

### SOSEY

#### Automatic liquid control pioneer Nippon Sosey Kogyo corporation

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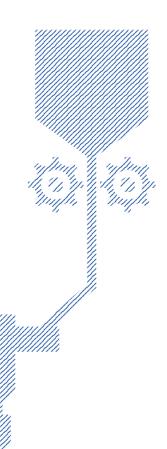
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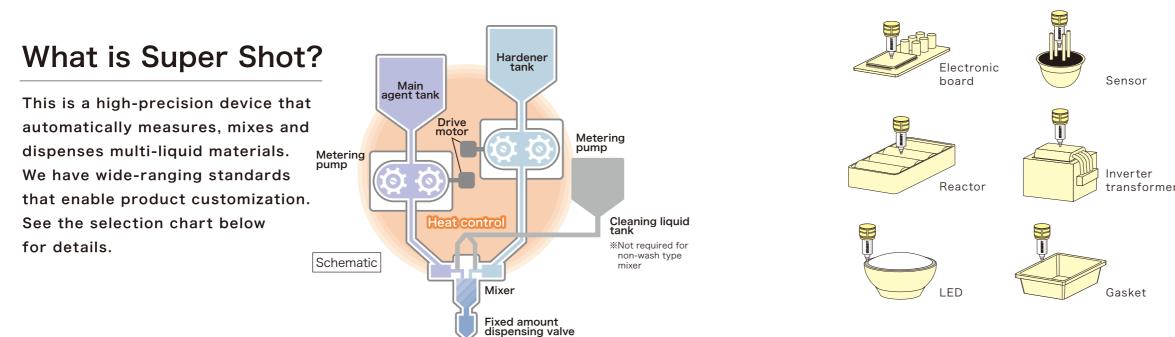
#### **Responding to diverse needs for liquid control** SOSEY LISTENS TO CUSTOMER NEEDS



We respond to a full range of needs for automatic liquid control, from very small to very large amounts centering on customized products.

## **Super Shot Series**

#### SUPER SHOT Series is used in diverse settings.

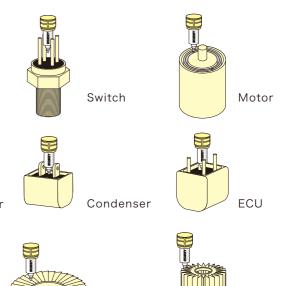


#### **SUPER SHOT Series Selection Chart**



#### **SUPER SHOT SERIES**

Filter



Grinder

Super small-amount dispenser with two ultra-precision pump units.

## **Automatic Dual-liquid Measuring Metered Dispenser**

**TWIN SOLID PUMP SYSTEM** 

# **TSP Series** Ultra-precision Measuring Compact

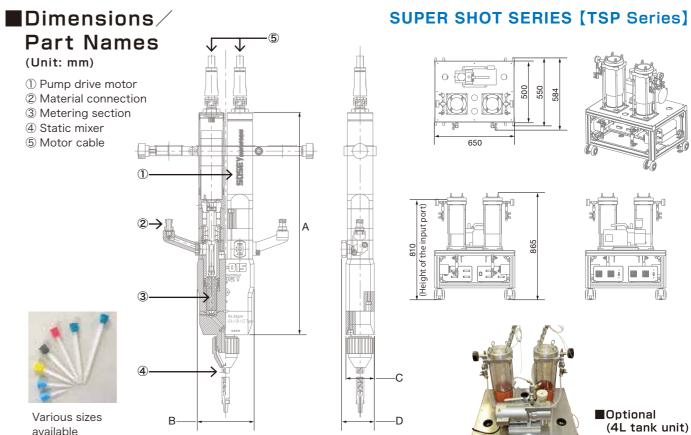
Featuring SOSEY-SOLID® pump system capable of dispensing super small amounts of 0.015 / 0.050 / 0.150 / 0.450 / 0.900ml. Perfect for low-gravity to high-gravity, low-viscosity to high-viscosity materials (\*), urethane, epoxy, silicon and other liquid materials. (%)Depending on the type of material or filler, it may be unusable or part wear may be faster



Comes with simple operation controller It can be used immediately

It is extremely light and easy to incorporate onto a tabletop robot. ※Robot sold separately.

