



Make the Cut!



- World-class precision
- Intuitive user interface
- Unique grinding function





EASY POSITIONING

The new Accutom cut-off machines are packed with intuitive easy-to-use functions, enabling world-class cutting precision with a minimum of effort.

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

Accutom comes in two new models, depending on customer needs.

High precision and easy positioning

Positioning with fingertip precision is easy using the convenient operating keys on the control panel to move the specimen holder in the X-direction with 5 or 100 µm increments and the cut-off/cup wheel motor in the Y-direction. Mounting the specimen holder directly on the X-movement arm ensures Accutom's high level of precision and parallelism.

Intuitive user interface – easy to learn and use

An intuitive user interface provides a clear overview of each method and related cut-off wheels.

A smart turn/push knob enables fast selection of settings and large icons provide an easy-to-understand overview of functions.

Rotation and oscillation for shorter cutting time

Rotation of the workpiece significantly reduces cutting time, for example for a tube or round workpiece, while oscillation prevents overheating when cutting hard materials.

MultiCut for extra productivity

The MultiCut mode boosts productivity by enabling cutting of up to 10 identical or different slices in a single workflow. MultiCut is available on Accutom-100.

Grinding mode with perfect planeness

Available on Accutom-100, grinding mode can be used for all types of material using multiple bi-directional sweeps between movements in the X-direction to ensure perfect planeness.

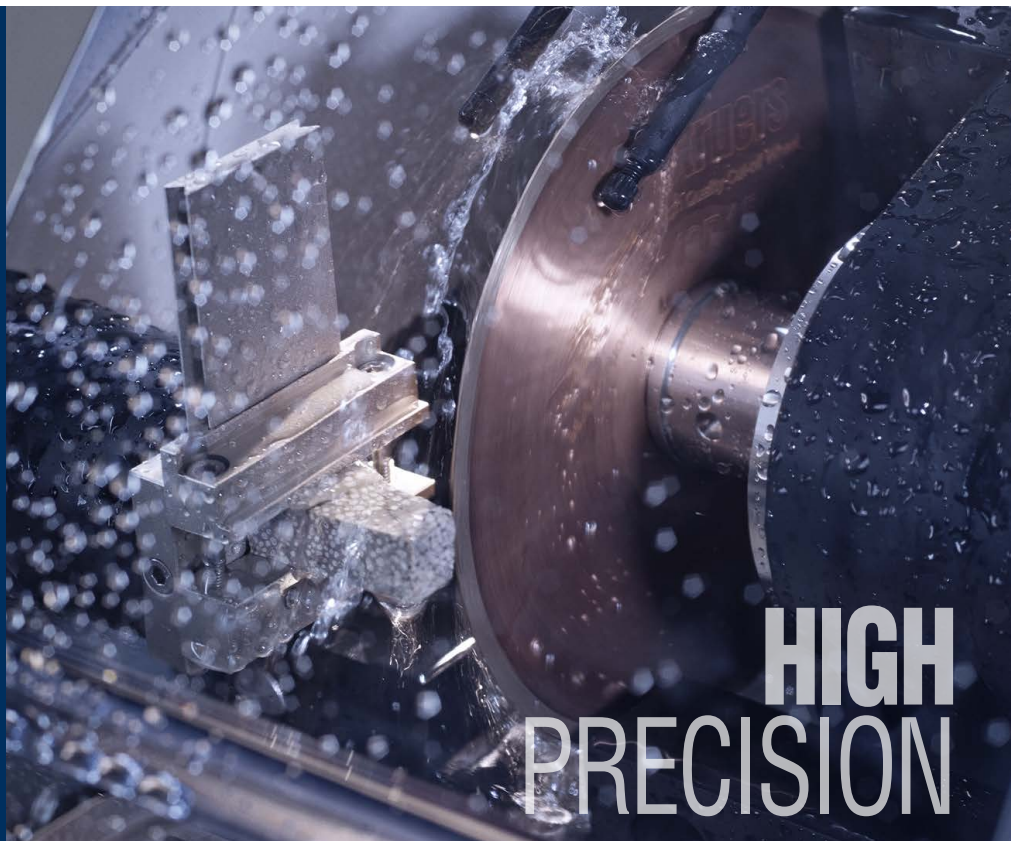
To achieve the optimal preparation result, two grinding modes are available to accurately control material removal.

