Mixers

Rotators

Mixing by rotation is more vigorous than a roller mixer, typically the sample, in either tubes or bottles, are turn end-over-end. Rotators can be based on a rotisserie type design whereby a single axis is rotated and samples are attached to this by a variety of different methods. Alternatively, a rotator can take the form of a disk rotated around its central point; samples are attached to the edge of the disk, this form of rotator is less vigorous than the rotisserie style as the angle of the disk can be lowered to lessen the end over end action.

Page 60 - Fixed speed rotator
Page 61 - Variable speed rotator
Page 62 - Rotator drive unit
- Test tube holder drum
Page 63 - Two platform drum
- Figure 8 drum
Page 64 - Bottle holder drum
- Microcentrifuge tube drum

Rotator, fixed speed, SB2

- Fully adjustable mixing angle
- Constant speed of 20rpm
- Choice of tube holders to hold a number of different sized tubes
- Simple on/off control switch
- Spillage tray

The SB2 gives gentle but effective mixing, ideal for keeping biological samples in suspension e.g. blood
The rotator can be used in incubators up to 60°C and in cold rooms down to 4°C.

The rotator has a constant speed of 20rpm and the angle of rotation is fully adjustable, from horizontal for minimal mixing to vertical for full end-over-end mixing.

An integral tray catches any spillage from the rotating tubes. A choice of six tube holders are available to fulfil most applications. It is possible to use two tube holders simultaneously with our dual holder accessory.

Technical Specification

	SB2
Speed range	Fixed to 20rpm
Dimensions, mm (w x d x h)	200 x 270 x 230
Net weight, kg	3.2
Electrical supply	230V, 50Hz, 50W
IP Rating	31

SB2 & SB3/2

Ordering Information

Model	Description
SB2	Rotator, fixed speed

Tube holders

- Choice of six types
- Quick and easy loading and removal of tubes
- End-over-end or rolling action

Ordering Information

Model	Description	Tube diameter	Max. no. of tubes
End-over-end action			
SB3/1	Micro tube holder	10 to 11.5 mm	40
SB3/2	Test/blood tube holder	9 to 20mm	20
SB3/3	50ml centrifuge tube holder	25 to 35 mm	12
Rolling action			
SB3/4	Culture tube holder	12mm	63
SB3/5	Culture tube holder	16mm	63
SB3/6	Culture tube holder	26mm	30
Accessories			
SB2/DUAL	Multiple tube holder accessory		
SB3/1/PC	Spare clips for SB3/1 holder		

SB3

SB3 with 2 x SB3/1 and SB2/DUAL

Rotator, variable speed, timer, SB3

- Fully adjustable mixing angle
- Variable speed
- Digital timer
- Choice of tube holders to hold a number of different sized tubes
- Spillage tray

The SB3 is ideal for aerating cultures, keeping biological samples in suspension and for general mixing applications.
The rotator can be used in incubators up to 60°C and in cold rooms down to 4°C.

The rotator has a variable speed of 2 to 40rpm for gentle rolling or vigorous mixing of samples and the angle of rotation is fully adjustable, from horizontal for minimal mixing to vertical for full end-over-end mixing.

A digital timer and speed display allow procedures to be accurately repeated for optimal results.

A tray catches any spillage from the rotating tubes.
Scale to measure mixing angle for future reference or continuity.
A choice of six tube holders are available to fulfil most applications.
It is possible to use two tube holders simultaneously with our dual holder accessory.

Holder must be ordered separately (see page 60)

Technical Specification

	SB3
Speed range	2 to 40rpm
Speed control	Digital
Timer	Yes
Net weight, kg	3.2
Dimensions, mm (w x d x h)	200 x 270 x 230
Electrical supply	230V, 50Hz, 50W
IP Rating	31

