

Precision diamond wire saws

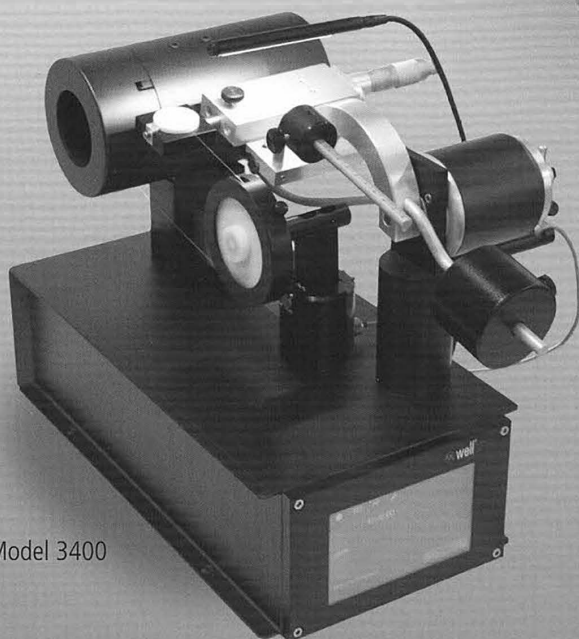
Series 3000



Model 3500
« Premium »



Model 3500
« Base »



Model 3400

Requirements

New materials with specific characteristics are being developed ever more frequently. In-depth analysis and research are required during the development phase. The first step is usually cutting samples. Special composite materials generally include very different materials to achieve specific properties. It is not uncommon for materials such as oxides (ceramics), metals, glass and plastics to be combined in a single part (hybrid).

Field of application

Well diamond wire saws are used in research, development, quality assurance and sample preparation.

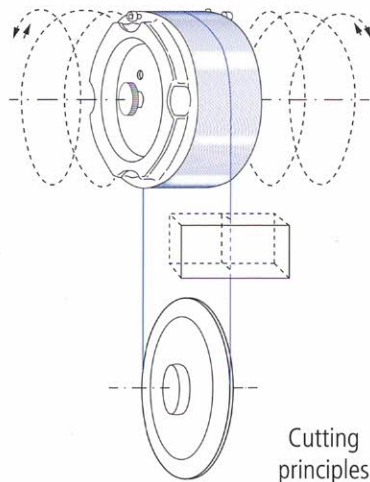
Benefits of the cutting process

Practice has shown that the saws are optimally used for cutting diverse materials. The saws can be used both dry and wet (with cutting fluid). It must be pointed out that almost all materials can be cut in a minimum of space and with the lowest level of noise (environmental impact).

The low forces mean that materials can be cut without damage and overheating.

Our diamond wire saws produce flat cutting surfaces with sharp edges.

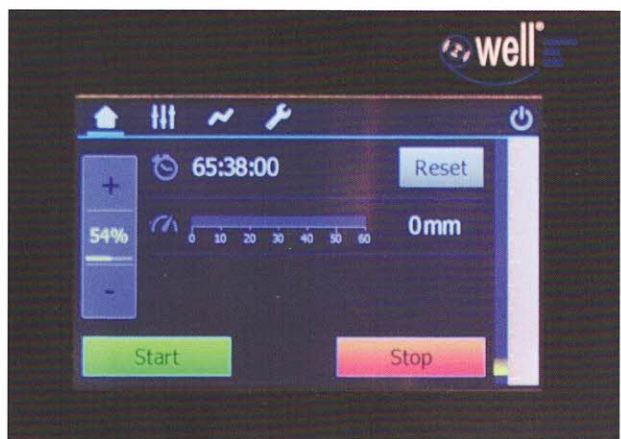
Samples are held with wax or synthetic resin, which prevents any dimensional distortion to the sample.