Method database

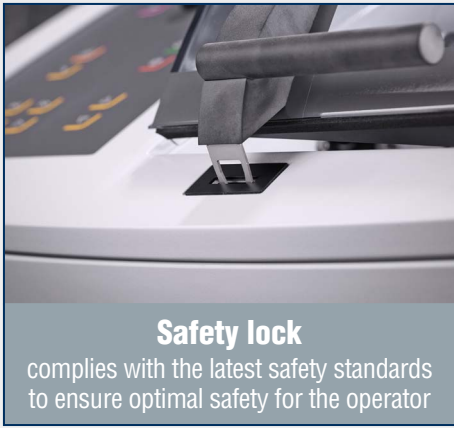
The clear menu system enables easy input and selection of up to 100 cutting and 100 grinding methods that can be named individually.

World-class precision makes Accutom ideal for delicate applications such as:

- Bone
- Teeth
- Otolith
- Solder ball
- PCB
- Fibre
- Painted layer
- Minerals
- Concrete



Precision, reliability



Safety lock

complies with the latest safety standards to ensure optimal safety for the operator

Safety metal plate

Emergency stop



Flexible LED light

provides easy illumination of alignment and the machine interior when flushing



Method database*

enables input and retrieval of up to 100 cutting and grinding methods

Rotation of specimen holder on Accutom-100



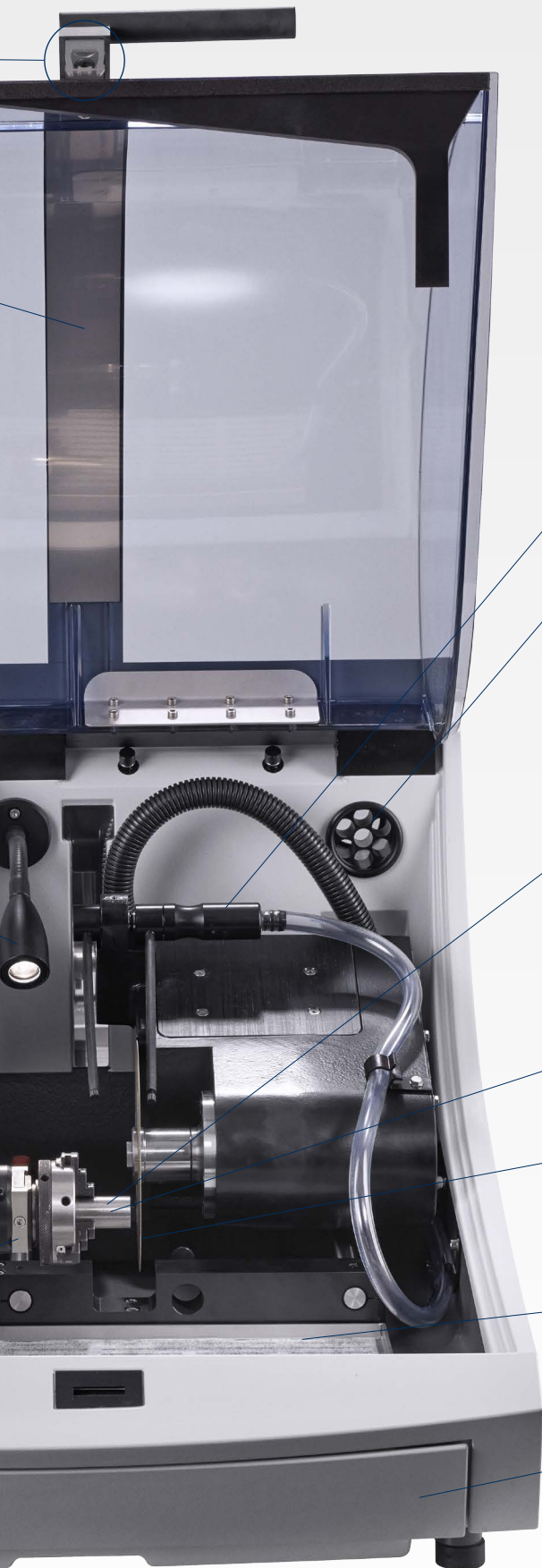
Intuitive user interface

with a turn/push knob for easy navigation and smart keys for easy positioning

Specimen holders for any workpiece



and reproducibility



Built-in flushing gun
makes cleaning fast, easy and effective



