

### Ideal for fine work with a delicate touch!

Ultrasonic power output of 45 W. Ideal for cutting, cutting-out, and window work of thin sheet materials as well as gate-cutting and deburring of small plastic parts. Just a light touch is all it takes to polish the work surface, and very little hand vibration.

#### Features

- ◎ Desktop-type ultrasonic cutter that is compact and lightweight.
- ◎ Clean work surface is achieved with a light touch and little hand.

### Oscillator SF-60



Tool holders for vice-gripping type available for off-the-shelf and made-to-order blades.

#### Specification

Frequency	25kHz
Frequency adjustment	Auto-tracking type
Maximum Power output	45 W
Power output adjustment	Infinitive adjustment
Power supply	AC100V 50/60Hz 1φ
Electricity consumption	135 VA
Outer dimension	145W x 180D x 125H (mm)
Weight	1.9 kg

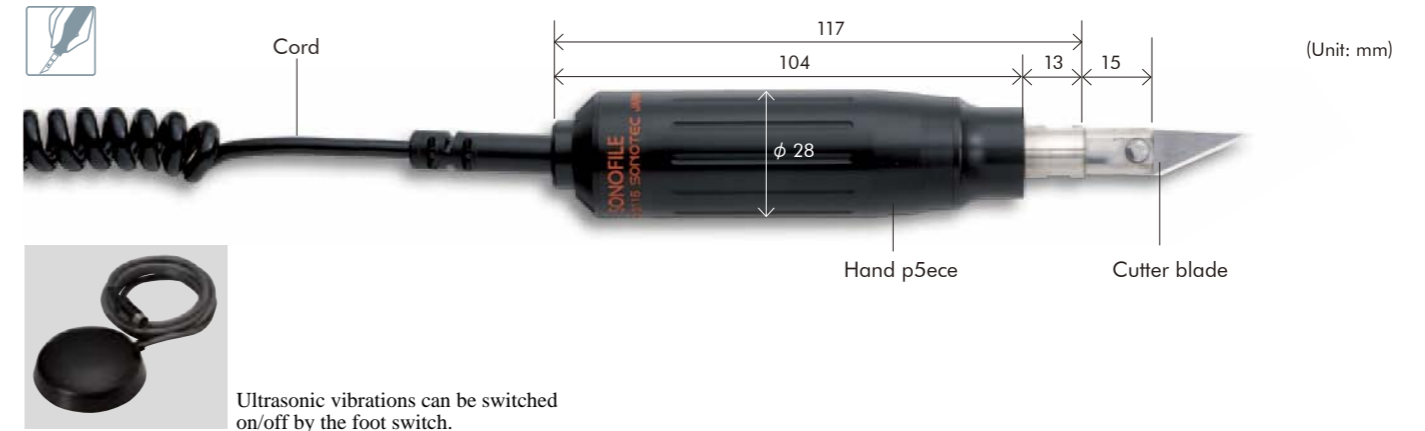
\* 200 V version can also be manufactured.

#### Applicable materials

- ◎ Thin sheet material (specially-treated paper, cloth, etc.)
- ◎ Rubber sheets.
- ◎ Plastic sheets.

## SF-9400

Compact and lightweight, easy to hold and user-friendly, making it suitable for light labor.



#### Specification

Vibration element	PZT piezoelectric transducer
Screw thread	M6
Cord length	0.6-meter curled cord, extended to 2.5m
Housing material	Polyoxymethylene (Duracon)
Outer dimension	φ 11.5 / φ 28 × 128L (mm)
Weight	130g (Exclusive of the cord & tool)
Blade thickness	0.4 mm

