



- **Reliable** – robust materials and design
- **Fast** – easy setup and preparation
- **Adaptable** – flexibility for changing needs



RELIABLE

Designed for reliability and speed for manual grinding and polishing in the lab or next to the production line, the new LaboSystem is now ready for your inspection. A choice of robust modules gives you adaptability for your changing needs in demanding production environments. Struers' LaboSystem also has the endurance and speed you need to keep up with 24/7 throughput, enabling faster and more reliable preparation of specimens.

"During a three month trial we were impressed by the reliability, speed and simplicity of the new LaboSystem from Struers. The new LaboPol-60 was nearly 50% faster than our old polisher, enabling us to prepare specimens in half the time."

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

By the way...

The LaboSystem has undergone more than **40,000 cycles of durability testing** and has been subject to six months of field tests in Germany, the USA, the Czech Republic and Norway.

6 MONTHS TEST



Fast and reliable specimen preparation

The LaboSystem is a modular grinding and polishing system offering a choice of three LaboPol polishers, three LaboForce specimen movers, and two LaboDoser dosing units. Designed for reliability and speed, the LaboSystem is a highly adaptable polishing solution for the lab and production environment.

Reliable

Reliability means constant availability and performance. This is why the LaboPol is made from overall corrosion resistant and impact proof materials suitable for demanding environments. A cast aluminium block serves as a rigid backbone for the preparation disc, control panel and the optional specimen mover.

Fast

Speed is about productivity and standards compliant quality. The fast setup and simple design of the LaboSystem, including the disc size option of 300 mm dia. with a 44% increase in surface area*, means a significant reduction of processing time and less time standing at the polisher.