Ordering Information

Model	Description
SB3	Rotator, variable speed, timer

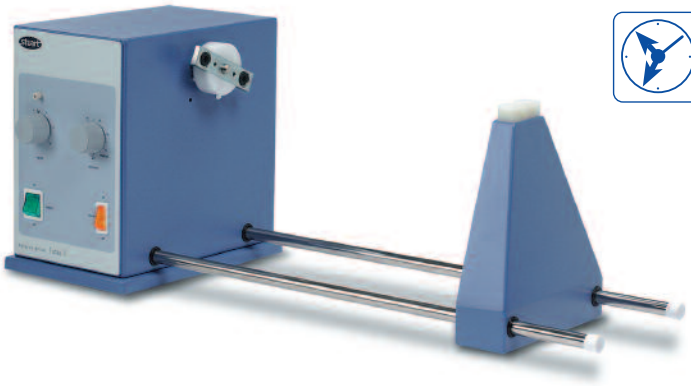
Rotator, drive unit, STR4

- Highly versatile - accepts a choice of 5 drums
- Built in timer
- Variable speed control 6 to 60rpm

The STR4 rotator drive unit is used in conjunction with a wide range of drums designed to take different sizes and types of vessels. The five drums are designed to give different mixing actions and are listed on pages 62 to 64.

Speed of rotation is variable from 6 to 60rpm for a range of mixing applications.

For added convenience a built in analogue timer can be set from 10 to 60 minutes. Alternatively the unit can be set for continuous operation.



STR4

Technical Specification

	STR4
Maximum load, kg	3
Rotation speed	6 to 60rpm
Dimensions, mm (w x d x h)	650 x 250 x 250
Net weight, kg	6.4
Electrical Supply	230V, 50Hz, 50W
IP Rating	31

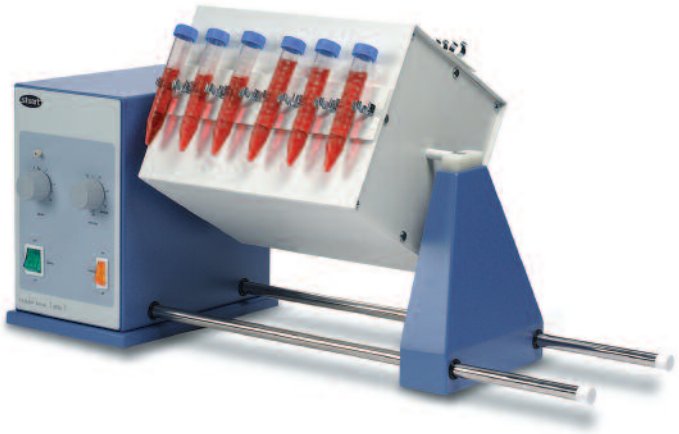
Ordering Information

Model	Description
STR4	Rotator drive

(n.b. vessel holding drum not included and must be ordered separately)

Drum, test-tube holder, STR4/1

Designed to rotate test-tubes in an end-over-end movement. Comprises a square metal drum which can accommodate a choice of plates fitted with tube clips.
Up to four plates can be mounted on the drum. Easy fitting via a push button mechanism.

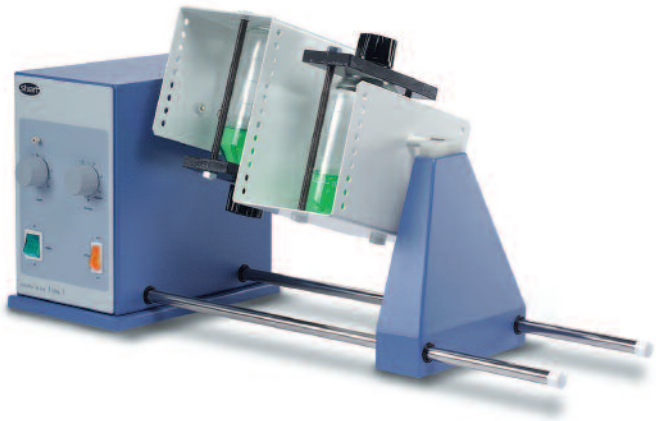


STR4 with STR4/1 plus clip plates

Ordering Information

Model	Description
STR4/1	Drum to hold test tube clip plates
STR1/1	Clip plates for 12 x 12mm tubes (per pair)
STR1/2	Clip plates for 10 x 16mm tubes (per pair)
STR1/3	Clip plates for 8 x 9mm tubes (per pair)
STR1/4	Clip plates for 7 x 24mm tubes (per pair)