MultiCut function*
provides extra productivity of up to 10 slices in a single workflow

Exhaust



Rotation/oscillation
reduces cutting time and avoids overheating of hard materials

75-150 mm / 3"-6" dia. cut-off wheels

Tray for cut specimens

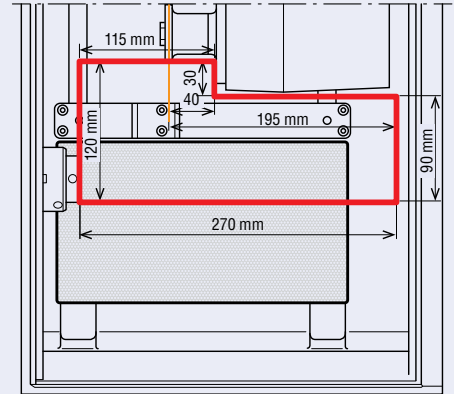
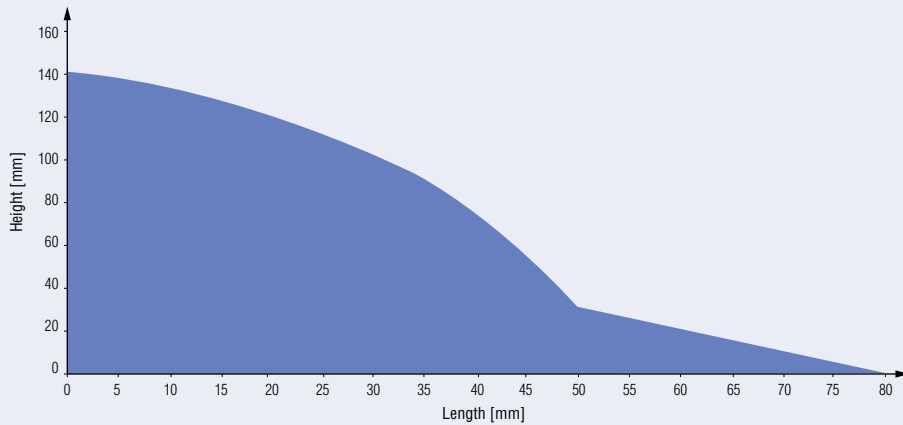


Built-in recirculation cooling unit
no extra tank required – the built-in tank has a capacity of 4.76 l.

*Accutom-100 only

TECHNICAL DATA - Accutom-10/-100

CUTTING CAPACITY



Subject	Accutom-10	Accutom-100
Specimen holder rotation and oscillation	Yes	Yes
Automatic rotation of specimen holder	No	Yes
Motor rotation speed	300-3000 rpm adjustable in steps of 50 rpm	300-5000 rpm adjustable in steps of 50 rpm
Grinding		Feed speed: 0.5 - 7.5 mm/s adjustable in steps of 0.5 mm/s
Cutting		Feed speed: 0.005 - 3 mm/s adjustable in steps of 0.005 mm/s
Positioning speed		Y= 13 mm/s X= 10 mm/s
Positioning range		X direction: 60 mm (precision 0.005 mm) Y direction: 110 mm (precision 0.1 mm)

