



- Precise and powerful performance
- Fast and easy to operate
- High capacity

# PERFECT PLANENESS

AbraPlan-30 brings a wide array of features and benefits, enabling users to optimize their grinding process to save time and consumables. As the strongest plane grinding machine available on the materialographic market, AbraPlan-30 ensures a powerful and fast plane grinding process and is ideal for workplaces carrying out testing of large specimens or a high volume of specimens.

## Optimise process and save time

- High capacity / High volume
- Fast and powerful
- Efficient and reproducible
- Intuitive user interface

### ***By the way...***

The AbraPlan-30 has successfully undergone more than **20,000 cycles of durability testing** and has been subject to four months of field testing in Germany.

**20,000 CYCLES**

*"We were initially impressed with the intuitive and icon-based user interface the AbraPlan-30 and AbraPol-30 presented. More so it was evident how optimized and precise the machines operated to not only increase our efficiency, but to match the quality of technology expected from 2017."*

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

# A reliable, high-capacity machine for fast and efficient plane grinding

AbraPlan-30 is an advanced plane grinding machine for specimen holders up to 200 mm diameter. It is a sturdy machine for heavy use, for grinding of large or numerous specimens full time. Using AbraPlan-30 to plane grind your specimens will help you save time and will increase productivity of your grinding/polishing machines. Use the time saved on grinding for other purposes!

## Fast and simple

The automatic diamond dresser will keep your grinding stone plane and sharp. An automatic surface detection makes the process simpler and faster. A special dresser key, on the front

panel, enables faster and easier access to the dresser function. The dresser automatically monitors the remaining thickness of the grinding stone and notify the user, when the stone has to be replaced, and minimise grinding time and stone consumption.

## Easy to operate

The user interface features a clear colour display with large icons. The performance of the grinding stone and the material removal rate are monitored continuously. The operator can follow the removal rate graph and optimise the process. Thanks to the multi-purpose turn/push knob, navigation is easy and uncomplicated.

## Accurate and powerful performance

AbraPlan-30 features an exceptionally stable and robust design for precision grinding, with an extremely solid frame and powerful motors. The sturdy design limits vibrations, and a stainless-steel bowl prevents damage of the bowl in case a specimen is loosens from mover head. The bowl comes with a lifetime corrosion warranty.



**AUTOMATIC DRESSER**





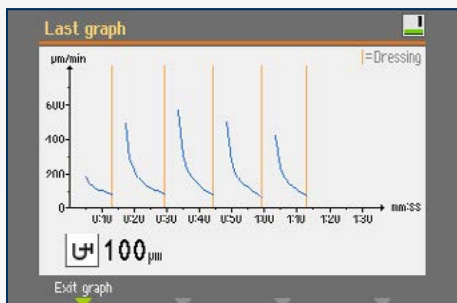
### Automated dressing

Optimised stone performance reduce stone consumption and increase removal rates.



### User-friendly interface

Very easy to operate, making extensive training unnecessary and reduce operator time.



### Removal rate displayed

Visualised process to minimise time and stone consumption.



### Always know the status

The beacon helps the operator to give attention only when necessary.

## Key features that ensure high-volume and tr



# ure fast and efficient, ouble-free grinding



**LIFETIME  
WARRANTY\***



### Durability is key\*

Bowl made of a corrosion resistant stainless steel for greater durability and safety.



### Precise and repeatable

Repeatedly reach the defined stock removal saves time and money.



### Maximum operator safety

AbraPlan-30 is designed for the highest level of operator safety.



### Wide application range

A diamond grinding disc is available, further to the  $Al_2O_3$  and SiC grinding stones, for plane grinding of very hard and brittle materials.

*\*Only on breakthrough corrosion and when Struers consumables are used.*

## Technical data



### AbraPlan-30

Advanced semi-automatic plane grinding machine for grinding of specimens in specimen holders up to 200 mm/8" dia. AbraPlan-30 features an automatic diamond dresser with automatic surface detection, a removal rate sensor and a transparent safety cover. Recirculation cooling tank, pump and filter, grinding stones and specimen holders are available separately.