#### Standard tool

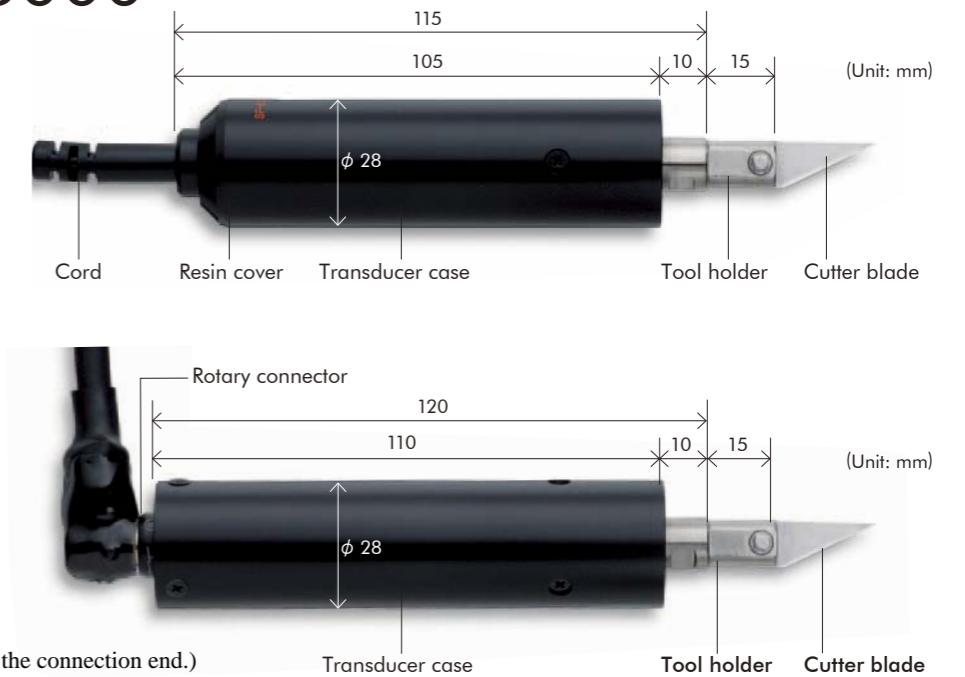


\* Various options available for blade thickness and shape. Please contact us for details.

## SF-6100/SF-6000



When the oscillator for SF-60 is combined with the machine-mounted transducer SF-6100, the cutting unit can be used on the automatic cutting machine that cuts and processes sheets and films. Alternatively, when used with the transducer SF-6000 equipped with a rotary connector, it becomes a cutting unit mountable on the plotting cutter.



#### Specification (Interchangeable except for the connection end.)

Vibration element	PZT piezoelectric transducer
Screw thread	M6
Cord length	4 m (maximum extension is 10 m)
Housing material	Polyoxymethylene (Duracon)
Outer dimension	As shown in the drawing
Weight	150g (Exclusive of the cord)
Blade thickness	0.4 mm

\* Specifications are subject to change without notice due to continual improvements. Please confirm when placing your order.

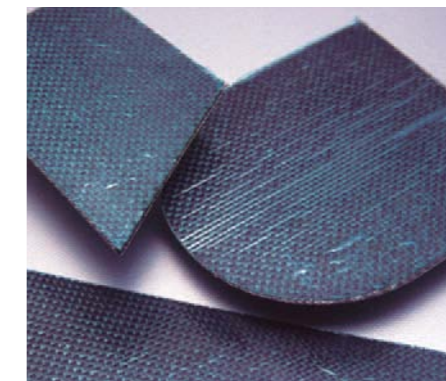
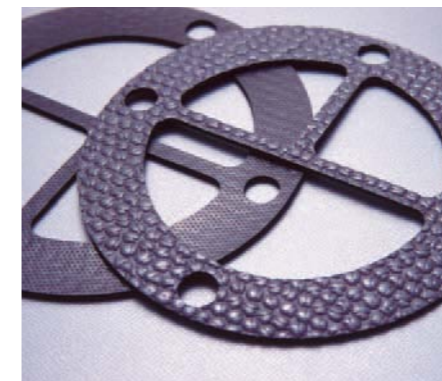
Specification