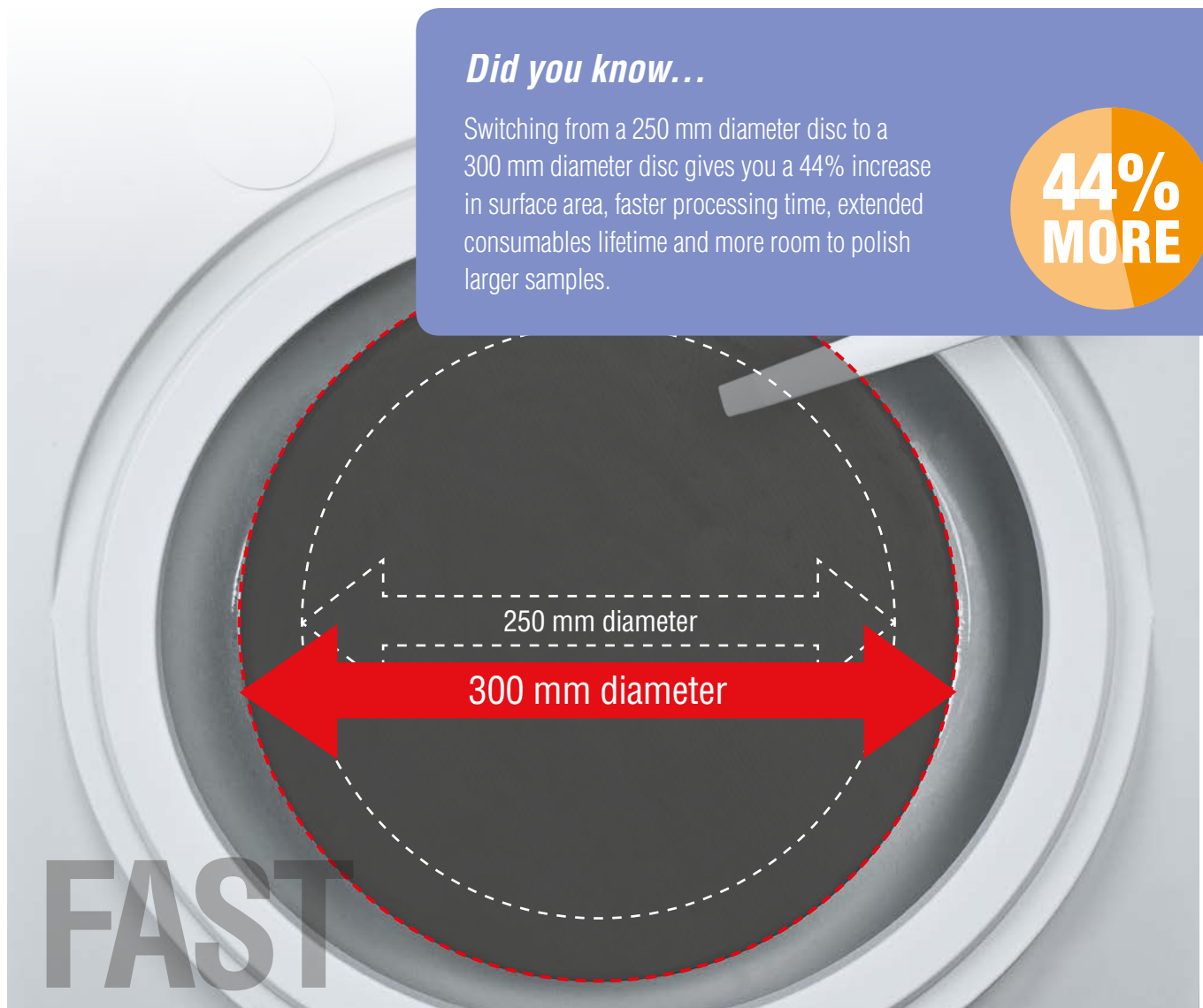
Adaptable

The modular design of the LaboSystem gives you the reassurance of being able to meet evolving needs by changing or upgrading your LaboPol with a semi-automatic LaboForce specimen mover and an automatic LaboDoser.

Did you know...

Switching from a 250 mm diameter disc to a 300 mm diameter disc gives you a 44% increase in surface area, faster processing time, extended consumables lifetime and more room to polish larger samples.

**44%
MORE**



* compared to 250 mm disc.

Basic system

Single disc, manual system that can be upgraded with a specimen mover and a dosing unit



*LaboPol-20 polishing machine with 200 mm dia. disc +
Labo UI control panel + LaboDoser-10 dosing unit*

Benefits for all LaboSystem configurations

Cone disc system

Save time with fast removal of the disc for cleaning. The high mass of the cone disc ensures a lower preparation temperature to reduce consumption of consumables.

Durability

Use the Struers' LaboSystem wherever you need it. Overall corrosion-resistant and impact-proof materials make it suitable for demanding environments.

Elliptical splash ring and bowl

Shorten preparation time with easy access to the preparation disc.

Operator convenience

Save time and effort with the bowl liner (standard on all LaboPols) for easier cleaning of the bowl.

Semi-automatic system

Single disc system that can be upgraded with a choice of specimen movers and dosing units



*LaboPol-30 polishing machine with 300 mm dia. disc +
LaboForce-100 specimen mover + LaboDoser-100 dosing unit*

Longer machine life-time

Soft start ensures less wear and a longer service life for the LaboPol.

Control panel protection

The elevated control panel is entirely free from water splashes and damage from heavy, loose samples, and avoids accidental changing of the rpm setting.

Operator safety

When pressed, the emergency button immediately stops all moving parts. The small gap between the splash ring and bowl prevents injury to fingers.

Convenient storage

You can use the storage pad to keep unused specimen mover plates, for example, within easy reach when you need them.

Full size system

Dual disc system that can be upgraded with a choice of specimen movers and dosing units



LaboPol-60 polishing machine with 2 x 300 mm dia. disc + LaboForce-50 specimen mover + LaboDoser-10 dosing unit

Stable sample preparation

Constant speed regardless of load ensures more uniform and higher reproducibility of specimens.

Clear view

A long-life LED lamp illuminates the preparation area to give you a clear view.

Easy drying and cleaning

The unique spin function saves you time and effort by removing all water or moisture from the disc surface.

Automatic water on/off

A magnetic valve automatically opens the water flow when needed.

Adaptable for your changing needs

The modular design of the Struers' LaboSystem gives you the assurance of compliance with evolving needs. You can upgrade later on with an automatic LaboForce specimen mover and an automatic LaboDoser.

3 types of polishing machines



LaboPol-20 - 200 mm dia. disc

3 types of specimen movers



LaboForce-50* - 4 x 40 mm

2 types of dosing units



LaboDoser-10 - 1 x bottle (man.)



LaboPol-30 - 250/300 mm dia. disc

LaboForce-50* - 4 x 40 mm

LaboDoser-10 - 1 x bottle (man.)

LaboForce-Mi** - 8 x 30 mm

LaboDoser-10 - 1 x bottle (man.)

LaboForce-100 - 6 x 40 mm

LaboDoser-10 - 1 x bottle (man.)
LaboDoser-100 - 4 x bottles (aut.)



