

ULTRASONIC CUTTER

SONOFILE®



ULTRASONIC HAND-TOOLS
SONOTEC



DJK Europe GmbH

SONOFILE SH-3510

SH-8700RR SF-8541RR
SF-8500RR

High-power ultrasonic cutter with maximum power output of 500 W.

Oscillator with maximum power output of 500 W enables powerful cutting of difficult-to-cut and extra-tough materials. Abrasion resistant carbide blade with 1 mm thickness can be used. Signals for on/off, emergency stop, change of output level, and other features with automated machinery or industrial robots can be performed.

Features

- Ⓞ High-power ultrasonic cutter with maximum power output of 500 W is compatible with materials needing high-power cutting.
- Ⓞ Takes carbide and large blades.
- Ⓞ Mountable on automated machinery/industrial robots.

Oscillator SH-3510



Applicable materials

- Ⓞ Carbon (CFRP).
- Ⓞ A range of prepregs (boron, Kevlar, polyethylene fiber, etc.).
- Ⓞ Rubber (vulcanized latex, non-vulcanized latex, sheeting material, sealing material, and tube).
- Ⓞ Thermoplastics (board, sheeting material, film, and laminated material).

Specification

Frequency adjustment	Auto-tracking type
Maximum power output	500 W
Power output adjustment	Infinitive adjustment
Power supply	AC 200 V 50/60 Hz
Electricity consumption	1000 VA
Outer dimension	300 W × 400 D × 200 H (mm)
Weight	10 kg

SONOFILE SF-3441

SF-8541RR

SF-8500RR

High-power ultrasonic cutter with maximum power output of 300 W.

Ultrasonic controller that enables signal communication for on/off, emergency stop, reset, and other features with the body of the machine such as automated machinery, industrial robots, plotters, etc.

Features

- ⊙ High-power ultrasonic cutter with maximum amplitude of 60 micron and power output of 300W.
- ⊙ Automated machinery/plotter-mountable
- ⊙ Overload relay

Oscillator SF-3441



Applicable materials

- ⊙ A range of prepregs (boron, Kevlar, polyethylene fiber, etc.).
- ⊙ Rubber (vulcanized latex, non-vulcanized latex, sheeting material, sealing material, and tube)
- ⊙ Leather (natural and artificial).
- ⊙ Thermoplastics (board, sheeting material, film, laminated material, and floor cover).
- ⊙ Cloth, nonwoven fabric and paper (specially treated paper and coated paper).

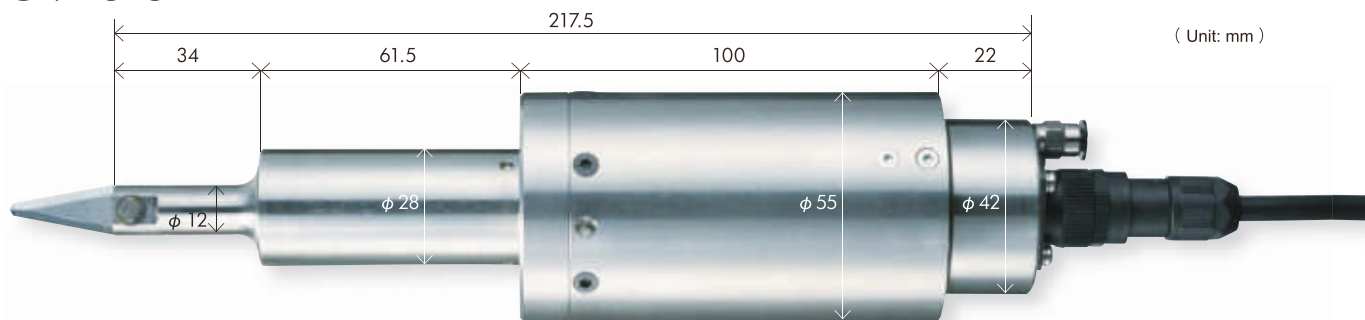
Specification

Frequency adjustment	Auto-tracking type
Maximum power output	300 W
Power output adjustment	Infinitive adjustment
Power supply	AC200V 50/60Hz
Electricity consumption	500 VA
Outer dimension	230W x 330D x 150H (mm)
Weight	5.5 kg

for SH-3510

SH-8700RR

Generates powerful and stable vibrations for high-power cuttings, and is designed to allow for extended continuous use.



