

WELL 3500 Precision Vertical Diamond Wire Saw

AGB8500-KIT & AGB8500B-KIT

The WELL Precision Vertical Diamond Wire Saws produce smooth, sharp-edged surfaces on virtually any material. The 'cutting tool' is a stainless steel wire with diamonds embedded into the surface of the wire using a patented embedding process, ensures maximum cutting capability and long wire life. The wire is wound onto a drum mounted onto a precision reciprocating motor.

Although it may seem like a contradiction, the Saws produce a non-destructive, nondeforming cut and/or slice. This holds true for both homogeneous materials and for bonded materials of vastly different compositional properties.

Metals, plastics, quartz, glass, graphite and ceramics are just some of the many natural and synthetic materials that can be successfully cut in research and development, quality control, failure analysis and production. The precision cut and resulting smooth finish often eliminate or greatly reduce polishing time for parts that previously required thorough polishing.



In addition to the industrial applications, these saws are also used within:

- ◆ Metallography
- ◆ Geology
- ◆ Archeology and paleontology
- ◆ Criminology and forensics
- ◆ Biology
- ◆ Pathology
- ◆ Histology
- ◆ Anatomy and dentistry

Kit Options:

AGB8500-KIT - Premium Kit WELL Vertical Diamond Wire Saw, 3500

AGB8500B-KIT - Base Kit WELL Vertical Diamond Wire Saw, 3500

Technical Specification

Design	Vertical
Cutting Feed	Gravity ($\pm 300g$)
Primary Voltage	230V / 50-60Hz
Secondary Voltage	36Vdc
Auxiliary Voltage	24Vdc
Electric motor	36V DC – 8A – 200W
Primary fuse	$\varnothing 5 \times 20 - 250 V - 2 A$
Secondary fuse	$\varnothing 5 \times 20 - 250 V - 10 A$
WiFi	Ready, WiFi B/G
Machine weight (without accessories)	13.8kg
Overall dimensions	L x B x H ; 401 x 345 x 455mm
Machine control	Tactile resistive screen, 600x480 pixels
Drum diameter	83mm
Pulley diameter	80mm
CE Certification	CE
USB output	5V / 400mA
Possible wire diameter	0.10 - 0.30mm
Wire length	10m
Wire speed	0 - 3.6 m/s
Wire tension for 0.22 - 0.3mm	2kg
Wire tension for 0.10 - 0.17mm	1kg
Cleaning of Wire	With cutting liquid diluted 5% or water
Max. Sample Weight	2500g
Max. Sample Dimension	50 x 50 x 50 mm – $\varnothing 50mm$
Warranty	12 months

WELL 3500 Precision Vertical Diamond Wire Saw kits:



AGB8500B-KIT Base

- ◆ 1x WELL Vertical Diamond Wire Saw
- ◆ 1x Standard base support
- ◆ 1x Support sample holder
- ◆ 1x Sample holder support plate
- ◆ 1x Intermediate support
- ◆ 1x Aluminium plate for vertical vice
- ◆ 1x Standard Sample holder with 5 ceramic pads Ø 30mm
- ◆ 1x Drum with 10 meters of diamond wire
- ◆ 1x Cutting liquid concentrate 5% 500ml
- ◆ 1x Stainless steel bath
- ◆ 1x Toolbox
- ◆ 1x Soft Touch Pen
- ◆ 1x LED Lamp with Clip-on
- ◆ 1x Power Cable

AGB8500-KIT Premium

- ◆ 1x WELL Vertical Diamond Wire Saw
- ◆ 1x Turntable with 5 ceramic pads Ø 30mm
- ◆ 1x Micrometer table
- ◆ 1x Standard Sample holder with 5 ceramic pads Ø 30mm
- ◆ 1x Cross table
- ◆ 1x Drum with 10 meters of diamond wire
- ◆ 1x Toolbox
- ◆ 1x Cutting liquid concentrate 5% 500ml
- ◆ 1x Stainless steel bath
- ◆ 1x Soft Touch Pen
- ◆ 1x LED Lamp with Clip-on
- ◆ 1x Power Cable

3000 Series Compatible Diamond Wire

Diameter	Diamond Grit Size	Length
0.13mm	20µm	60m
0.13mm	20µm	120m
0.17mm	20µm	60m
0.17mm	20µm	120m
0.17mm	30µm	60m
0.17mm	30µm	120m
0.22mm	20µm	60m
0.22mm	20µm	120m
0.22mm	30µm	60m
0.22mm	30µm	120m
0.22mm	40µm	60m
0.22mm	40µm	120m
0.22mm	60µm	60m
0.22mm	60µm	120m
0.30mm	20µm	120m
0.30mm	30µm	120m
0.30mm	40µm	60m
0.30mm	40µm	120m
0.30mm	60µm	60m
0.30mm	60µm	120m

Please contact sales@agarscientific.com for a quote for the diamond wire that will be best suited to your application. Please include diameter, diamond grit size and length required. If you are unsure which diamond wire is required, we will be happy to help you.