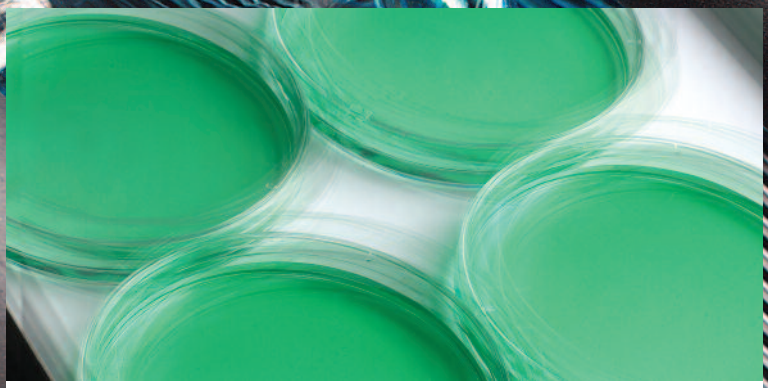

Rockers & Shakers

Shakers

Shakers are ideal for almost any vessel from microcentrifuge tubes through petri dishes and microtitre plates to conical flasks. Shakers are available with either an orbital action where the platform moves in a circular orbit or a reciprocating linear movement where the platform moves back and forth horizontally. An orbital action provides a swirling action on the sample, ideal for aeration. A linear shaker is more aggressive making it ideal for applications such as extractions. A flask shaker applies the movement directly to the sample vessel, rather than via a platform. The sample vessel, typically a flask or bottle, is clamped around the neck and shaken in a pivotal motion. This mimics the type of aggressive shaking action that would be generated when a flask is shaken by hand.

Page 88 - Microtitre shakers
Page 89 - Orbital mini shaker
Page 90 - Orbital laboratory scale shaker
Page 91 - Reciprocating laboratory scale shaker
Page 92 - Flask shaker

THE BENCHTOP EQUIPMENT HYGIENE SOLUTION Protected by BioCote®

Shaker, microtitre, SS:5 Range

- High speed, small orbiting action – ideal for microtitre plates
- Capacity for four or eight microtitre plates
- Digital selection of speed
- In built digital timer
- Accessories available for mixing microcentrifuge tubes

With the combination of high speed and a tiny orbit the SS:5 range has an ideal action for mixing microtitre plates and microcentrifuge tubes. Microtitre plates are held to the platform by a highly efficient non slip mat. Microtubes can be held via the purpose built accessory racks, available separately.

The SS:5 range has adjustable speed control between 250 and 1250rpm, the speed is shown via the bright LED display and accurately controlled by an encoder. The versatile timer can be set from 1 second to 9 hours. The unit can also be set for continuous operation.

SSM5

SSL5

Technical Specification

	SSM5	SSL5
Platform dimensions, mm (w x l)	220 x 220	306 x 306
Number of plate positions	4	8
Speed range, rpm	250 to 1250	250 to 1250
Orbit diameter, mm	1.5	1.5
Maximum load, kg	1	2
Operational temperature range	+4 to +40°C	+4 to +40°C
Maximum permissible humidity	80%	80%
Dimensions, mm (w x d x h)	240 x 300 x 160	360 x 420 x 160
Net weight, kg	5	10
Electrical supply	230V, 50Hz, 50W	230V, 50Hz, 50W
IP Rating	31	31

Ordering Information

Model	Description
SSM5	Shaker, microtitre, mini
SSL5	Shaker, microtitre, labscale
SSM5/1	Tube holder for 1.5ml tubes
SSM5/2	Tube holder for 0.5ml tubes
SSM5/3	Tube holder for 0.2ml tubes

SSM1

Shaker, orbital, mini SSM1

- Smooth orbital shaking action
- Orbit of 16mm is ideal for larger samples, e.g. multi-well plates
- Built-in digital timer
- Variable speed control to 300rpm
- Supplied with non-slip mat for multi-well plates etc.
- Optional accessory cradle system for flasks and bottles

The compact SSM1 provides a smooth uniform circular motion with an orbit of 16mm. It is supplied with a non-slip mat that can hold up to four multi-well plates or diagnostic cards. The shaking action is ideal for samples of 0.5 to 5ml held in multi well plates, dishes and petri dishes. The shaker can be used in incubators and environmental chambers (up to 40°C and 80% humidity). Alternatively, an accessory cradle system is available that can accommodate a variety of vessels including flasks, bottles or beakers via four rubber securing bars. It turns the SSM1 into a very effective mini platform shaker. It will hold up to: 4 x 250ml or 2 x 500ml or 1 x 1000ml Erlenmeyer flasks or bottles. These larger vessels are held between the rubber bars. The flexible cradle system allows for different combinations of vessels offering maximum versatility.

Speed is variable from 30 to 300 rpm. Once set on the digital display, the shaking speed is effectively maintained even over long periods of time. Shaking times can be set to run from 1 second to 9 hours on the versatile timer, or the unit can be set for continuous operation.

