



# Micromechatronics Inc.

200 Innovation Blvd., Suite 155 ; State College, PA 16803-6602, USA  
 Phone: (814) 861-5688 ; Fax: (814) 861-1418. www.mmech.com



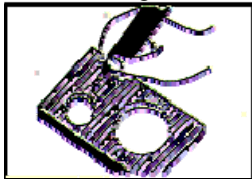
## USW-335Ti Ultrasonic Cutter

### FEATURES

- Previously hard-to-cut materials can now be cut effortlessly.
- Makes a smooth and even cut on straight and curve lines.
- Safe and compact design.
- Easily transported or stores.

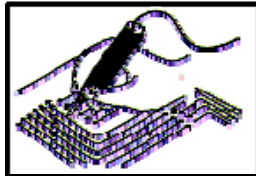
### APPLICATIONS

#### Detailed Design Work



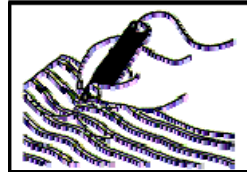
Easily cuts openings in plastic products or removes burrs or rough edges. Makes clean, even cuts through rubber or Styrofoam.

#### Printed Circuit Boards



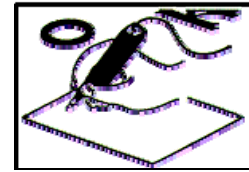
Makes precise cuts into patterns and printed circuit boards. Perfect for quick and accurate corrections.

#### Film Material and Fabric



Cuts synthetic and composite materials without fraying. Easily cuts aluminum and cork sheets.

#### Other cuts



The USW-335 can be used in a wide range of applications such as cutting paper, wood, food products, plaster, cable or in building scale models and other small detailed items.

### SPECIFICATIONS

Oscillation frequency	22kHz
Maximum output	30W
Maximum power Consumption	100 VA
Power (Options: 100V, 110V and 220V)	Option: AC 100V 1A or AC 110V; Option: AC 220V 0.5A; 50/60Hz
Dimensions (mm)	Aluminum Case: 230 x vertical 275 x height 120. Weight: 3.1Kg Hand-piece: D=25 x L=190 (Weight 70g)
Power Supply Cord	1.5m
Output Cord	1.4m
Foot Pedal with Switch Cord	1.5m
Accessories	Blades: 1 replacement set with 40 units Blades Mount: 1 unit Blade Set Screw: 3 units Hexagonal Wrench: 1 Wrench Ground Wire: 1 Wire Operating Manual: 1 manual



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## FEATURES

- **Compact Design:** The handle, oscillator, foot switch, cord, and other components all fit into a compact aluminum case. This makes the USW-334 easy to carry and easy to store. The handle is light and easy to grip, enhancing operating ease.
- **Clean Cut:** The tip of the blade generates 22,000 ultrasonic vibrations per second during cutting. However, the operator does not feel any vibration as the USW-335 accurately follows the cut line and effortlessly produces a clean, even cut.
- **Easy operation:** Simply turn on the switch and begin cutting. No other adjustments are necessary. Even a first-time operator can use it with ease.
- **Safe and economical:** Oscillation of the blade is turned on or off by the foot switch. This means that both hands can be used for safe cutting control. And the responsive switch helps conserve electrical power, boosting economical operation.

## OPTIONAL PARTS FOR USW-335

Article	Model Code	Units per case	Material	Description	
Blades	Standard Blade	HA04	40 units	SK2 (carbon tool steel)	
	Ultra Hard Blade	HA07	1 unit	Tungsten Carbide	
	Square-shaped Blade	HA08	1 unit	SKH	
	Long Blade	HA09	1 unit	SKH	
	Round-edge Blade	HA10	1 unit	SKH	
Blade Clamp	HK02	1 unit			



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Screw for mounting blade	HB04	1 unit	
Allen wrench	RR03	1 unit	

## EXAMPLES OF USE (time will depend on specific material. Values in the table are just for reference)

Time to cut 3 cm  Using USW-335  Standard cutter

Material	Thickness	Time (seconds)
		カット時間 0秒 10秒 20秒 30秒
Plastic Model	1mm	
Plastic Model	3mm	
Acrylic	1mm	
Acrylic	5mm	
PVC	1mm	
PVC	10mm	
Polypropylene	0.5mm	
Teflon Tube	1mm	
Duracon	5mm	
Cardboard	5mm	
Ice	2cm cube	

Material	Thickness	Time (seconds)
		カット時間 0秒 10秒 20秒 30秒
Leather Belt/Jacket	1.5mm	
Leather Suede type	2mm	
Rubber Sticky/Viscous	1mm	
Rubber Sticky/Viscous	3mm	
Rubber Sticky/Viscous	5mm	
Rubber CR (Polychloropren)	1mm	
Rubber CR (Polychloropren)	3mm	
Rubber CR (Polychloropren)	5mm	
Butyl Rubber	10mm	
Rubber NR *Natural Rubber)	1mm	
Rubber NR (Natural Rubber)	8mm	