Characteristics

All models in the 3000 series have the following characteristics in common:

- Horizontal or vertical wire position
- Automatic shut-off at the end of the cutting process or in the event of wire breakage,
- Touch-screen control, (optimal control of the wire speed and effective cutting time)
- Remote WiFi operation (in hazardous or difficult environments)
- Information (end of cutting process, wire breakage, etc.) can be transferred remotely
- Software can be updated remotely
- Adjustable working height (counterweight marked with coloured dots, like on the winding device)
- Optimum access to essential functional elements,
- Long service life due to the sophisticated design
- Advanced technology
- USB 5V supply on the side of the machine,
- Different sample holders according to the machine type,
- Maintenance of the saws: if you wish we can give you a maintenance contract tailored to your needs
- 12 month warranty (with the exception of parts subject to wear).



Series 3000

The first model 3000 was designed in 1970 and continually developed. So today it provides optimal performance.

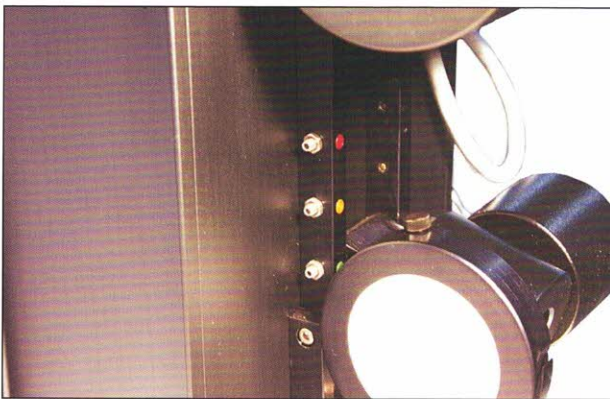
The series is highly valued in laboratories because of its sophisticated design and ease of use. To date over 1,500 of the saws have been sold worldwide.

The new Series 3000 includes two models (3400 and 3500). In the Series 3500 you can choose between 2 versions, Base and Premium. Detailed descriptions of both models are given below.

Model 3500 "Base"

The saw 3500 has a grooved table that provides the base for securing samples using various flexible methods. The cutting mechanism is attached to a precise guiding system and moves against the sample by gravity via the slope of the base of the machine (horizontal frame). So the feed rate is guaranteed. In a simple and reliable way it fulfils the function of feed rate in the form of variable pressure.

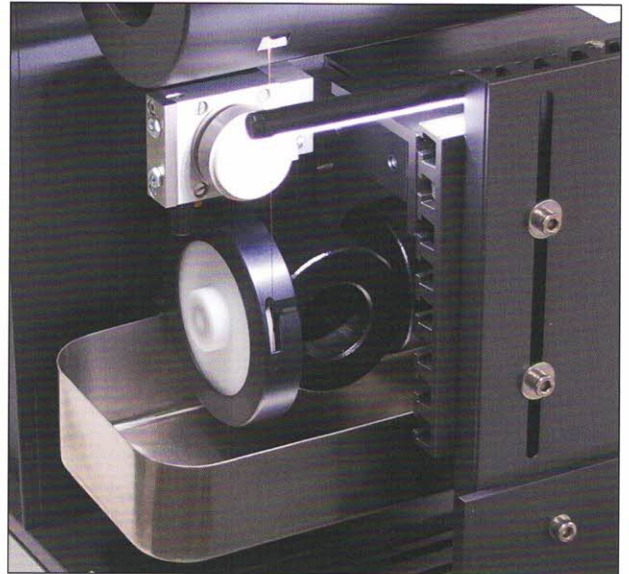
The work space can be adapted according to the sample size as there are four potential positions identified by different colours between the pulley axes and the drum., which allows an optimal use of the saw.



Model 3500 "Premium"

This model was designed in response to numerous requests from our customers.

The 3500 Premium wire saw is an identical model to the Base 3500 model but with additional accessories that allow the cutting point to be observed more easily because the sample is located inside the wire loop. Before beginning to cut the wire provides a reference, the sample can then be rotated, moved by 90° or moved laterally with great accuracy (x-axis). This enables the cut to be made at precisely the point desired.



