

## **AbraPlan-30**

**High-capacity plane grinding machine** 





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.



"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

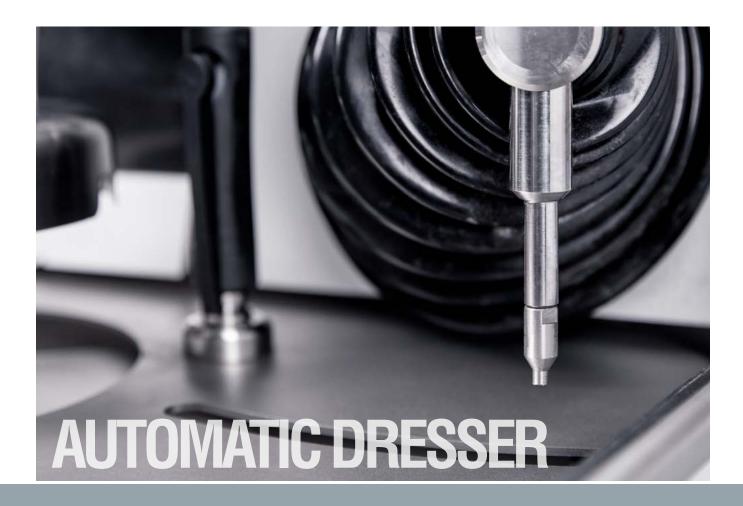
panel, enables faster and easier access to the dresser function. The dresser automatically monitors the remaining thickness of the grinding stone and notify the user, when the stone has to be replaced, and minimise grinding time and stone consumption.

#### 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.

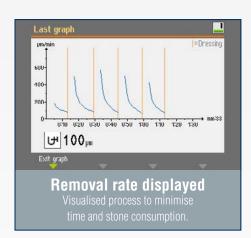
#### **Accurate and powerful performance**

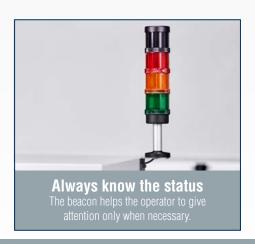
AbraPlan-30 features an exceptionally stable and robust design for precision grinding, with an extremely solid frame and powerful motors. The sturdy design limits vibrations, and a stainless-steel bowl prevents damage of the bowl in case a specimen is loosens from mover head. The bowl comes with a lifetime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























## **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
 Cat. no.

 3 x 200 - 240 V / 50 - 60 Hz
 06296129

 3 x 380 - 480 V / 50 - 60 Hz
 06296146

Stone	Diameter	356 mm / 16"
	Speed	1450 rpm
	Motor power, continuous (S1)	4.0 kW
Specimen holder	Speed	150 rpm
	Force	50 - 700 N
	Max. size	200 mm / 8"
Dresser	Dresser modes	Time, Removal
Process mode	Time	5 sec 10 min
	Removal	0.05 - 10 mm
	Removal/Time	0.05 - 10 mm, 5 sec 10 min
Safety		Please refer to the Declaration of Conformity
Noise level	At idle running, at a distance of 1.0 m / 39.4 $\!\!^{"}$ from the machine	52 dB (A)
Surrounding temperature		5 - 40 °C / 41 - 104 °F
Humidity		Non condensing 0 - 95 % RH
Supply	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 (¼")
	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
Software and electronics	Controls	Touch pad and turn/push knob
	Memory	FLASH-ROM / RAM / NV-RAM
	LC Display	TFT-colour 320x240 dots with LED back light
Recirculation unit	Optional	
Pump for recirculation	Optional	
Flow sensor for cooling water	Included	
Drain	Diameter	50 mm / 2"
Exhaust	Diameter	50 mm (2")
	Recommended capacity for exhaust system	1000 l/m (265 gpm)
PHYSICAL SPECIFICATIONS		
Dimensions and weight	Width	84 cm (33")
-	Depth	98 cm (39")
	Hight closed	156 cm (62")
	Hight open	187 cm (74")
	Weight	400 kg (882 lbs)
Beacon	Optional	Sound, Red/Yellow/ Green light
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Struers' equipment is in conformity with the provisions of the applicable International Directives and their appurtenant Standards (please contact you 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
SHE'S	Recirculation pump for 3 x 460 - 480V 50 / 60Hz	06296954
	<b>Recirculation tank</b> 50 I tank. Can be used with static filter (05766928).	05766906
-	Filter bag Filter bag for use with 50 I tank (05766906). Stainless steel.	05766928
300	<b>Disposable liners</b> For collecting waste material in 50l tank (05766906)	49900042
	<b>Beacon</b> 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.	
COV	Without pressure foot for positioning of specimens	04886101

With pressure foot for positioning of specimens

**Specimen holders**Please see separate brochure

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

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

Consumables	Cat. no.



<b>Grinding stone 6A36</b> 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
<b>Diamond grinding disc</b> Resin bonded diamond disc, grooved in a square pattern. For plane grinding of ceramics and sintered carbides on	40800202



04886102

AbraPlan and MAPS. Grit 120, 356 mm/14" dia.

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.



## **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









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#### **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