PHYSICAL SPECIFICATIONS

Cutting capacity	
Cut-off wheel:	75 mm (3") - 150 mm (6") dia. Arbor size: 12.7 mm
Length of cut-off specimen:	40 mm / 195 mm for 25 mm dia.
Length of workpiece to be clamped:	250 mm
Workpiece width and height:	50 x 130 mm
Workpiece cross section:	54 mm without rotation / 108 mm with rotation
Grinding capacity	
Cup wheel:	100 mm (4") - 150 mm (6") dia. Arbor size: 12.7 mm
Sample:	95 x 95 mm (3.7" x 3.7")
Power	
Nominal load	370 W synchronous motor with high energy efficiency and constant torque in various rpm
Current max	10 A
Dimensions	
Height:	440 mm (17.3") cover closed 1065 mm (42") cover open
Width:	644 mm (25.4")
Depth:	720 mm (28.3") 784 mm (30.9") with plug
Weight	68 kg
Software and electronics	
Controls	Touch pad and push/turn knob
Memory	FLASH-ROM/RAM/NV-RAM
LC Display	TFT-colour 320 x 240 dots with LED back light
Noise level	60 dBA, at idle running, at a distance 1.0 m (39.4")
Surrounding temperature	5 - 40 °C (41-104 °F)
Humidity	0 - 95 % RH, non condensing
Safety	Please refer to the Declaration of Conformity
Recirculation cooling unit	
Contents	4.75 l (1.25 gallon)
Flow	1.6 l/min. (0.4 gallon/min.)

SPECIFICATIONS

Accutom-10

Precision cut-off machine with variable speed (300 - 3000 rpm). Variable automatic feed speed and motorized positioning system with digital read-out. Built-in specimen holder rotation and oscillation. Three changeable cutting methods. Complete with recirculation cooling unit, flange set 50 mm dia. and tray for extra filter paper and collection of cut specimens. Specimen holders, cut-off wheels and Corrozip (additive for cooling fluid cat. No. 49900045) are ordered separately.

Cat. no: 06286127
Voltage: 200-240 V / 50-60 Hz

Accutom-100

Precision cut-off and grinding machine with variable speed (300 - 5000 rpm). Variable automatic feed speed and motorized positioning system with digital read-out with MultiCut function. Built-in specimen holder rotation and oscillation and vacuum pump connection for vacuum chuck. Cut-off wheel, cup wheel and material database and 100 optional changeable methods included. Complete with recirculation cooling unit, flange set 50 mm dia. and tray for extra filter paper and collection of cut specimens. Specimen holders, cut-off wheels, cup wheels and Corrozip (additive for cooling fluid cat. No. 49900045) are ordered separately.

Cat. no: 06176127
Voltage: 200-240 V / 50-60 Hz

Welch Vacuum Pump

Used on Discoplan-TS and Accutom-100. With vacuum: ~907 mbar and output: ~28 l/min. Dimensions L x W x H, cm (in): 37.5 x 21 x 25.5 (14.8 x 8.3 x 10.0).

Cat. no: 061961xx

Struers' equipment conforms with the provisions of the applicable International Directives and their appurtenant Standards. (Please contact your local supplier for details)

Struers' products are subject to constant product development. Therefore, we reserve the right to introduce changes in our products without notice.

CONSUMABLES

Diamond Cup Wheel, MOP15 91 µm

For grinding of hard and brittle materials on Accutom-100. Metal bond. Size 150 mm dia.

40800199

Diamond Cup Wheel, MOP15 40 µm

For grinding of hard and brittle materials on Accutom-100. Metal bond. Size 150 mm dia.

40800200

Filter paper, 100 pcs.

