



- ✓ 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

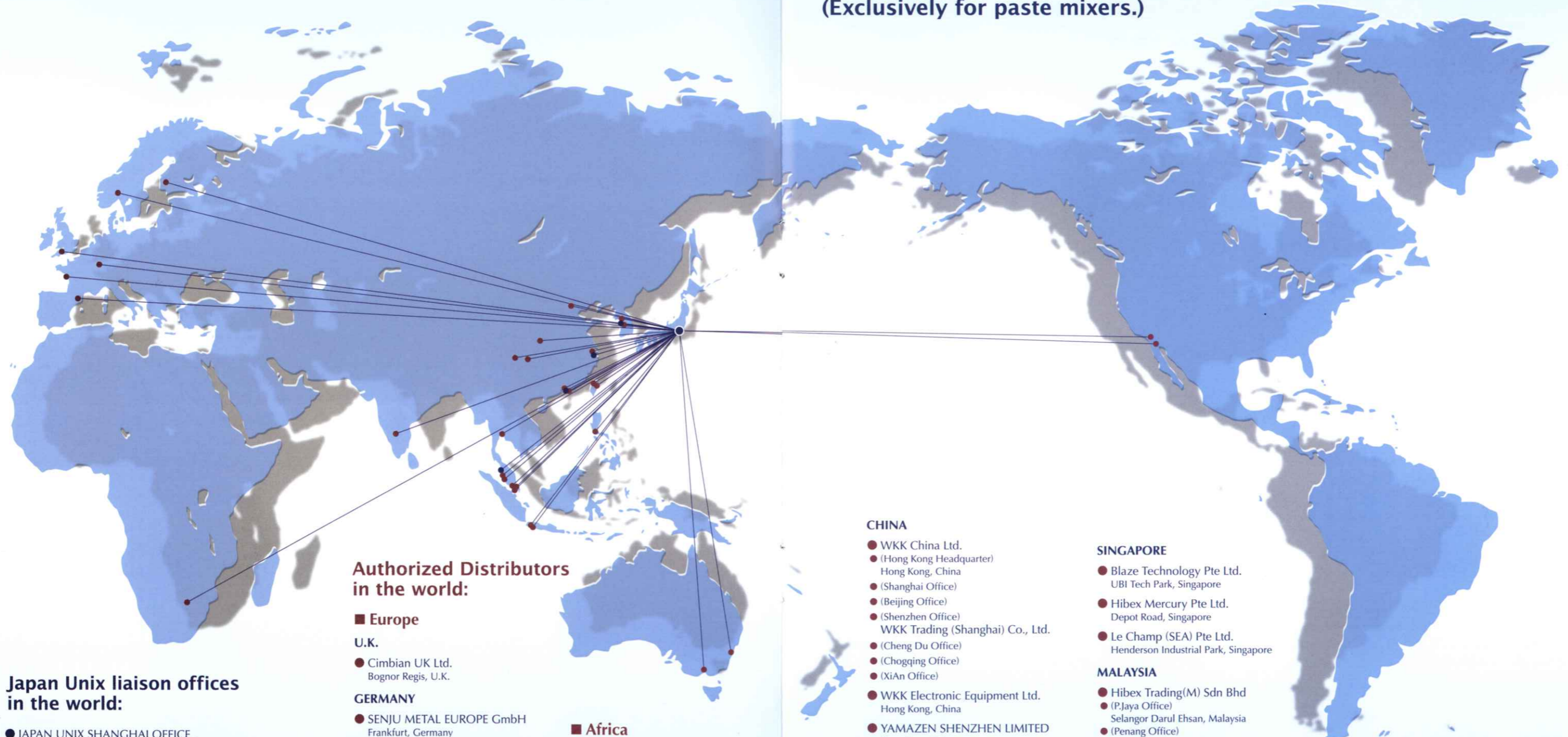
UM-125

UM-113

# Impeller-less mixing/defoaming mixer that is spreading throughout the world

## *Uni-Cyclone*

JAPAN UNIX supplies Uni-Cyclone through the international sales network. (Exclusively for paste mixers.)