SSM1 with SSM1/1

Technical Specification

	SSM1
Platform dimensions, mm, (w x l)	220 x 220
Speed range	30 to 300rpm
Orbit diameter, mm	16
Maximum load, kg	3
Operational temperature range	+4 to +40°C
Maximum permissible humidity	80%
Dimensions, mm (w x d x h)	240 x 300 x 140
Net weight, kg	5
Electrical supply	230V, 50Hz, 50W
IP Rating	31

Ordering Information

Model	Description
SSM1	Shaker, orbital, mini
SSM1/1	Accessory cradle with 4 securing bars
SSM1/2	Large platform (holds up 8 plates) 340 x 300mm
SSM1/3	Clear Acrylic® lid

Shaker, orbital, lab scale, SSL1

- Orbital shaking action – ideal for aeration applications
- Digital speed selection to 300rpm with soft start
- Built-in digital timer
- Reliable quiet drive mechanism
- Fully adjustable cradle system

This lab scale platform shaker has a powerful yet quiet shaking mechanism that has been designed for problem free continuous use. Model SSL1 provides a smooth orbital shaking action with an orbit of 16mm and speed range of 30 to 300rpm, ideal for most culturing / aeration applications. It can be used in environmental chambers and CO_2 incubators.

The cradle type platform has four rubber cushioned horizontal securing bars with quick release handles. They can be easily adjusted both vertically and horizontally to hold most sizes and types of vessel, including flasks, bottles and beakers. For example, they will accommodate the following Erlenmeyer flasks or bottles:
12 x 250ml or 9 x 500ml or 6 x 1000ml or 2 x 2000ml.

The main advantage of this cradle system is that it can accommodate different sizes of vessel, a common requirement where shakers are used by different people in the laboratory.

Speed is fully variable and is set digitally for consistency. The speed is microprocessor controlled and accurately maintained even over long runs. A versatile built in timer can be set from 1 second to 9 hours. After the timer has counted down, the shaker stops and sounds an alert. Alternatively the unit can be set for continuous operation.

A larger platform is available as an optional accessory (catalogue number SSL1/1). Designed to increase the capacity of the SSL1, the platform is 510 x 510mm with six securing bars. It will accommodate the following Erlenmeyer flasks or bottles:
30 x 250ml or 16 x 500ml or 9 x 1000ml or 4 x 2000ml.
When this platform is fitted, the maximum permissible speed is 150rpm. An optional flat platform the SSL1/2 is available if you would prefer not to use the cradle system.

SSL1

SSL1/1

Technical Specification

	SSL1
Shaking action	Orbital
Platform dimensions, mm (w x l)	335 x 335
Speed range	30 to 300rpm
Orbit / amplitude, mm	16
Maximum load, kg	10
Dimensions, mm (w x d x h)	360 x 420 x 270
Operational temperature range	+4 to +40°C
Maximum permissible humidity	80%
Net weight, kg	11
Electrical supply	230V, 50Hz, 50W
IP Rating	31

Ordering Information

Model	Description
SSL1	Shaker, orbital, lab scale
SSL1/1	Accessory platform 510 x 510mm with six rubber securing bars.
SSL1/2	Flat platform, no cradle 350 x 350mm

Shaker, reciprocating, lab scale, SSL2

Model SSL2 has construction and control identical to SSL1 on previous pages, but with reciprocating shaking action with an amplitude of 20mm and speed range of 25 to 250 strokes / minute. It produces a rigorous side-to-side mixing action ideal for extractions etc.

SSL2

Technical Specification

	SSL2
Shaking action	Reciprocating
Platform dimensions, mm, (w x l)	335 x 335
Speed range	25 to 250rpm
Orbit / amplitude, mm	20
Maximum load, kg	10
Operational temperature range	+4 to +40°C
Maximum permissible humidity	80%
Dimensions, mm (w x d x h)	360 x 420 x 270
Net weight, kg	11
Electrical supply	230V, 50Hz, 50W
IP Rating	31

Ordering Information

Model	Description
SSL2	Shaker, reciprocating, lab scale

Shaker, flask, SF1

- Vigorous shaking action
- Timed operation or continuous running
- Robust construction
- Ideal for extractions

Valuable time can be taken up mixing bottles and flasks by hand. Let the SF1 take the strain. Holding up to eight flasks or bottles, up to 500ml capacity, it creates a vigorous mixing action by simulating hand shaking - especially useful for applications where prolonged shaking is required as it can be left on continuously and won't get tired!

Robust construction, mounted on four rubber feet to absorb vibration and prevent unnecessary movement on the bench. Analogue timer covers 10 to 60 minutes with a manual override. Electronic feed-back control ensures a constant speed irrespective of load. Supplied with two side arms, eight clamps and Allen key. An optional extension kit is available, catalogue number SF1/2 which consists of two extension arms and four extra clamps. It increases the capacity to twelve bottles or flasks.

SF1

Technical Specification

	SF1
Speed range	8 to 800 oscillations/min
Amplitude, mm	1.5
Dimensions, mm (w x d x h)	780 x 270 x 240
Maximum load, kg	3
Net weight, kg	8.3
Electrical supply	230V, 50Hz, 50W
IP Rating	31

Ordering Information

Model	Description
SF1	Flask shaker with two side-arms, eight clamps and Allen key
SF1/1	Spare clamp
SF1/2	2 x accessory side - arms and 4 x clamps. Allows shaker to hold up to 12 vessels