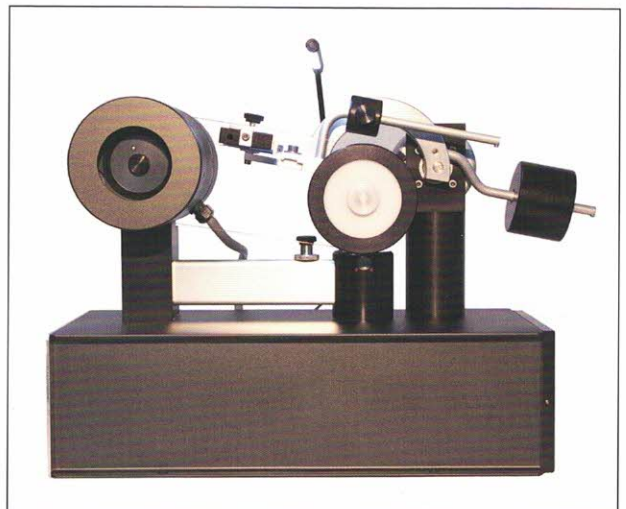
The saw can also be equipped with a stereomicroscope for a precise view of the cutting point.

Model 3400

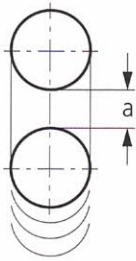
In the Well 3400 wire saw the wire moves horizontally. This model is designed for cutting small samples (single crystals, semiconductors, ceramics, brittle material, etc.).

The highly sensitive cutting system and extremely precise cutting pressure (with a set of weights) enables finer wires to be used with this saw. The sample, mounted on a swing arm equipped with a micrometre table, is positioned inside the wire loop. The cutting area is thus easier to view.

The saw can be equipped with a stereomicroscope, available as an optional extra, to allow a precise view of the cutting point.



Serie 3000



Spacing (a)	mm	Color*	3500 « Base »	3500 « Premium »	3400
Position 1	a = 10	Red dot	⊗	○	×
Position 2	a = 35	Yellow dot	✓✓	○	×
Position 3	a = 60	Green dot	⊗	✓✓	×
Position 4	a = 85	Blue dot	⊗	⊗	✓✓
Wire breaking switch Design			✓✓ vertical	✓✓ vertical	✓✓ horizontal
Moving forward by	gravity (wire) counterweight/weight (sample)		✓✓ ×	✓✓ ×	×
Cutting depth	max in mm electronic slider slider with electronic stop for cutting end		60 ✓✓ ○	35/52 ✓✓ ✓✓	50 ✓✓ ○
Sample holder (other models, see list)	grooved table micrometer table 30 mm Ø 30 mm Ø, 90° } with 5 ceramic plates 12 mm double vice circular vice 12-32 mm Ø rotating table goniometer		✓✓ ✓ ✓ ✓✓ ⊗ ⊗ ⊗ ⊗ ⊗	✓✓ ✓✓ ✓✓ ✓✓ ⊗ ⊗ ✓✓ ⊗ ⊗	×
Standard accessories	tools + accessories moistening device		✓✓ ✓✓	✓✓ ✓✓	✓✓ ✓✓
Electrical equipment	Voltage 230 V, 50-60 Hz Voltage 110 V, 50-60 Hz access code power supply cable touch screen WiFi ready		✓✓ ⊗ ✓✓ ✓✓ ✓✓ ✓✓	✓✓ ⊗ ✓✓ ✓✓ ✓✓ ✓✓	✓✓ ⊗ ✓✓ ✓✓ ✓✓ ✓✓
Special accessories	stereomicroscope 40 hour meter dynamometer		×	⊗ ✓✓ ⊗	⊗ ✓✓ ⊗
Characteristics	weight in kg, without accessories dimensions in mm: – Length – Width – Height		13,8 410 345 460	13,8 410 345 460	11,3 450 290 310
Order number			35.B.000	35.P.000	34.P.000

Explanation of symbols

- ✓✓ Standard (included in the price)
 - ✓ Definitely recommended
 - ⊗ Available on request
 - Not customary
 - ×
 - ×
 - ×
 - ×
 - *
- Colors match the type 33 winding machine



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