### Japan Unix liaison offices in the world:

- JAPAN UNIX SHANGHAI OFFICE  
Shanghai, China
- JAPAN UNIX SHENZHEN OFFICE  
Shenzhen, China
- JAPAN UNIX KOREA OFFICE  
Seoul, Korea
- JAPAN UNIX MALAYSIA OFFICE  
Penang, Malaysia

### Authorized Distributors in the world:

#### ■ Europe

- U.K.  
● Cimbrian UK Ltd.  
Bognor Regis, U.K.
- GERMANY  
● SENJU METAL EUROPE GmbH  
Frankfurt, Germany
- SPAIN  
● Barcelona Instruments Electronics, S.L. (BIELEC)  
Barcelona, Spain
- FRANCE  
● CAPA ELECTRONIC  
Bouaye, France
- Finland  
● AMAPROM OY  
Salo, Finland
- Norway  
● KREPRO AS  
Raholt, Norway

#### ■ Africa

- SOUTH AFRICA  
● PEM TECHNOLOGIES  
Gauteng, South Africa

#### ■ Asia

- INDIA  
● Le Champ Ltd. India Office  
Bangalore South India
- PHILIPPINES  
● Globaltech Automation, Inc.  
Metro Manila, Philippines
- NuPON Technology Philippines Corporation  
Laguna, Philippines

#### CHINA

- WKK China Ltd.  
● (Hong Kong Headquarter)  
Hong Kong, China
- (Shanghai Office)
- (Beijing Office)
- (Shenzhen Office)
- WKK Trading (Shanghai) Co., Ltd.  
● (Cheng Du Office)
- (Chongqing Office)
- (XiAn Office)
- WKK Electronic Equipment Ltd.  
Hong Kong, China
- YAMAZEN SHENZHEN LIMITED  
Shenzhen, China
- YAMAZEN HONG KONG LIMITED  
Hong Kong, China

#### KOREA

- WOOIL FA CO.,LTD.  
Suwon-Si, Gyeonggi-Do, Korea
- SEILIECO CORPORATION  
Kumpo-shi, Korea

#### TAIWAN R.O.C.

- SUNNIC Technology & Merchandising Inc.  
Taipei, Taiwan
- LOOVER INDUSTRIAL CO.,LTD.  
Taipei, Taiwan

#### SINGAPORE

- Blaze Technology Pte Ltd.  
UBI Tech Park, Singapore
- Hibex Mercury Pte Ltd.  
Depot Road, Singapore
- Le Champ (SEA) Pte Ltd.  
Henderson Industrial Park, Singapore

#### MALAYSIA

- Hibex Trading(M) Sdn Bhd  
● (P.Jaya Office)  
Selangor Darul Ehsan, Malaysia
- (Penang Office)  
Penang, Malaysia

#### INDONESIA

- CV.KT International  
Nagoya-Batam, Indonesia
- PT.Hibex Indonesia  
Cikarang-Bekasi, Indonesia
- PT.SKT International  
Lippo Cikarang-Bekasi, Indonesia

#### THAILAND

- CHEMTEC INDUSTRIAL PRODUCTS CO.,LTD.  
Bangkok, Thailand
- Thai Hibex Co.,Ltd.  
Bangkok, Thailand

#### ■ Oceania

##### AUSTRALIA & NEW ZEALAND

- SUBA Engineering Pty Ltd.  
● (Sydney Office)  
Bankstown NSW, Australia
- (Melbourne Office)  
Mentone VIC, Australia

#### ■ North America

##### U.S.A.

- CHRISTOPHER ASSOCIATES, INC.  
Santa Ana, California, U.S.A.
- U.S.UNI ELECTRONICS CORPORATION  
San Diego, California, U.S.A.

# 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.

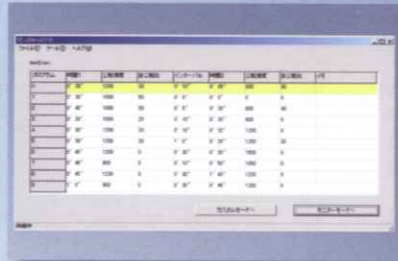


Mixing is completed in a short time.

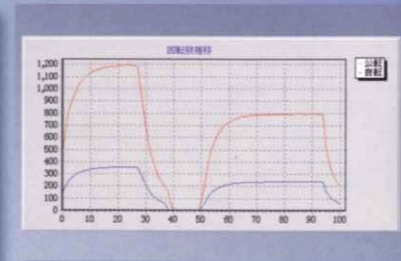
## Detailed mixing/defoaming conditions can be freely set by PC management software.

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.