For Accutom-10 / -100, size 240 x 130 mm (9.4" x 5.1")

49900060

ACCESSORIES

Flange set

Different flanges can be used to achieve the highest precision or the biggest cutting capacity. For Secotom-15/-50 and Accutom-10/-100 42 mm dia. flange set (max. 168 mm / 6.6" cut-off wheel) 65 mm dia. flange set 110 mm dia. flange set

Flange Set for cup wheels on Accutom-100

For use with cup wheels on Accutom-100

Specimen holders with dovetail

Specimen Holder CATAN

for small workpieces Max. opening: 10 mm

Specimen Holder CATSI

for general use. Max. opening: 60 mm

Specimen Holder CATFF

teardrop type with opening. For workpieces 15 - 40 mm dia.

Specimen Holder CATTY

with 7 screws for irregular workpieces. Max. 40 mm width

Specimen Holder CATRE

for cylindrical workpieces. Max opening 40 mm dia.

Specimen Holder CATAL

for long workpieces. With double parallel vice

Three-jaw Chuck

For centering and clamping cylindrical workpieces up to 65 mm dia.

Tilting Joint CATJO

to be mounted between the dovetail and the specimen holder The specimen holder can then be angled $\pm 10^\circ$

Angling Joint CATJA

to be mounted between the dovetail and the specimen holder. The specimen holder can then be angled 30° to one side and 90° to the other side

Specimen Holder CATNI

with goniometer

Specimen Holder CATPE

for adhering workpieces

Specimen holder CATAP

with ceramic vacuum chuck for thin sections.

Vacuum chuck 3 x 28 x 48 mm

For thin sections. With three separate ceramic vacuum chucks with individual valves. Can be used for one to three of 28 x 48 mm / two 1" x 3" / one 2" x 3" glass slides. To be used on Accutom-100. Vacuum pump with vacuum of minimum 900 mBar and approx. 34 l/min is recommended to secure the glass slide.

Kit for an external recirculation tank

To be used if you do not want to clean the included tank or where 4.75 litre cooling fluid is not enough. Can also be used if you want to filter the fluid to ensure that the fluid is as clean as possible. Includes 2 x 2 m hoses and front plate to be placed instead of the recirculation tank front.

Cat.no

05036901
05996919
05036902



06176902



04276915



04946903



04946904



04946905



04946907



04946909



05036919



04946906



04946908



04276911



04276912



04276913



06176901



05996918



FLEXIBLE CLAMPING

Struers A/S
 Pederstrupvej 84
 DK-2750 Ballerup, Denmark
 Phone +45 44 600 800
 Fax +45 44 600 801
 struers@struers.dk
 www.struers.com



AUSTRALIA & NEW ZEALAND

Struers Australia
 27 Mayneview Street
 Milton QLD 4064
 Australia
 Phone +61 7 3512 9600
 Fax +61 7 3369 8200
 info.au@struers.dk

BELGIQUE (Wallonie)

Struers S.A.S.
 370, rue du Marché Rollay
 F- 94507 Champigny
 sur Marne Cedex
 Téléphone +33 1 5509 1430
 Télécopie +33 1 5509 1449
 struers@struers.fr

BELGIUM (Flanders)

Struers GmbH Nederland
 Elektraweg 5
 3144 CB Maassluis
 Telefon +31 (10) 599 7209
 Fax +31 (10) 5997201
 netherlands@struers.de

CANADA

Struers Ltd.
 7275 West Credit Avenue
 Mississauga, Ontario L5N 5M9
 Phone +1 905-814-8855
 Fax +1 905-814-1440
 info@struers.com

CHINA

Struers Ltd.
 No. 1696 Zhang Heng Road
 Zhang Jiang Hi-Tech Park
 Shanghai 201203, P.R. China
 Phone +86 (21) 6035 3900
 Fax +86 (21) 6035 3999
 struers@struers.cn

CZECH REPUBLIC

Struers GmbH
 Organizační složka
 Havlíčkova 361
 CZ-252 63 Roztoky u Prahy
 Phone +420 233 312 625
 Fax +420 233 312 640
 czechrepublic@struers.de

DEUTSCHLAND

Struers GmbH
 Carl-Friedrich-Benz-Straße 5
 D-47877 Willich
 Telefon +49 (0) 2154 486-0
 Fax +49 (0) 2154 486-222
 verkauf@struers.de