Use Adhesive chip on smartphone. potting inside electronic components, gap filler coating, etc.



#### Main Unit Specifications \*\*Numerical value is the design theoretical value and does not warrant the performance of this device.

Name	TSP-015	TSP-050	TSP-150	TSP-500	TSP-1000
Pump size (one side)	0.015ml/rev	0.050ml/rev	0.150ml/rev	0.450ml/rev	0.900ml/rev
Pump drive motor speed	~120rpm *Differs by material				
Maximum amount dispensed (one side, theoretical value)	0.03ml/s	0.10ml/s	0.30ml/s	0.90ml/s	1.80ml/s
Minimum amount dispensed (one side, theoretical value)	0.0005ml/s	0.0017ml/s	0.0050ml/s	0.0150ml/s	0.0300ml/s
Dispensing precision	±1% **Differs by material				
Material dispensing method	PT1/4 or Luer lock				
Material supply pressure	~0.6MPa				
Material viscosity	~200,000mPa·s				
Usable temperature	~50°C				
Pump drive motor	Servo motor				
Unit weight	1.12kg 1.66kg		6kg	1.85kg	
Mixer	Possible to select diameter / number of elements				
A(mm)	235		283		319.5
B(mm)	60		65		65
C(mm)	30		32		32
D(mm)	34.5		36	6.5	36.5

#### Controller Specifications

Power supply	Single phase 100VAC 50/60 Hz
Power consumption	200W
Dispensed pattern memories	15 patterns %Selectable by external I/O
Operation mode	Timer dispensing / manual (continuous) dispensing / automatic cycle / ratio check
Air supply for syringe pressurization	Φ6 air supply Capable of adjusting air pressurization in the range of 0-0.6 MPa with built-in regulator

Specifications and outside appearance may change without advanced notice. The device is not explosion- or water-proof

Special specifications other than those noted above are available (optional). Please inquire with our sales representative if you wish to add optional specifications

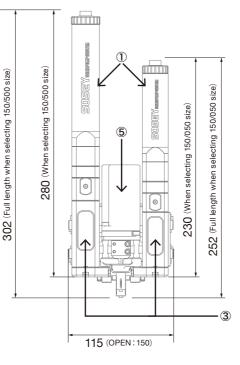
### Corresponds to difficult to mix materials **Next-generation Dynamic Disposer-Mixer**



Huse Adhesives, gap fillers, OCR

#### Dimensions Part Names(Unit: mm)

- 1 Pump drive motor
- ② Material connection
- ③ Metering section④ MRP mixer
- Mixer drive motor



#### Main Unit Specifications \*Possible to select according to mixture

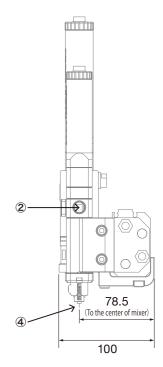
Name	015	050	150	500
Pump size (one side)	0.015ml/rev	0.050ml/rev	0.150ml/rev	0.450ml/rev
Pump drive motor speed	~120rpm *Differs by material			
Maximum amount dispensed (one side, theoretical value)	0.03ml/s	0.10ml/s	0.30ml/s	0.90ml/s
Minimum amount dispensed (one side, theoretical value)	0.0005ml/s	0.0017ml/s	0.0050ml/s	0.0150ml/s
Dispensing precision	±1% *Differs by material			
Material dispensing method	PT1/4 or Luer lock			
Material supply pressure	~0.6MPa			
Material viscosity	~200,000mPa·s			
Usable temperature	~50°C			
Pump drive motor	Servo motor			
Mixer drive motor	Servo motor			
Mixing ratio	100:3~100:100 *Differs by material			
Mixer	MRP mixer internal volume:1ml			
Unit weight	3.5kg			

#### Controller Specifications

Power supply	Single phase 100VAC 50/60 Hz
Power consumption	500W
Dispensed pattern memories	15 patterns*Selectable by exterr
Operation mode	Timer dispensing / manual (cont
Air supply for syringe pressurization	Φ6 air supply
	Capable of adjusting air pressur

Specifications and outside appearance may change without advanced notice. \*\*The device is not explosion- or water-proof.
Special specifications other than those noted above are available (optional).
Please inquire with our sales representative if you wish to add optional specifications.

