

## DIAMOND WIRE SAWS

Fine separation cuts can be made in materials such as glass, ceramic, plastic, metal - to name just a few - with precision diamond wire saws from Diamond WireTec. However, the most common application is the cutting of samples made of various substances, so-called hybrid materials.

With a cutting surface area of, for example, 245 x 245 mm and a blade clearance of only 0.2 to 0.5 mm - depending on the diamond wire strength - samples can be cut without structural changes and, if necessary, without cooling lubricant. Bevels breaks or smearing are also not to be expected. Separation cuts with wall strengths of less than 1 mm can be made.

When developing our precision diamond wire saws, we place great emphasis on simple operation, a high level of safety and long lifetimes. This starts with the selection of materials, the use of industrial-strength and standardised components, protective covers on moving machine parts and menu-guided control as well as a wide variety of installed monitoring sensors.

Our current line of standard diamond wire saws stands out first of all due to the size of the cutting range of the workpieces/samples.

### THE MAXIMUM CUTTING SURFACES ARE:



### ALL OF OUR PRECISION DIAMOND WIRE SAWS ...

- ✓ Are equipped with sturdy industrial engines and integrated absolute encoders
- ✓ Have safety sensors for wire break and separation cut limit stops
- ✓ Can be operated in dry and wet cutting processes
- ✓ Are equipped with a wire cleaning and corrosion protection unit
- ✓ Do not generate any considerable amount of heat when making the separation cut
- ✓ Consist of rust-free materials such as aluminium, stainless steel and plastic
- ✓ Feature a micrometre workpiece infeed (optional for DWS175 and DWS250)
- ✓ Have quality control system with large and colourful touch panel
- ✓ Enable cold, precise and plane-parallel separation cuts
- ✓ Feature automatic winding of the wire onto the spool

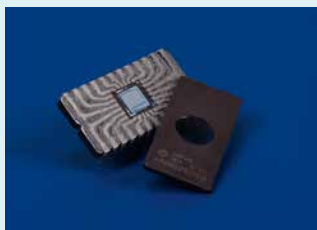
# DIAMOND WIRE SAWS



## TECHNICAL DATA

Machine type	DWS100	DWS175	DWS250
Housing	Stainless steel aluminium construction	Stainless steel aluminium construction	Stainless steel aluminium construction
Safety	Acc. to machinery directive	Acc. to machinery directive	Acc. to machinery directive
Machine dimensions	H410 x L530 x B350 mm	H770 x L570 x B350 mm	H850 x L620 x B400 mm
Machine weight	35 kg	65 kg	85 kg
<b>Drive / Supply</b>			
Engine power	120 Watt	120 Watt	120 Watt
Power supply	100-240 V / 50-60 Hz	100-240 V / 50-60 Hz	100-240 V / 50-60 Hz
<b>Diamond wire</b>			
Wire diameter	0,2 - 0,4 mm	0,2 - 0,4 mm	0,3 - 0,5 mm
Diamond wire length	19 m	28 m	28 m
Spool diameter	100 mm	175 mm	250 mm
<b>Control unit</b>			
User interface	Colour touch panel	Colour touch panel	Colour touch panel
Protection via access code	Can be deactivated	Can be deactivated	Can be deactivated
<b>Cutting</b>			
Cutting procedure	Diamond wire saw cut	Diamond wire saw cut	Diamond wire saw cut
Cutting pressure	Constant/Gravity	Constant/Gravity	Constant/Gravity
Cutting speed	0 - 4 m/Sek.	0 - 4 m/Sek.	0 - 4 m/Sek.
<b>Samples</b>			
Sample weight max.	0,5 kg	15 kg	20 kg
Sample dimensions	85 mm x 85 mm	170 mm x 170 mm	245 mm x 245 mm
Clamping device	Ceramic disc	Slot table	Slot table
<b>Wire cleaning</b>			
Type	Mech. Water whirling	Mech. Water whirling	Mech. Water whirling
Alternative	Dry or air jet	Dry or air jet	Dry or air jet

## SAMPLE



Eprom



Spark plug



Internal combustion engine



Coin