LaboPol-60 - 2 x 250/300 mm dia. disc

LaboForce-50* - 4 x 40 mm

LaboDoser-10 - 1 x bottle (man.)

LaboForce-Mi** - 8 x 30 mm

LaboDoser-10 - 1 x bottle (man.)

LaboForce-100 - 6 x 40 mm

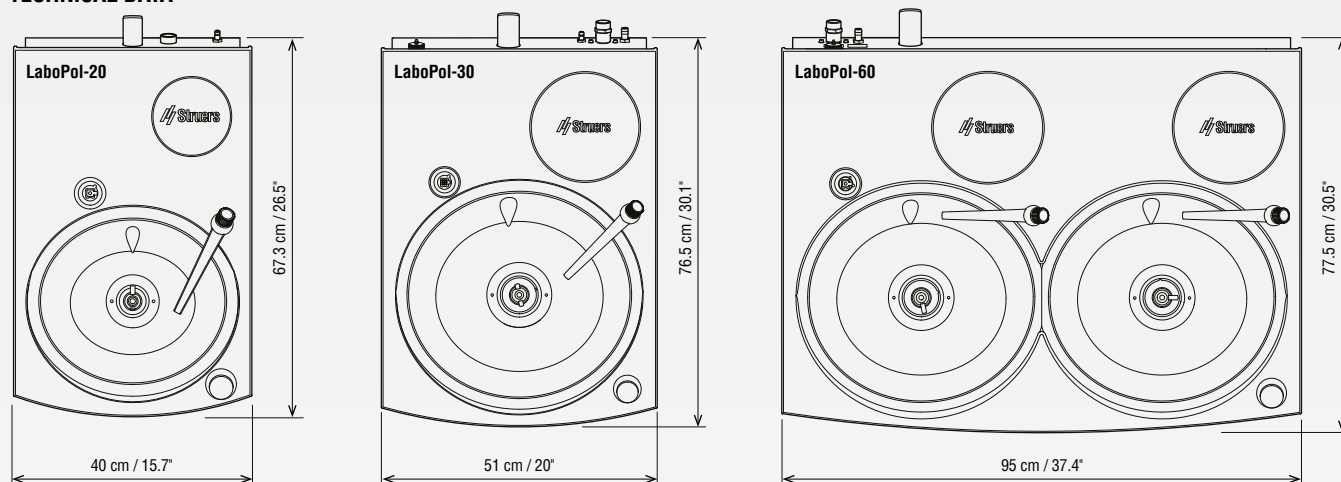
LaboDoser-10 - 1 x bottle (man.)
LaboDoser-100 - 4 x bottles (aut.)



* Patent pending.

** For mineralogical preparation. For more information, see the Mineralogical Specimen Preparation brochure.

TECHNICAL DATA



Technical data		LaboPol-20	LaboPol-30	LaboPol-60
Disc	Diameter	200 mm / 8"	250 mm / 10" or 300 mm / 12"	
	Speed	50 - 500 rpm		
	Rotational direction	Counter-clockwise		
	Motor power, continuous (S1)	370 W / 0.5 HP	750 W / 1 HP	
	Torque, @300 rpm	>12 Nm	>24 Nm	
Head (option)	Recommended specimen mover	LaboForce-50*	LaboForce-100**	
	Specimens (max)	4 x 40 mm dia.	6 x 40 mm dia.	
	Max sample height, individual specimens	10 - 35 mm		
	Max sample height, sample holder	-	40 mm	
	Speed	150 rpm	50 - 150 rpm	
	Rotational direction	Counter-Clockwise	Clockwise / Counter-clockwise	
	Force, Individual specimens	0 - 30 N	10 - 50 N	
	Force, Specimen holder	-	30 - 300 N	
	Motor	40 W	180 W	
	Methods	1	3	
Dosing (option)	Recommended dosing unit	LaboDoser-10	LaboDoser-100	
	Pumps	-	4 suspensions/lubricants	
Safety		Please refer to the Declaration of Conformity		
Emergency stop	Designed to comply with:	EN60204-1, Stop Category 0. EN954-1, Category 2		
Noise level	At idle running, at a distance of 1.0 m / 39.4" from the machine	51 dBA	52 dBA	52 dBA
Surrounding temperature		5 - 40 °C / 41 - 104 °F		
Humidity	Non condensing	0 - 95 % RH		
Supply	Voltage / frequency	200 - 240 V / 50 - 60 Hz		
	Power inlet	1-phase (N+L1+PE) or 2-phase (L1+L2+PE)		
	Power, nominal load	550 W	900 W	
	Power, idle	15 W	16 W	
	Current, nom.	2.4 A	4 A	
	Current, max.	6.3 A	10 A	
	Pressure for tap water	1-10 bar / 14.5 - 145 psi		
	Water inlet	½" or ¾"		
	Water outlet	ø 30 mm / 1¼" ø 40 mm / 1½"		
	Air inlet (LaboForce-100)	ø 6 mm / ¼"		
	Air pressure (LaboForce-100)	6 - 10 bar / 87-145 psi		
Dimensions and weight	Width	40 cm / 15.7"	51 cm / 20"	95 cm / 37.4"
	Depth	67.3 cm / 26.5"	76.5 cm / 30.1"	77.5 cm / 30.5"
	Height (with LaboForce)	22 cm / 8.7" (58 cm / 22.8")	25 cm / 9.8" (64.5 cm / 25.4")	25 cm / 9.8" (64.5 cm / 25.4")
	Weight (with LaboForce)	22 kg / 49 lbs (36.5 kg / 80.5 lbs)	33 kg / 73 lbs (53.5 kg / 118 lbs)	50 kg / 110 lbs (70.5 kg / 156 lbs)