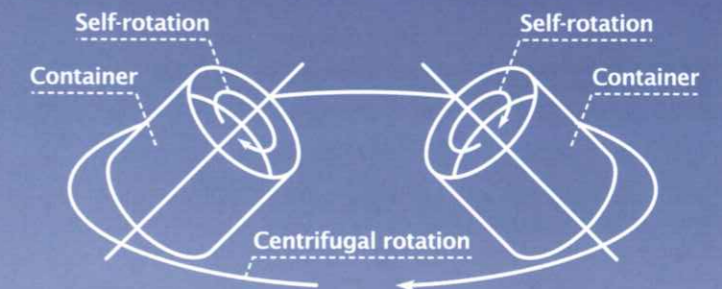
Mixing of different types of syringes



Syringe adapters



UM-117



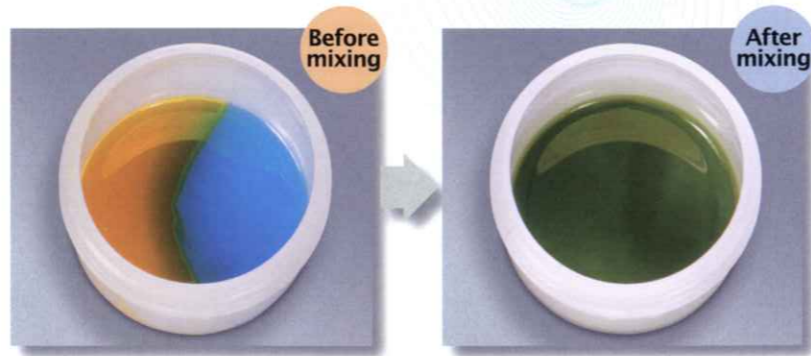
## Principle of Double (Self / Centrifugal) Rotation Method Mixer, Uni-Cyclone

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

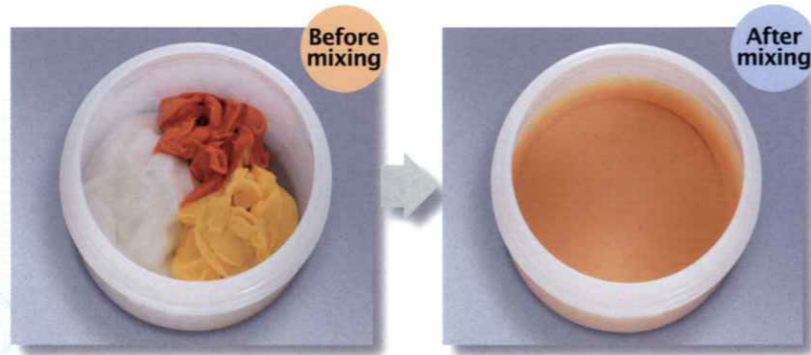
## Mixing/defoaming of epoxy resin

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



## Mixing and defoaming of lead-free solder paste

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-Cyclone

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"> <li>Spatula</li> <li>Dedicated containers 2pcs. (∅42)</li> <li>Disposable cup 2cups</li> <li>PC software</li> <li>USB cable</li> <li>Round belt (spare)</li> <li>Balance weight 50g</li> </ul>

### 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"> <li>Spatula</li> <li>Dedicated containers 2 pcs. (∅78)</li> <li>PC software</li> <li>USB cable</li> <li>Round belt (spare)</li> <li>Balance weight</li> </ul>

### 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"> <li>Spatula</li> <li>Dedicated containers 2pcs. (∅78)</li> <li>PC software</li> <li>USB cable</li> <li>Round belt (spare)</li> <li>Balance weight</li> </ul>

### 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"> <li>Spatula</li> <li>PC software</li> <li>USB cable</li> <li>Round belt (spare)</li> <li>Balance weight</li> </ul>

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"> <li>Spatula</li> <li>PC software</li> <li>USB cable</li> <li>Round belt (spare)</li> <li>Balance weight 150g/300g</li> <li>Container metal fastener</li> </ul>

# Accessories

## For UM-113S



120 ml dedicated container  
**U-101-1**  
(Set of 5)  
External diameter  $\phi$ 74  
Cup weight 52g



Disposable cup  
**U-90DC-1**  
(Set of 10)



Syringe adapter dedicated to UM-113S

Specification	Model No.
5ml	U-102S-EFM5
10ml	U-102S-EFM10



Balance weight for UM-113S  
**U-102S-3**  
50g

## For UM-117 and UM-118



300ml dedicated container  
**U-118-1**  
(Set of 5)  
External diameter  $\phi$ 78  
Cup weight 64g



Solder paste container adapter  
**U-118-500G**



120 ml container adapter  
**U-118-120G**



Syringe adapter dedicated to UM-117/118

Specification	Model No.
5ml	U-118-5CC
10ml	U-118-10CC
20ml	U-118-20CC
30ml	U-118-30CC