#### Voltage

3 x 200 - 240 V / 50 - 60 Hz  
3 x 380 - 480 V / 50 - 60 Hz

#### Cat. no.

06296129  
06296146

<b>Stone</b>	Diameter	356 mm / 16"
	Speed	1450 rpm
	Motor power, continuous (S1)	4.0 kW
<b>Specimen holder</b>	Speed	150 rpm
	Force	50 - 700 N
	Max. size	200 mm / 8"
<b>Dresser Process mode</b>	Dresser modes	Time, Removal
	Time	5 sec. - 10 min
	Removal	0.05 - 10 mm
	Removal/Time	0.05 - 10 mm, 5 sec. - 10 min
<b>Safety</b>	Please refer to the Declaration of Conformity	
<b>Noise level</b>	At idle running, at a distance of 1.0 m / 39.4" from the machine	52 dB (A)
<b>Surrounding temperature</b>	5 - 40 °C / 41 - 104 °F	
<b>Humidity</b>	Non condensing 0 - 95 % RH	
<b>Supply</b>	Voltage / frequency	3x200-240 50/60Hz, 3x380-480 50/60Hz
	Power inlet	3 phase (3L + PE)
	Power, nominal load	4,5 kW
	Compressed air inlet diameter	6 mm (1/4")
	Compressed air pressure	6 - 9,9 bar (87-145 psi)
	Compressed air flow	30 l/min (6.6 gpm)
	Compressed air quality	ISO 8573-1, class 3
<b>Software and electronics</b>	Controls	Touch pad and turn/push knob
	Memory	FLASH-ROM / RAM / NV-RAM
	LC Display	TFT-colour 320x240 dots with LED back light
<b>Recirculation unit</b>	Optional	
<b>Pump for recirculation</b>	Optional	
<b>Flow sensor for cooling water</b>	Included	
<b>Drain</b>	Diameter	50 mm / 2"
<b>Exhaust</b>	Diameter	50 mm (2")
	Recommended capacity for exhaust system	1000 l/m (265 gpm)
<b>PHYSICAL SPECIFICATIONS</b>		
<b>Dimensions and weight</b>	Width	84 cm (33")
	Depth	98 cm (39")
	Height closed	156 cm (62")
	Height open	187 cm (74")
	Weight	400 kg (882 lbs)
<b>Beacon</b>	Optional	Sound, Red/Yellow/ Green light

Struers' equipment is in conformity with the provisions of the applicable International Directives and their appurtenant Standards (please contact your local supplier for details).

**Accessories****Cat. no.****Recirculation pump**

Recirculation pump for AbraPlan-30 and AbraPol-30.  
The pump is supplied and controlled by the machine.

Recirculation pump for 3 x 200 - 240V 50 / 60Hz

06296929

Recirculation pump for 3 x 380 - 415V 50 / 60Hz

06296946

Recirculation pump for 3 x 460 - 480V 50 / 60Hz

06296954

**Recirculation tank**

50 l tank. Can be used with static filter (05766928).

05766906

**Filter bag**

Filter bag for use with 50 l tank (05766906). Stainless steel.

05766928

**Disposable liners**

For collecting waste material in 50l tank (05766906)

49900042

**Beacon**

To display the actual working condition of AbraPlan-30 and AbraPol-30

06296900

**Uniforce**

Levelling device for levelling of specimens in specimen holder's 140, 160 and 200 mm dia.

Without pressure foot for positioning of specimens

04886101

With pressure foot for positioning of specimens

04886102

**Specimen holders**

Please see separate brochure

*For further information, please refer to the individual brochure on each product.*

*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****Cat. no.****Grinding stone 6A36**

Aluminium oxide grinding stone, for plane grinding of very hard steels/steels containing many carbides on AbraPlan and MAPS. Grit 150, 356 mm/14" dia.

40800177

**Grinding stone 4A36**

Aluminium oxide grinding stone, for plane grinding of metals >HV 250 on AbraPlan and MAPS. Grit 150, 356 mm/14" dia.

40800010

**Grinding stone 3A36**

Aluminium oxide grinding stone, for plane grinding of nickel-based alloys (turbine blades) and stainless steels on AbraPlan and MAPS. Grit 150, 356 mm/14" dia.

40800178

**Grinding stone 2S36**

Silicon carbide grinding stone, for plane grinding of non-ferrous metals on AbraPlan and MAPS. Grit 150, 356 mm/14" dia.

40800074

**Diamond grinding disc**

Resin bonded diamond disc, grooved in a square pattern. For plane grinding of ceramics and sintered carbides on AbraPlan and MAPS. Grit 120, 356 mm/14" dia.

40800202

**Diamond point for dressing tool**

Diamond point for dressing tool, 5 mm/0.2" dia. For Hexamatic, MAPS, AbraPlan-10/-20/-30, Prepamatic and Miniplan.

40800045



## Struers Support Commitment

Struers is committed to helping you achieve maximum performance from your Struers equipment. Based on a wide range of knowledge and support services, the Struers Support Commitment applies to all Struers customers anywhere in the world.

- Global hotline support
- Global network of certified field service engineers
- Global network of materialographic specialists
- Documentation support online
- Annual service review
- Access to complete range of performance enhancing services
- All critical parts on stock for immediate shipping



**Struers ApS**  
Pederstrupvej 84  
DK-2750 Ballerup, Denmark

Phone +45 44 600 800  
Fax +45 44 600 801  
struers@struers.dk  
www.struers.com

**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 España**  
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 ApS, Suomi**  
Hietaladhenranta 13  
00180 Helsinki  
Puhelin +358 (0)207 919 430  
Faksi +358 (0)207 919 431  
finland@struers.fi

**SWEDEN**  
**Struers Sverige**  
Box 20038  
161 02 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

**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**  
Zomerdijk 34 A  
3143 CT Maassluis  
Telefoon +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 & SLOVAKIA**  
**Struers GmbH Organizační složka**  
vědeckotechnický park  
Přílepská 1920,  
CZ-252 63 Roztoky u Prahy  
Phone +420 233 312 625  
Fax +420 233 312 640  
czechrepublic@struers.de  
slovakia@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**  
Zomerdijk 34 A  
3143 CT Maassluis  
Telefoon +31 (10) 599 7209  
Fax +31 (10) 5997201  
netherlands@struers.de

**NORWAY**  
**Struers ApS, 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 Bucuresti**  
Str. Preciziei nr. 6R  
062203 sector 6, Bucuresti  
Phone +40 (31) 101 9548  
Fax +40 (31) 101 9549  
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

## 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.

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