* Compatible with Tegramin-20 specimen mover plates

** Compatible with Tegramin-25 specimen mover plates and holders

SPECIFICATIONS

LaboPol-20

Grinding/polishing machine with variable speed (50-500 rpm) for 200 mm dia. disc. Supplied with manual splash guard and bowl liner. LaboUI control panel and discs are ordered separately. Specimen mover LaboForce-50 can be mounted.

06326127

LaboPol-30

Grinding/polishing machine with variable speed (50-500 rpm) for 230, 250 or 300 mm dia. disc. Supplied with manual splash guard and bowl liner. LaboUI control panel and discs are ordered separately. Specimen mover LaboForce-50/-100 can be mounted.

06336127

LaboPol-60

Grinding/polishing machine with variable speed (50-500 rpm) for 2 discs, 250 or 300 mm dia. Each disc with automatic water valve, manual splash guard and bowl liner. LaboUI control panel and discs are ordered separately. One specimen mover LaboForce-50/-100 can be mounted.

06346127

LaboUI

Control panel for LaboPol-20/-30/-60.

06206901

LaboForce-50

Semi-automatic specimen mover for preparation of 1-4 specimens. For use with LaboPol-20/-30/-60. Specimen mover plates and dosing unit (LaboDoser-10) are ordered separately.

06356127

LaboForce-100

Semi-automatic specimen mover for preparation of 1-6 specimens. For use with LaboPol-30/-60. Specimen mover plates and dosing unit (LaboDoser-10/-100) are ordered separately.

06366127

LaboForce-Mi

Automatic specimen mover for the preparation of mineralogical specimens. For use with LaboPol-30/-60. Specimen mover plates and dosing unit (LaboDoser-10) are ordered separately.

06386129

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. Includes empty 1000 ml bottle.

06376901

LaboDoser-100

Dosing unit for use with LaboPol-30/-60. With 4 peristaltic pumps for dosing of diamond suspension, lubricant and all-in-one products. Controlled from LaboForce-100, which is ordered separately. Includes four empty 500 ml bottles.

06376902

Lid for LaboPol-20

For protection of LaboPol-20 disc during non-use.

06206912

Lid for LaboPol-30/-60

For protection of LaboPol-30/-60 disc during non-use.

06206913

Cap for LaboDoser-10

For use with LaboDoser-10 (06376901) and Struers' standard 500 ml/1000 ml bottles with diamond suspension, lubricant and all-in-one products. With adjustable drip mechanism.

06376903

Table stand for LaboDoser-10

Stand for use with Struers' standard 500 ml/1000 ml bottles with diamond suspension, lubricant and all-in-one products. Includes cap with adjustable drip mechanism (06376903).

06376904

Splash guard for manual preparation, 250 mm dia.

For manual preparation on LaboPol-30/-60 with 250 mm MD-Disc. LaboPol comes standard with 200 (LaboPol-20) or 300 mm splash guard for manual preparation, with small gap to prevent stuck specimens.

06206921

Splash guard for semi-automatic preparation, 200 mm dia.