Balance weight for UM-117/118  
**U-118-W**

## For UM-125



Specification	Model No.	External diameter	Cup weight
300ml	U-118-1	$\phi$ 78	64g
610ml	U-115-1A	$\phi$ 95	103g
1100ml	U-115-1B	$\phi$ 118	160g



Specification	Model No.
300ml	U-115-18C
610ml	U-115-18A
1100ml	U-115-18B



Balance weight for UM-125  
**U-10S-3**

## For UM-113 Solder Paste Mixer



Solder paste container metal fasteners

Specification	Model No.
For general use (left)	U-102-1*
For Senju Metal (right)	U-102-1S



Weight rings dedicated to UM-113

Specification	Model No.
80g	U-113-W08
150g	U-102-3A*
250g	U-113-W25
300g	U-113-W30*

\*Standard accessories

## Maintenance parts



Spatula  
**UM-SPA**  
(Set of 2)



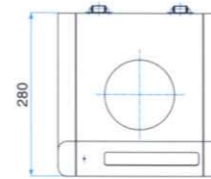
Round belts (for maintenance)

Specification	Model No.
For UM-113, UM-113S	U-103-7
For UM-117, UM-118	U-118-RB
For UM-125	U-125-7

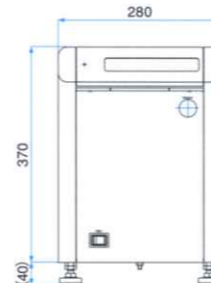
# Dimensions

Unit: mm

## UM-113 UM-113S

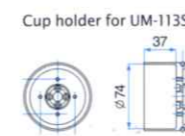
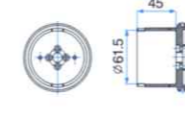


< Top view >



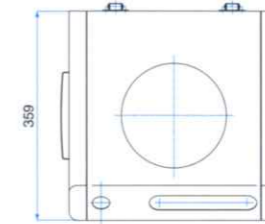
< Front view >

Cup holder for UM-113

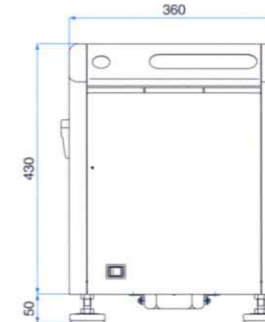


Cup holder for UM-113S

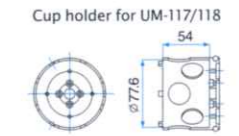
## UM-117 UM-118



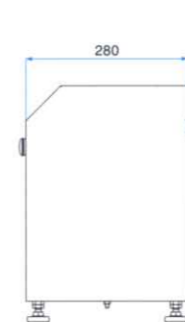
< Top view >



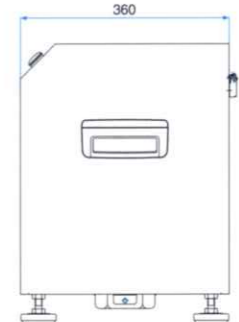
< Front view >



Cup holder for UM-117/118



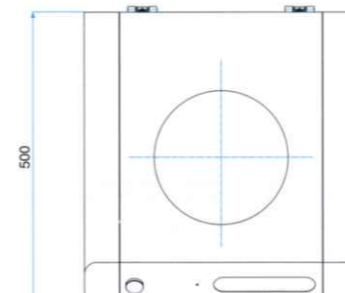
< Side view >



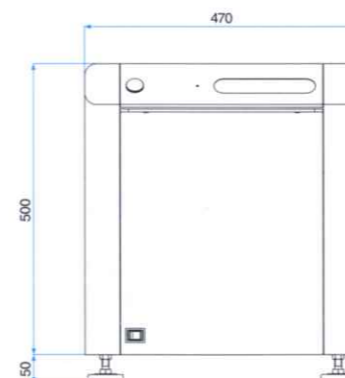
< Side view >

\* Dimensions shown above is those of the Model UM-117.  
As for the Model UM-118, there is no projection part on the bottom of the main unit.

## UM-125



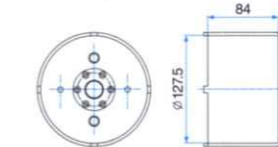
< Top view >



< Front view >



Cup holder for UM-125



< Side view >

## ■ 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, Ø 62
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 220 to 230V 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.

 **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:



**fancort industries, inc.**

31 Fairfield Place, West Caldwell, NJ 07006

1-800-fancort

[www.fancort.com](http://www.fancort.com)

Printed in Japan 08033000-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 December, 2007. Specifications and exterior described in this catalog are subject to change without notice due to improvements.