#### SUPER SHOT SERIES [MRP Mixer]



rnal I/O

tinuous) dispensing / automatic cycle / ratio check

rization in the range of 0-0.6 MPa with built-in regulator

#### Next-generation Dynamic Disposer-Mixer

#### Next Generation Value 1

#### Now possible to mix materials with widely different mixing ratios and materials with differences in viscosity

[Example of use] Adhesive, gap filler, OCR, etc.

#### With the new dynamic mixing method, it is possible to use wo liquids with wide-ranging mixing ratios and viscosities. \*See the specifications chart on the back cover for details

High A-agent viscosity Static mixer compatible range **MRP** mixer compatible range Low High B-agent viscosity

Image of the corresponding range of viscosities

## **MRP** Mixer

#### Next Generation Value III

### Non-wash, disposable specifications result in improved productivity.

MRP mixer body

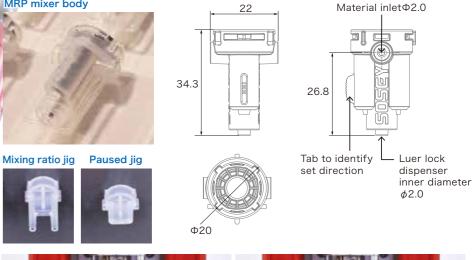
Pump drive 🖿

motor

Mixer drive motor

Mixer

Needle





#### Next Generation Value IV

#### **Combination with** our original high precision solid pump solved a range of problems

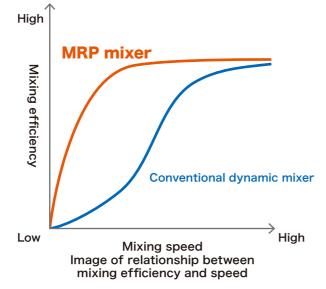
Solid pump realized high precision mixing and dispensing materials of wide-ranging viscosity and specific gravities Super lightweight, compact design makes installation on diverse types of robots possible, and we offer solutions that meet your needs. \*See the specifications chart on the back cover for details.



#### Next Generation Value

#### Achieved high mixing capacity with compact, low speed device

Mixing capacity has significantly improved compared to conventional dynamic mixers. Because of compactness and low speed, the device can be used also for short pot life materials.