(Unit: mm)

Standard tool

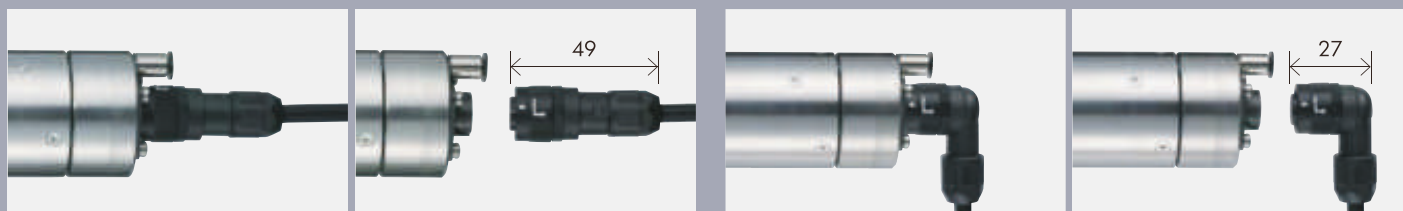


Specification

Frequency	30 kHz
Vibration element	PZT piezoelectric transducer
Housing material	SUS 303
Outer dimensions	φ 12/ φ 28/ φ 55 × 179.5 L (mm)
Weight	1100 g
Blade thickness	1.0 mm

The new method to which it can easily detach it is adopted.

The main body end part of model RR was built the connector of the rotary type and the entire code into the main body, and adopted the new method to which it was able to detach it easily. As a result, it is easy to wire when installing it in the robot, and, in addition, maintenance has improved. Please choose either of a straight type angle types to be shape of the socket. It is possible to change though it is the standard 4m that the code length. (When the old model is hoped, we will do for custom-designed.)



Straight type

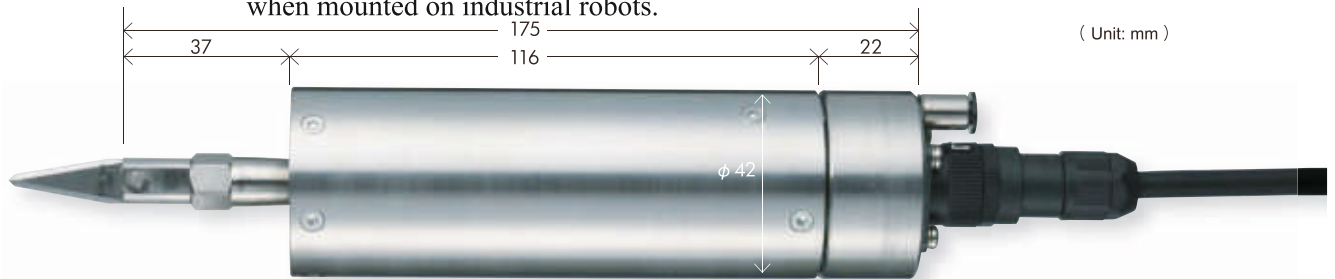
Angle type

* The tool that best meets your application can be selected from our wide range in stock. Special tools can also be designed and manufactured. Specifications are subject to change without notice due to continual improvements. Please confirm when placing your order.

for SH-3510/SF-3441

SF-8500RR

The blade vibration amplitude of this model is remarkably larger than that of the conventional model. This model, with a 42 mm diameter cylindrical shape, is easy to install in automated machinery, industrial robots, and plotters. This model is ideal not only for sheets and cut-out, but also for cutting and cut-out of three-dimensional parts when mounted on industrial robots.



Standard tool



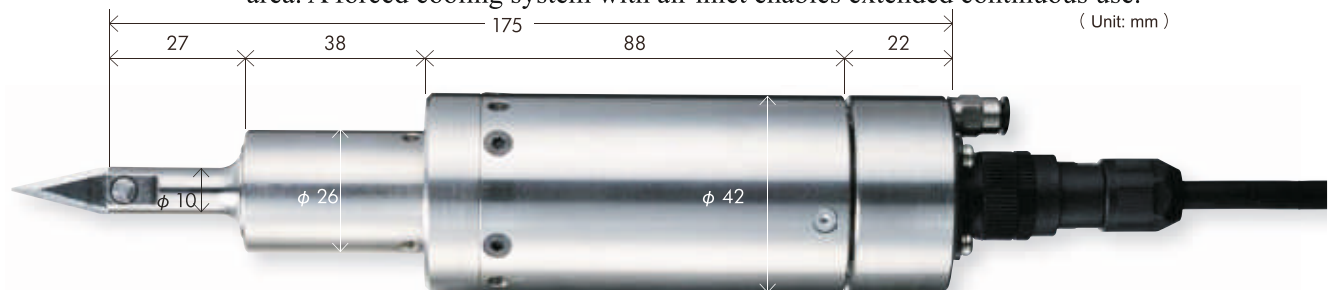
*Various vice-gripping-type tool holders are available.

Specification

Frequency	22 kHz
Vibration element	PZT piezoelectric transducer
Tool attachment screw	M6
Housing material	SUS303
Outer dimensions, Weight	$\phi 11 / \phi 42 \times 175$ L (mm) , 560g
Blade thickness	0.6mm (a blade suitable for your application can be manufactured from 0.4 mm and up in thickness).

SF-8541RR

An even more compact and powerful high frequency ultrasonic cutter than previous models results in a sharper cut. User-friendly design fully utilizes the robot's operation area. A forced cooling system with air inlet enables extended continuous use.



