cooling water for cut-off and grinding machines. A compact design enables it to be stored underneath tables or even built into the machines themselves.



Filter bags



Struers filter bags are designed to work perfectly with our large recirculation tanks, by removing as much debris as possible from entering your drainage system. Not only does this reduce the risk of clogging, but it means you do not need to change the water very often.



FAST, EASY, AND PRECISE

Siemens Industrial Turbomachinery needed a reliable and precise way to section turbine components for materialographic analysis. The process had to be faster, more efficient, and easy to clamp both oddly shaped and tiny workpieces.

The Struers Secotom-60 precision cutting machine gave a fast, silent, and easy cutting solution with an ultra-flexible T-slot table for multiple clamping options. **Read full case** [➤](#)



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ALL THE CONSUMABLES YOU'LL EVER NEED

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

Cut-off wheels

Struers provides the market's most comprehensive range of purpose-designed cut-off wheels for metallographic sectioning. Engineered for precision and quality, each of our cut-off wheels delivers the best possible specimen with as little deformation or overheating as possible.

Different materials and processes require different types of cut-off wheels, with various characteristics such as diameter size, thickness, or abrasive surface placement.

Our cut-off wheels have been manufactured to work perfectly with our cutting machines, helping you to save time and cost by optimizing performance, efficiency, and durability.

We offer Alumina, CBN, diamond, or Silicon Carbide cut-off wheels. Explore more in the selector guide available in our consumables catalogue on [Struers.com](https://www.struers.com). Or contact our specialists to find out which is the right one to use for your material and preparation goals.



Cooling additives

Our cooling additives are specially formulated to prevent thermal damage to your specimen, protect your cut-off wheel, inhibit corrosion, and minimize the chance of fungus in the water. This helps to increase the lifetime of your cutting machine and recirculation unit, and minimizes ongoing maintenance requirements.

When sectioning case-hardened steel, you can get up to three times as many cuts with our Cooli Additive Plus product, compared to its predecessor, Corrozip. Cooli Additive Plus also gives you up to 30% more cuts per cut-off wheel when sectioning aluminum alloy.



With Cooli Additive Plus, you can save up to

↓ 67 %

of your cut-off wheel expenses with each cut.



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CHOOSE A PARTNER, NOT JUST A SUPPLIER

Get total support – whenever you need it

Cutting 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.

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.

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.

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**98% of consumables
are shipped within**

48 hrs



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GET PEACE OF MIND WITH SERVICEGUARD

We are here to support you in ways that add value far beyond simply class-leading products and equipment. Struers 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.



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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

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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.

Struers cutting equipment

CUT RIGHT TO THE POINT

Minitom

Small, automatic precision cutting machine for gentle sectioning of delicate workpieces



Struers cutting equipment

CUT RIGHT TO THE POINT

Accutom

Precision cutting and grinding with a smart and intuitive user interface for higher productivity



Struers cutting equipment

CUT RIGHT TO THE POINT

Secotom

Advanced precision cutting machine with large capacity and application flexibility



Struers cutting equipment

CUT RIGHT TO THE POINT

Labotom

Fast manual cutting of any workpiece, large or small



Struers cutting equipment

CUT RIGHT TO THE POINT

Discotom

Greater versatility and productivity in a single cut-off machine



Struers cutting equipment

CUT RIGHT TO THE POINT

Axiotom

Fully automatic, high volume sectioning in rough environments



Struers cutting equipment

CUT RIGHT TO THE POINT

Magnutom-5000

All aspects of the section process included in one machine