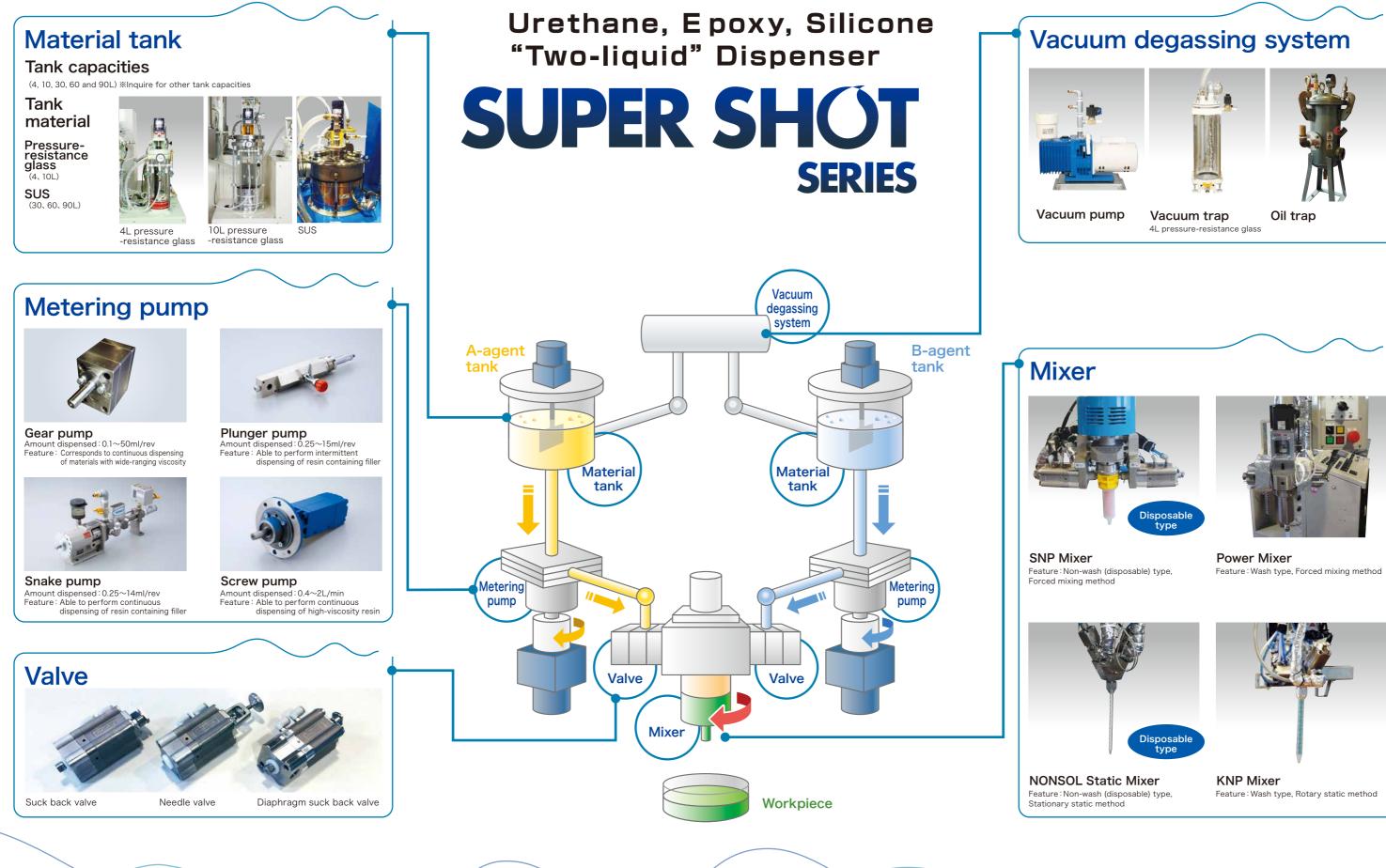
Specifications and outside appearance may change without advanced notice. \*\*The device is not explosion- or water-proo \*Special specifications other than those noted above are available (optional) Please inquire with our sales representative if you wish to add optional specifications

Disposable type makes daily cleaning unnecessary. No problems with the unwashed area seen in the cleaning type





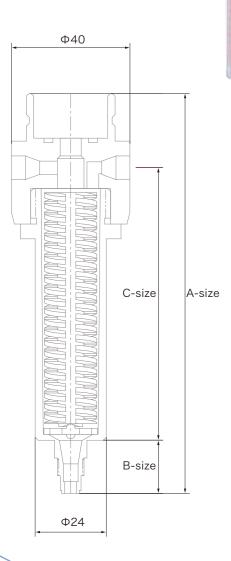
We respond to a full range of needs for automatic liquid control, from very small to very large amounts centering on customized products.







# Non-wash disposable mixer **WONDER MIX**





#### **Dimensions** / Part Names(Unit: mm)

\*Specifications and outside appearance may change without advanced notice. \*The device is not explosion- or water-proof. \*Special specifications other than those noted above are available (optional).

Please inquire with our sales representative if you wish to add optional specifications

Model	SNP-S	SNP-M	SNP-L	SNP-XL
Measurement A(mm)	92	109	135	161
Measurement B(mm)	18	18	18	18
Measurement C(mm)	49	66	92	118
Net content(ml)	6.5	8.5	12.5	16.5

\*Due to its being a resin mold product, actual product sizes may vary somewhat from those shown in the chart.

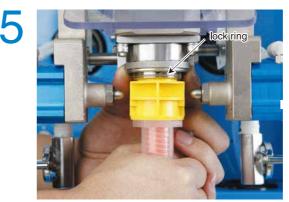
### How to attach and detach Wonder Mix



Check that D seal is affixed to the mixer head.