Standard tool



Specification

Frequency	40 kHz
Vibration element	PZT piezoelectric transducer
Housing material	SUS303
Outer dimensions	$\phi 10 / \phi 26 / \phi 42 \times 175$ L (mm)
Weight	660g (excluding the cord)
Blade thickness	0.6mm

SONOFILE SF-653

HP-653

Applicable to a wide range of materials with low processing pressure, a sharp cutting edge, and little dust

A wide range of materials, including newly-developed composite materials, rubber, and leather, can be cut freely with low processing pressure, a sharp cutting edge, and little dust.

A wide range of materials, including newly-developed composite materials, rubber, and leather, can be cut freely with low processing pressure. Simplified and secure installation of the tool can be performed with a special square-headed screw and driver.

Features

- ◎ Stable vibrations with a maximum amplitude of 30 microns ensure remarkable cutting performance.
- ◎ Our unique development prevents the transducer from overheating, allowing for extended continuous use.

Oscillator SF-653



- ◎ A range of prepregs (boron, Kevlar, polyethylene fiber, etc.).
- ◎ Rubber (vulcanized latex, non-vulcanized latex, sheeting material, sealing material, and tube)
- ◎ Leather (natural and artificial).
- ◎ Thermoplastics (board, sheeting material, film, laminated material, and floor covers).
- ◎ Cloth, nonwoven fabric, and paper (specially treated paper and coated paper).

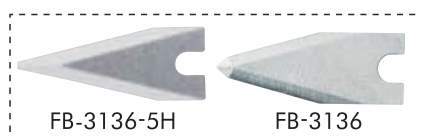
Specification : oscillator

Frequency adjustment	40kHz Auto-tracking type
Maximum power output	100 W
Power output adjustment	Infinitive adjustment
Power supply	AC 200 V 50/60 Hz 1 φ
Electricity consumption	300 VA
Outer dimension	230 W × 232 D × 140 H (mm)
External I/O	ON/OFF, Emergency stop
Weight	5.0 kg

Transducers HP-653

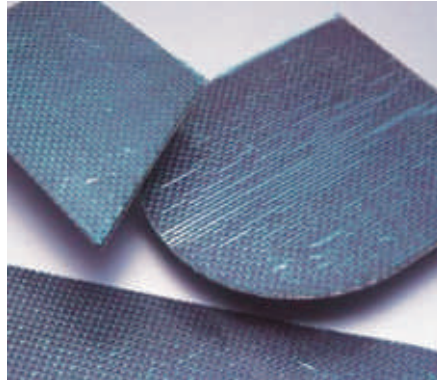
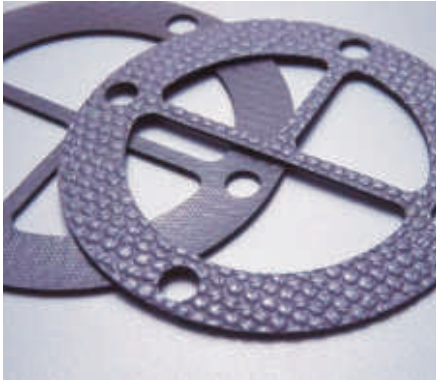


Standard tool

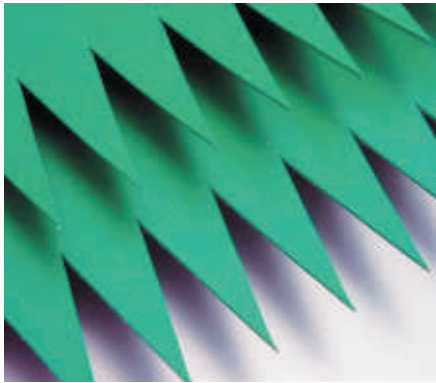


Specification : transducer

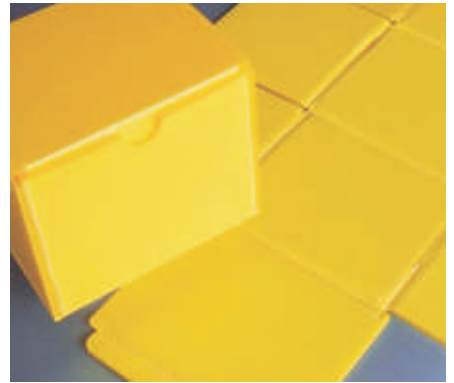
Vibration element	PZT piezoelectric transducer
Cord length	4 m
Housing material	SUS 303
Outer dimensions	φ 12 / φ 30 × 10 L (mm)
Weight	270 g
Blade thickness	0.6mm (standard)



Carbon (CFRP).



Examples of materials
applicable to
SONOFILE®



NR sponge



Corrugated elbow



Wide-mouthed bottles



www.sonotec.com

SONOTEC Co., Ltd.

5-4-1 Shinsaku, Takatsu-ku, Kawasaki 213-0014, Japan

TEL:044-877-8311 FAX:044-877-8312

e-mail: info@sonotec.com

Distributed by



DJK Europe GmbH

Mergenthalerallee 79-81

D-65760 Eschborn / Germany

Tel + 49 61 96 776 1418

Fax+ 49 61 96 776 1419

e-mail: frankfurt@djkeurope.com

www.djkeurope.com