



Specifications

Model	UM-113S	UM-117	UM-118	UM-125	UM-113
Main Application	Mixing and defoaming of different materials (*)				Mixing and defoaming of solder paste
Timer setting	0 sec to 99 min 50 sec (Note 1)				0 sec to 99 min 50 sec (Note 1)
Centrifugal rotation speed	100 to 2000 rpm (Note 2)	100 to 2000 rpm (Note 2)	100 to 1500 rpm (Note 2)	100 to 1000 rpm (Note 2)	100 to 1000 rpm (Note 2)
Self-rotation speed	25% of centrifugal rotation	20% of centrifugal rotation	20 to 70% of centrifugal rotation (Note 3)	17% of centrifugal rotation	25% of centrifugal rotation
Mixing weight (NET)	80g × 1cup (120ml)	0 to 500g × 2cups (300ml)		0 to 1kg × 2cups (1,100ml max.)	500g container available on the market, Ø62
Memory	10 (Note 4)				10 (Note 4)
Speed change program		●			●
Intermittent program		●			●
PC management software	Standard accessory				Standard accessory
Safety function	Door sensor, vibration sensor, rotation sensor, and emergency stop switch				Door sensor, vibration sensor, rotation sensor, and emergency switch
External dimensions (mm)	280W × 280D × 410H	360W × 360D × 451H	360W × 360D × 451H	470W × 500D × 550H	280W × 280D × 410H
Weight of the main unit (Kg)	21	30	37	40	21
Number of containers to be simultaneously mixed	1 container	2 containers	2 containers	2 containers	1 container
Operating ambient environment	5 to 35°C, 35 to 85% RH (without condensation)				5 to 35°C, 35 to 85% RH (without condensation)
Power supply	Single-phase 100 to 120V AC or 200 to 240V AC, 50/60Hz				Single-phase 100 to 120V AC or 220 to 230V AC, 50/60Hz

(Note 1): When a PC is used, the timer can be set to 48 hours or more.

(Note 2): The specified rotation speed may not be attained depending on the mixing material type, weight, viscosity, etc.

(Note 3): A requirement for any centrifugal rotation ratio other than the standard can be satisfied by placing a special order.

Please contact us for further information. (Self-rotation ratio: 5 to 20%, 70 to 90%, etc.)

(Note 4): The memory is unlimited by using a PC.

(*) This product is not based on an explosion-proof specification. Do not use the machine to mix materials that are harmful to the human body and ecosystem.

(*) This product conforms to the CE Marking and RoHS Standard based on the European EC Directive.

- Popular Double (Self / Centrifugal) Rotation Mixer
- Easy operation
- Available for high viscosity paste
- Specific speed settings
- Mixing program mode
- PC software supplied

Double (Self/Centrifugal) Rotation Method Defoaming Mixer Uni-Cyclone

UM-113S
UM-117
UM-118
UM-125
UM-113

JAPAN UNIX
JAPAN UNIX CO., LTD.

Head office:
2-21-25, Akasaka Minato-ku, Tokyo 107-0052, Japan.
TEL: +81-3-3588-0551 FAX: +81-3-3588-0554

Web site : <http://www.japanunix.co.jp/>

Contact :

Printed in Japan 08055000-S

- Before using this product, be sure to read the supplied Operating Instructions thoroughly to ensure that this product will be used safely.
- Descriptions in this catalog are valid as of May, 2008. Specifications and exterior described in this catalog are subject to change without notice due to improvements.

Mixing power beyond the professional worker's skill and amazing defoaming power

Best partner for development of new materials that is recognized by the world's researchers

Mixing and defoaming of every kind of materials can be executed quickly and easily.

Put the target material to be mixed into a container. After closing the lid of the container, set the container directly in the mixer. The material can be mixed and internal foams can be removed in a short time by operating a single button.

* To any container other than our standard container, Uni-Cyclone is applicable if an optional adapter is used.



The containers are set in the mixer.