Place the mixer key matched with the SNP mixing head key groove and insert the hexagon shaft into the mixer.



Push up and slide the mixer lock ring downward.

11

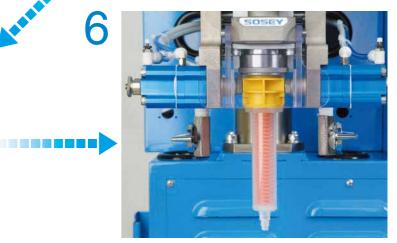


Place O-ring onto the mixer.

.....



Slide the mixer lock ring upward.



Lower the safety cover and press the mixer lock button. (in the control panel)

# **Automatic Dual-liquid Measuring Mixed Dispenser SNPSeries** Non-wash High-precision

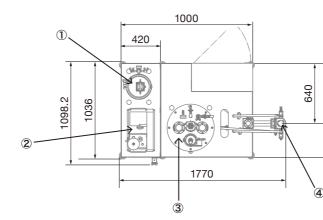
Dual-liquid mixed dispenser for urethane, epoxy, silicone, etc. Adopted disposable dynamic mixer enabling the dispenser operation for diverse materials Disposable mixer alleviates need for washing after use. Easy maintenance.

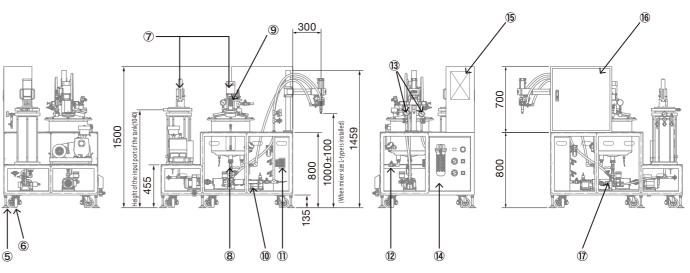
#### Use

Potting, coating, doming, heat application

#### **Dimensions** / Part Names (Unit: mm)

<ol> <li>B-agent tank %10L pressure-resistance glass</li> <li>Vacuum pump</li> <li>A-agent tank %30L SUS</li> </ol>	<ul> <li>⑥ Caster</li> <li>⑦ Tank mixing motor</li> <li>⑧ Pumping valve</li> </ul>	(9) (1) (1) (2)
<ul> <li>④ A-agent tank %SOL SOS</li> <li>④ Mixer</li> <li>⑤ Level bolt</li> </ul>		(13





#### Standard Specifications

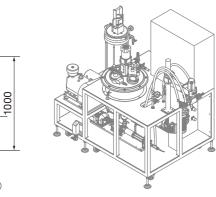
Amount dispensed	0.1~40ml/sec
Mixing ratio	100:3~100:100
Metering pump	Select from gear pump, snake pump, and
Metering pump drive motor	Geared motor
Mixer	Wonder Mix
Mixer drive motor	Servo motor
Material viscosity	~200,000mPa.s
Power supply	Three-phase 200V
Air source	0.5MP~
Unit weight	Approx. 300 kg *Differs according to specificatio

\*Specifications and outside appearance may change without advanced notice. \*The device is not explosion- or water-proof ecial specifications other than those noted above are available (optional). Please inquire with our sales representative if you wish to add optional specification

#### SUPER SHOT SERIES [SNP Series]

9 Material suction valve

- In A-agent measuring section (15) Operation panel
- D Solenoid valve
- 2 Drain valve
- ③ Pressure gauge
- (4) Air panel
- 16 Control panel
- 1 B-agent measuring section



d plunger pump
on

## **Automatic Dual-liquid Measuring Mixed Metered Dispenser STP Series**

# Ultra-precision

Featuring SOSEY-SOLID® pump system capable of dispensing super small amounts of 0.150/0.450/0.900ml/rev.

Perfect for low-gravity to high-gravity, low-viscosity to high-viscosity materials, urethane, epoxy, silicone and other liquid materials.

