

APD1

Precision annular and peripheral saw

The APD1 is a combined annular and precision saw ideal for slicing wafers, crystals or semiconductor components up to 55mm in diameter. It is also suitable for precision dicing of wafers up to 100mm in diameter.

Easy Operation

Operating the saw is a straightforward procedure using the intelligent joystick control panel, situated on the front of the unit.

The graphical interface screen allows you to accurately set parameters such as:

- Cut depth,
- Cut thickness
- Number of cuts to be carried out.

These are clearly displayed during cutting; the number of cuts already performed is shown, in addition to the percentage of the current cut which has been completed.

Spindle speed and feed rate are also easily set and controlled using the joystick.

Annular Cutting Mode

In annular cutting mode, the cutting edge is the diamond coated central aperture of a very fine steel disc. The blade is held under tension at its outer edge, providing a finer and more precise cut with less kerf loss than conventional blades.

Peripheral Cutting Mode

The APD1 is easily changed from annular to peripheral configuration, with a cutting envelope of approximately 100x100mm.



A manually operated, rotary table with variable height is available to cut wafers, crystals or discs of different thicknesses, up to a maximum of 10mm, blade dependant. The variable height table is also available in an automated format where the Z-axis is controlled using the joystick and is displayed on the APD1's graphical interface. These tables offer an indexing facility permitting cuts at a known angle to each other.

Such features make the saw a cost-effective acquisition for carrying out different types of cutting operations.



- *Annular and peripheral cutting in a single unit*
- *High precision slicing with minimal kerf loss*
- *Single or multiple cuts*
- *Automatic or manual operation*
- *Compact, modern design*

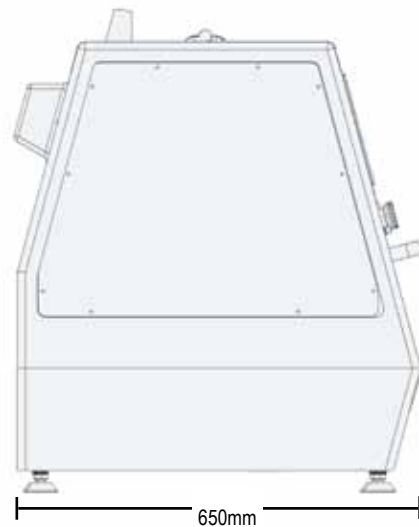
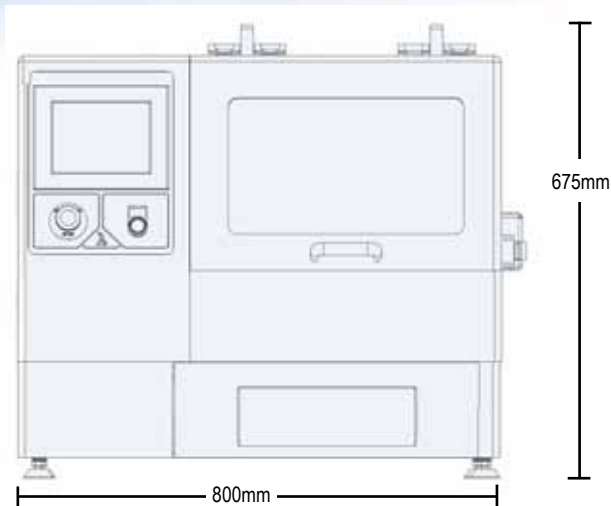
Typical Applications

The APD1 will prove an effective tool in applications such as:

- cutting & wafering of crystals
- sectioning of electronic components
- dicing semiconductor components
- slotting to depth

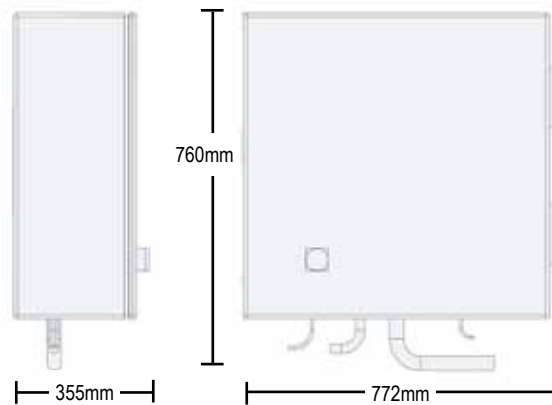
and the cutting of a wide range of materials, such as:

- glasses
- ceramics
- rock samples
- opto-electronic materials.



Technical Specifications:

Power supply:	240V, 50Hz
Main Drive Motor:	10 V d.c., 0.37kW
Dimensions H x L x W:	675 x 800 x 650mm
Net Weight:	130kg approx.
Gross weight (packed)	223kg approx.
Max. depth of cut:	55mm in annular mode
Max. length of cut:	102mm in peripheral mode
Min. rotational speed	100rpm in peripheral mode
Max. rotational speed	5000rpm in peripheral mode
Min. rotational speed	100rpm in annular mode
Max. rotational speed	5000rpm in annular mode
Min. feed rate:	0.1mm/sec
Max. feed rate:	2.0mm/sec
Positional accuracy:	Y-axis 5 microns
	X-axis 5 microns
Coolant tank:	15 litres capacity



Accessories, Components & Consumables

A comprehensive range of accessories, components and consumables are available to support this system, enabling optimum results and longevity of the machine. Further details can be found at www.logitech.uk.com

Logitech Limited

Erskine Ferry Road, Old Kilpatrick,
Glasgow G60 5EU, Scotland, U.K.

Tel: +44 (0) 1389 875444
Fax: +44 (0) 1389 890956
e-mail: info@logitech.uk.com

www.logitech.uk.com



Certificate No. [FM12025](#)