Mixing is completed in a short time.

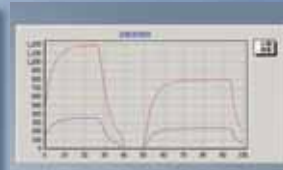
Detailed mixing/defoaming conditions can be freely set by PC management software.

The PC management software is attached to the mixer as standard.

The mixing time and mixing speed can be freely set and managed according to the material to be mixed.



The mixing program can be easily managed.



The rotation speed can be graphically checked.

The ratio between self-rotation/centrifugal rotation speeds can be changed.

In Uni-Cyclone UM-118, the ratio between self-rotation / centrifugal rotation speeds can be changed. Materials that could not be mixed enough in the conventional mixer can be mixed and made uniform.



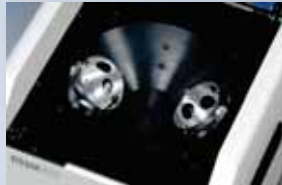
Clay and pigment mixed at 30% self-rotation.



Clay and pigment mixed at 70% self-rotation.

Two cups can be simultaneously mixed.

Medium or large type Uni-Cyclone can mix two cups simultaneously. This product is most suitable for small-lot production and production of samples.



Cup holders



Containers set in the cup holders

Mixing and defoaming can be performed for a material put in a syringe.

A material such as adhesive and silver paste, put in the syringe can be directly mixed and defoamed.



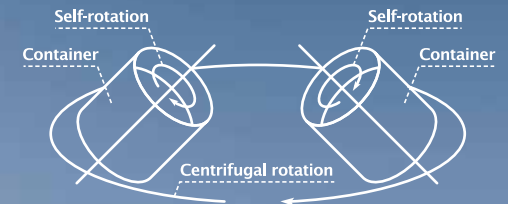
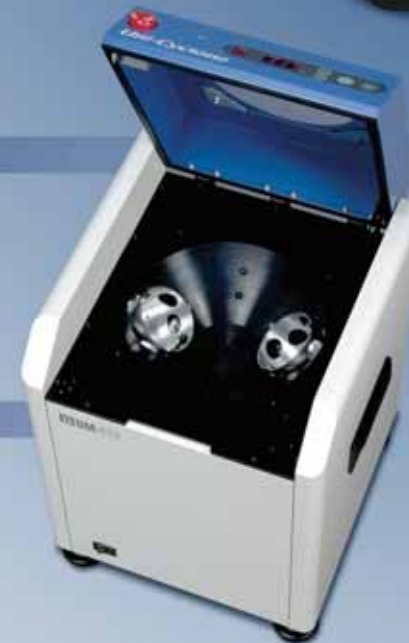
Mixing of different types of syringes



Syringe adapters



UM-117



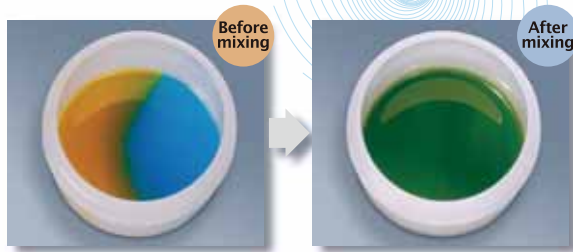
Principle of Double (Self/Centrifugal) Rotation Method Mixer, Uni-Cyclone

Uni-Cyclone puts the container to both self rotation and centrifugal rotation. As shown in the above figure, when the container is put to planetary motion, so that strong acceleration is given, thereby causing a convection current in the container. The material can be mixed and defoamed by using this force efficiently without using any stirring rod or mixing impeller. No cleaning of such a component part as impeller required. The user can avoid the waste of material.

Examples of Mixing/Defoaming by Uni-Cyclone

Mixing/defoaming of epoxy resin

1200 rpm 45 sec Self-rotation speed 20%
 Mixing and defoaming of epoxy resin
 (main ingredient and hardening agent)
 * The materials are colored in advance.