For semi-automatic preparation on LaboPol-20. LaboPol comes standard with guard for manual preparation, with small gap to prevent stuck specimens.

06206923

Splash guard for semi-automatic preparation, 300 mm dia.

For semi-automatic preparation on LaboPol-30/-60 with 300 mm dia. MD-Disc. LaboPol comes standard with guard for manual preparation, with small gap to prevent stuck specimens.

06206925

Preparation discs

MD-Disc with cone, 200 mm dia.
MD-Disc with cone, 250 mm dia.
MD-Disc with cone, 300 mm dia.

06086401
06086402
06086403

SPECIFICATIONS

Cat.no

Wet grinding disc with cone, 200 mm dia.

Aluminium disc with retention ring. For use on LaboPol-20 with plain back silicon carbide paper.

06206924

Wet grinding disc with cone, 230 mm dia.

Aluminium disc with retention ring. For use on LaboPol-30 with plain back silicon carbide paper.

06206932

Wet grinding disc with cone, 250 mm dia.

Aluminium disc with retention ring. For use on LaboPol-30/-60 with plain back silicon carbide paper.

06206918

Wet grinding disc with cone, 305 mm dia.

Aluminium disc with retention ring. For use on LaboPol-30/-60 with plain back silicon carbide paper.

06206919

Splash guard for wet grinding disc, 200 mm dia.

For use with 200 mm dia. wet grinding disc (06206924).

06206926

Splash guard for wet grinding disc, 230 mm dia.

For use with 230 mm dia. wet grinding disc (06206932).

06206927

Splash guard for wet grinding disc, 250 mm dia.

For use with 250 mm dia. wet grinding disc (06206918).

06206928

Splash guard for wet grinding disc, 305 mm dia.

For use with 305 mm dia. wet grinding disc (06206919).

06206929

Bowl liner, LaboPol-20

Disposable bowl liner for LaboPol-20. 5 pcs.

49900061

Bowl liner, LaboPol-30/-60

Disposable bowl liner for LaboPol-30/-60. 5 pcs.

49900062

Cast Iron disc for mineralogy, 300 mm dia.

Concentrically grooved, cone-type disc for lapping mineralogical specimens on LaboPol-30/-60 (06336127/06346127). Made of special SiC-resistant cast iron alloy.

06206917

Cooling System 3

Optional recirculation cooling system. Please see brochure Cooling Systems for more information.

Lavamin

Specimen cleaning unit for cleaning of specimen holders up to 160 mm dia. and for individual specimens in specimen mover plates for LaboPol-30/-60.

06236133

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.



e-Shop

*Buy your consumables in Struers e-Shop!
e-shop.struers.com*

**Find out more
about LaboSystem**

www.newlabosystem.com

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
Telefoon +31 (10) 599 7209
Fax +31 (10) 599 7201
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
Havlíčková 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
Magyarország Fióktelep
Tatai út 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
Taiko-ku, Tokyo 110-0015
Phone +81 3 5688 2914
Fax +81 3 5688 2927
struers@struers.jp

NETHERLANDS

Struers GmbH Nederland
Elektraweg 5
3144 CB Maassluis
Telefoon +31 (10) 599 7209
Fax +31 (10) 599 7201
netherlands@struers.de

NORWAY

Struers A/S, Norge
Sjøslogenveien 44C
1407 Vinterbro
Telefon +47 970 94 285
info@struers.no

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
Weissenbrunnstraße 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

SPAIN

Struers A/S, Spain
Camino Cerro de los Gamos 1
Building 1 - Pozuelo de Alarcón
CP 28224 Madrid
Teléfono +34 917 901 204
Fax +34 917 901 112
struers.es@struers.es

SUOMI

Struers A/S, Suomi
Hietalahdenranta 13
00180 Helsinki
Puhelin +358 (0)207 919 430
Faksi +358 (0)207 919 431
finland@struers.fi

SWEDEN

Struers Sverige
Ekbäcksvägen 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

Ensuring Certainty

With offices and affiliates in 24 countries and a presence in more than 50 countries worldwide, Struers is the world's leading materialographic solution supplier. We are dedicated to enabling our customers to ensure certainty in all aspects of materialographic preparation and testing as well as material hardness testing - wherever they are in the world. Struers offers a complete range of equipment, consumables, service and training programmes – all supported by the most comprehensive knowledge base, global applications support and a certified global service set-up.

Learn more

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