Drum, two platforms, STR4/2



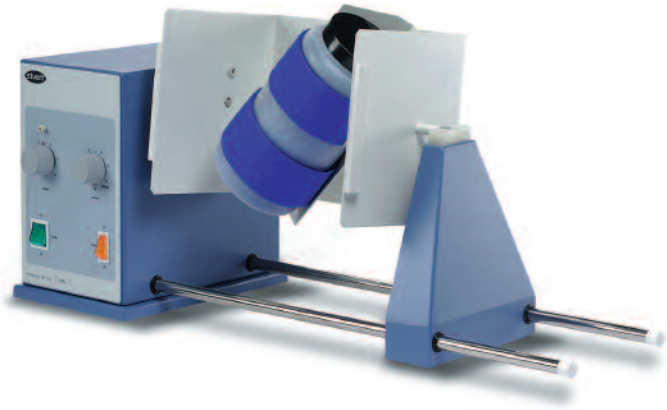
STR4 with STR4/2

This drum accepts 2 x 250ml conical flasks or reagent bottles for end over end mixing.
The samples are securely held in place by a collar that fits around the neck of the flask or bottle and is secured by two washers.

Ordering Information

Model	Description
STR4/2	Drum with two platforms to hold flasks or bottles

Drum, figure 8, STR4/3



STR4 with STR4/3

Drum holds the vessel at a 45° angle so it is rolled and turned end over end at the same time giving a vigorous figure of 8 mixing action.

The sample container is retained by a strong Velcro strap. Accepts almost any container including reagent bottles, powder jars and paint tins up to 200mm in length and 120mm diameter.

Ordering Information

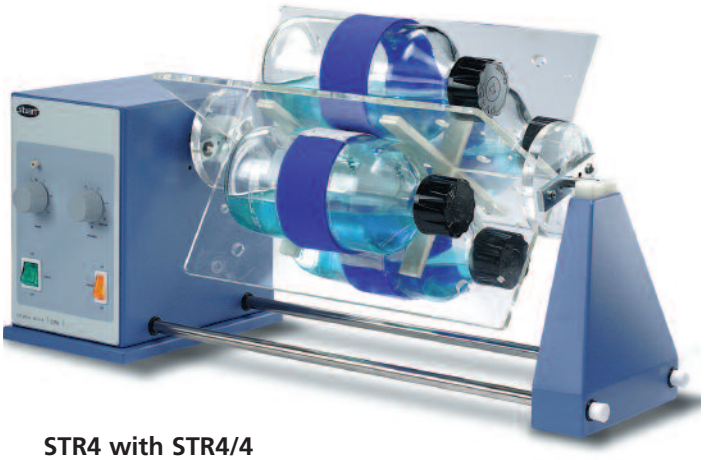
Model	Description
STR4/3	Drum with figure 8 mixing action

Drum, bottle holder, STR4/4

This drum consists of a four segment Perspex® cradle.
Each segment is fitted with a fully adjustable Velcro® strap to hold bottles and other containers up to 120mm diameter and up to 300mm in length.

Ordering Information

Model	Description
STR4/4	Drum with four segment cradles holding up to four bottles



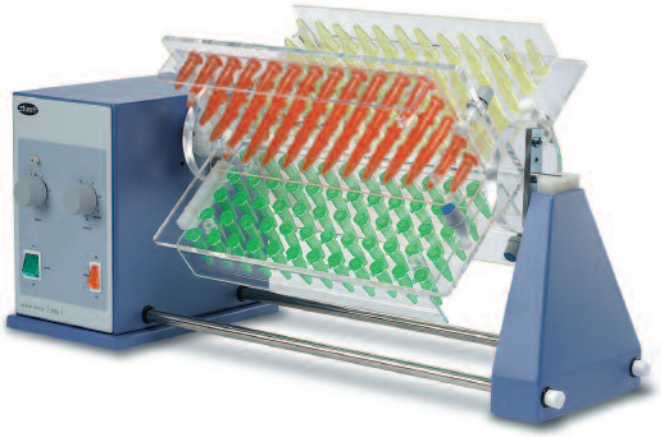
STR4 with STR4/4

Drum, microcentrifuge tube, STR4/5

Designed for thorough end over end mixing of 1.5ml microcentrifuge tubes. Four racks (included) can be held securely in the drum. Each rack can accommodate up to 60 microcentrifuge tubes, making this unit ideal for a high throughput laboratory.

Ordering Information

Model	Description
STR4/5	Drum with four segment cradles and four tube racks
SW2/1	Spare rack for 60 x 1.5ml tubes



STR4 with STR4/5