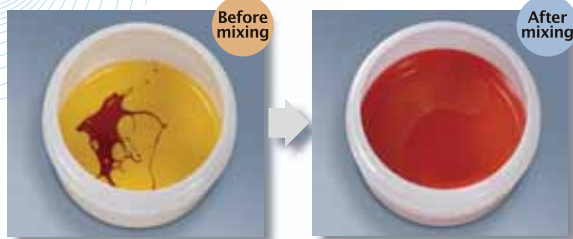
Mixing and defoaming of cosmetics base

1000 rpm 30 sec Self-rotation speed 20%
 Mixing and defoaming of wax and oxidized iron

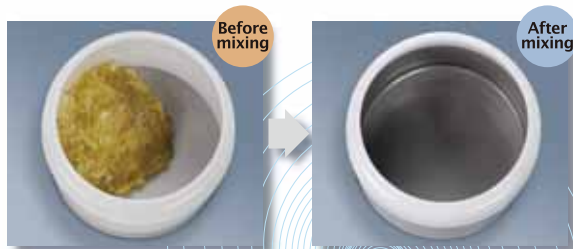


Mixing and defoaming of paint

1000 rpm 30 sec Self-rotation speed 20%
 Mixing of paint



1200 rpm 60 sec Self-rotation speed 70%
 Mixing and defoaming of solder powder and flux
 * For mixing of the solder paste, which is already mixed,
 available on the market, use the Model UM-113.



Materials that can be mixed and defoamed by Uni-

- Semiconductor materials
- LED materials
- Cosmetics bases
- Medical materials
- Dental materials
- Adhesives
- Liquid crystal materials
- Silver pastes
- Solder pastes
- Paints
- Foods etc.

* This machine is not based on an explosion-proof specification. Do not use the machine to mix materials that are harmful to the human body and ecosystem.

Uni-Cyclone Product Lineup

Mixing/Defoaming Mixer

UM-113S



Mixing capacity	Centrifugal rotation speed	Self-rotation speed	Standard configuration
NET 80g or Approx. 120ml × 1cup *Gross 130g fixed	2000rpm	25% centrifugal rotation fixed	<ul style="list-style-type: none"> ● Spatula ● Dedicated containers 2pcs. (∅42) ● Disposable cup 2cups ● PC software ● USB cable ● Round belt (spare) ● Balance weight 50g

UM-117



Mixing capacity	Centrifugal rotation speed	Self-rotation speed	Standard configuration
NET 500g or Approx. 300ml × 2cups *Gross 570g fixed	2000rpm	20% centrifugal rotation fixed	<ul style="list-style-type: none"> ● Spatula ● Dedicated containers 2 pcs. (∅78) ● PC software ● USB cable ● Round belt (spare) ● Balance weight

UM-118



Mixing capacity	Centrifugal rotation speed	Self-rotation speed	Standard configuration
NET 500g or Approx. 300ml × 2cups *Gross 570g fixed	1500rpm	20 to 70% centrifugal rotation variable	<ul style="list-style-type: none"> ● Spatula ● Dedicated containers 2pcs. (∅78) ● PC software ● USB cable ● Round belt (spare) ● Balance weight

UM-125



Mixing capacity	Centrifugal rotation speed	Self-rotation speed	Standard configuration
NET 1Kg. or Approx. 1100ml × 2cups *Gross 1500g fixed	1000rpm	17% centrifugal rotation fixed	<ul style="list-style-type: none"> ● Spatula ● PC software ● USB cable ● Round belt (spare) ● Balance weight

Mixer dedicated to solder paste UM-113



Mixing capacity	Centrifugal rotation speed	Self-rotation speed	Standard configuration
Solder paste container available on the market NET 500g × 1cup (Approx. 150 ml)	1000rpm	25% centrifugal rotation fixed	<ul style="list-style-type: none"> ● Spatula ● PC software ● USB cable ● Round belt (spare) ● Balance weight 150g/300g ● Container metal fastener