	Oscillator	SH-3510		SF-3441		SF-3410			SF-3400		SF-650	SF-651	SF-60		
	Transducer	SH-8700	SG-110	SF-8541	SF-8541R	SF-8500	SF-8500R	SF-3110	SF-7400	SF-3140	HP-650	HP-651	SF-9400	SF-6100	SF-6000
Oscillator	Frequency	30kHz		40kHz		22kHz			22kHz		40kHz		25kHz		
	Maximum output power	500W		300W		220W			220W		45W		45W		
	Power supply voltage <sup>*1</sup>	200V		200V		200V			100V		100V		100V		
	Maximum amplitude <sup>*2</sup>	80 μ	-	60 μ		60 μ			-	60 μ	30 μ		10 μ		
Transducer	Automated machinery-mounted-type	○	○	○	○	○	○	○				○		○	○
	Manual-operation type								○	○	○		○		
	Rotary connector	(○) <sup>*3</sup>			○		○								○
	Forced air cooling (for extended continuous use)	○		○	○	○	○			○		○			
	Vice-gripping blade	○		○	○	○	○			○	○	○	○	○	○
	Carbide blade	○	○			○	○			○					
	Exclusive tool <sup>*4</sup>		○					○	○						
	Robot code	○	○	○	○	○	○	○	○	○		△ <sup>*5</sup>			○
	Curled code										○		○		
	Straight code													○	
	Standard code length <sup>*6</sup>	4m		4m		4m			4m		2m	4m	2.5m	4m	
	Weight	1200g	1400g	550g	660g	560g	560g	800g	305g	560g	145g	270g	130g	150g	150g
External switch	External connection	○		○		○						○			
	DIN connector													○	○
	Foot switch								Hand switch	○	○		○		
Applicable material <sup>*7</sup>	Carbon	○													
	Range of prepregs	○		△		○				○	△				
	Composite materials	○		○		○				○	△				
	Rubber	○	○	○		○	○	○		○	○				
	Thermoplastics	○	○	△		○	○			○	△				
	Cloth, paper, and corrugated cardboard	○		○		○			△	○	○			○	
	Sponge and foaming materials	○		○		△				△	○				
	Exterior walls of buildings		○					○	○						
	Foods (frozen foods, cakes, and breads)	○	○	△		△		○	○	△	△				
Sheeting materials	○	○	○		○		△		○	○				○	

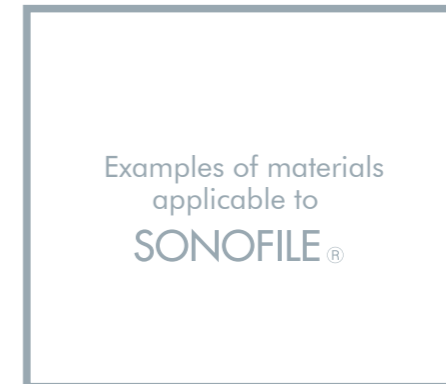
\*1 Power supply voltage can be changed. \*2 The maximum amplitude changes according to the tool to be used. \*3 Rotary type can also be manufactured. \*4 It is a built-to-order item (variable price). \*5 The code near the transducer is a straight code, and it changes to a robot code afterwards. \*6 The robot code can be extended to 10 m. Please specify the transducer's code length when placing your order. \*7 Please consider the applicable materials as standards. Since the ideal model may vary depending on the shape and other conditions, please confirm the performance by a test cut or using a demonstration machine.

## Recommendation of our Test Cut

The model and blade shapes you should choose vary depending on your material, its thickness, and the application. We will provide a free test cut if you send us a sample piece. You will be able to see the actual result of the machining performance. In case you have your own special blade manufactured, however, the extra cost will be applied.



Carbon (CFRP)



NR Sponge

Corrugated elbow

Wide-mouthed bottles