FRANCE

Struers S.A.S.
 370, rue du Marché Rollay
 F-94507 Champigny
 sur Marne Cedex
 Téléphone +33 1 5509 1430
 Télécopie +33 1 5509 1449
 struers@struers.fr

HUNGARY

Struers GmbH
 Magyarországi Fióktelep
 Tatai ut 53
 2821 Gyermely
 Phone +36 (34) 880546
 Fax +36 (34) 880547
 hungary@struers.de

IRELAND

Struers Ltd.
 Unit 11 Evolution @ AMP
 Whittle Way, Catcliffe
 Rotherham S60 5BL
 Tel. +44 0845 604 6664
 Fax +44 0845 604 6651
 info@struers.co.uk

ITALY

Struers Italia
 Via Monte Grappa 80/4
 20020 Arese (MI)
 Tel. +39-02/38236281
 Fax +39-02/38236274
 struers.it@struers.it

JAPAN

Marumoto Struers K.K.
 Takara 3rd Building
 18-6, Higashi Ueno 1-chome
 Taito-ku, Tokyo 110-0015
 Phone +81 3 5688 2914
 Fax +81 3 5688 2927
 struers@struers.co.jp

NETHERLANDS

Struers GmbH Nederland
 Elektraweg 5
 3144 CB Maassluis
 Telefon +31 (10) 599 7209
 Fax +31 (10) 5997201
 netherlands@struers.de

ÖSTERREICH

Struers GmbH
 Zweigniederlassung Österreich
 Betriebsgebiet Puch Nord 8
 5412 Puch
 Telefon +43 6245 70567
 Fax +43 6245 70567-78
 austria@struers.de

POLAND

Struers Sp. z o.o.
 Oddział w Polsce
 ul. Jasnogórska 44
 31-358 Kraków
 Phone +48 12 661 20 60
 Fax +48 12 626 01 46
 poland@struers.de

ROMANIA

Struers GmbH
 Sucursala Sibiu
 Str.Scoala de Inot, nr. 18
 RO-550005 Sibiu
 Phone +40 269 244 558
 Fax +40 269 244 559
 romania@struers.de

SCHWEIZ

Struers GmbH
 Zweigniederlassung Schweiz
 Weissenbrunnenstraße 41
 CH-8903 Birmensdorf
 Telefon +41 44 777 63 07
 Fax +41 44 777 63 09
 switzerland@struers.de

SINGAPORE

Struers Singapore
 627A Aljunied Road,
 #07-08 BizTech Centre
 Singapore 389842
 Phone +65 6299 2268
 Fax +65 6299 2661
 struers.sg@struers.dk

SUOMI

Struers Suomi
 Kalevankatu 43
 00180 Helsinki
 Puhelin +358 (0)207 919 430
 Faksi +358 (0)207 919 431
 finland@struers.fi

SWEDEN

Struers Sverige
 Ekbacksvägen 22
 168 69 Bromma
 Telefon +46 (0)8 447 53 90
 Telefax +46 (0)8 447 53 99
 info@struers.se

UNITED KINGDOM

Struers Ltd.
 Unit 11 Evolution @ AMP
 Whittle Way, Catcliffe
 Rotherham S60 5BL
 Tel. +44 0845 604 6664
 Fax +44 0845 604 6651
 info@struers.co.uk

USA

Struers Inc.
 24766 Detroit Road
 Westlake, OH 44145-1598
 Phone +1 440 871 0071
 Fax +1 440 871 8188
 info@struers.com

About Struers

Struers is the world leader in materialographic innovation. We develop, manufacture and distribute quality materialographic preparation solutions to help our customers realize maximum productivity and performance in laboratories and production facilities around the world. Struers is based in Copenhagen, Denmark with affiliates in 23 countries. Struers' employees, including experienced metallographers and qualified service personnel, work from strategically positioned global offices, supported by a worldwide network of dealers.

Learn more

Contact a Struers sales representative today or visit www.accutom.com