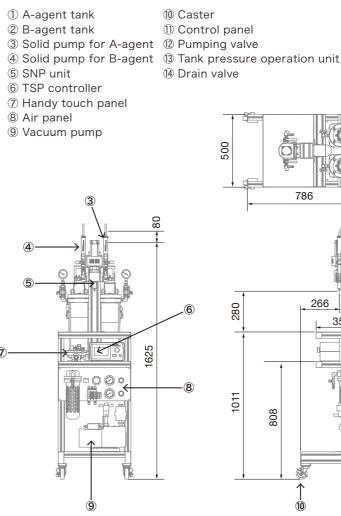
#### **⊕**Use

Various sensor capacitors, coils and transformers





#### Dimensions / Part Names (Unit: mm)

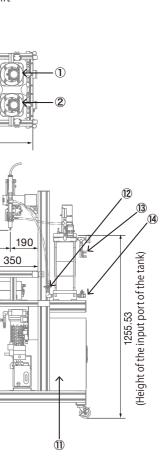


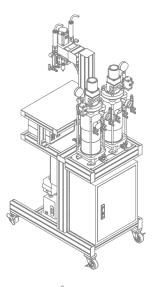
#### Comparison Table of Standard Specifications Controller Specifications

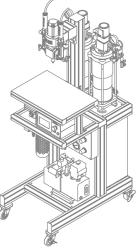
Model	150	500	1000
Pump size	0.150ml/rev	0.450ml/rev	0.900ml/
Pump drive motor speed	~120rpm *Differs by material		
Maximum amount dispensed (one side, theoretical value)	0.30ml/s	0.90ml/s	1.80ml/
Minimum amount dispensed (one side, theoretical value)	0.0050ml/s	0.0150ml/s	0.0300m
Dispensing precision	±]% ※Differs by material		
Material dispensing method	Pumped from tank		
Material supply pressure	~0.2MPa		
Material viscosity	~200,000mPa·s		
Usable temperature	~50°C		
Unit weight	200kg X* Differs according to specification		
Material tank	Two 4L-tank made of pressure-resistance gl		
Mixer	Wonder Mix		

\*Possible to select according to mixture. \*Numerical value is the design theoretical value and does not warrant the performance of this device

#### SUPER SHOT SERIES [STP Series]







1000	Power supply	Three-phase 200V
900ml/rev	Power consumption	1600W
1.80ml/s	Dispensed pattern memories	15 patterns
1.80ml/s	Operation mode	Timer dispensing
0300ml/s		manual (continuous) dispensing automatic cycle ratio check
	Source pressure air	Φ6 air supply Capable of adjusting air pressurization in the range of 0–0.6 MPa with built-in regulator

ance glass

Specifications and outside appearance may change without advanced notice \*The device is not explosion- or water-proof.

Special specifications other than those noted above are available (optional)

ease inquire with our sales representative if you wish to add optional specification

#### Compact dispenser combining gear pump and mixer in one

## **Automatic Dual-liquid Measuring Mixed Dispenser**

# TW Series Ultra-precision

High-precision gear pump and non-washing mixer combined into one unit.

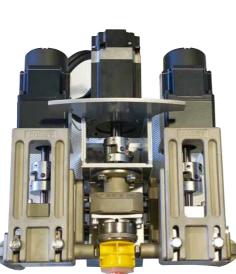
The device can be used not only on production lines but also for dispensing operations in small spaces such as laboratories.

We not only accept customized orders but offer catalogue models for short-time delivery

#### ⊕用途

Potting, coating, doming

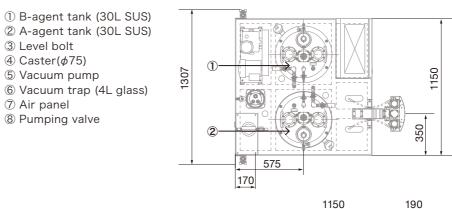


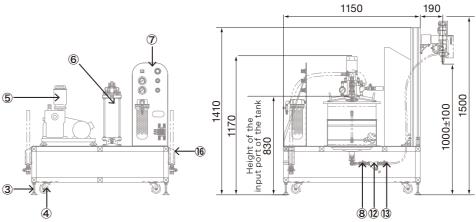




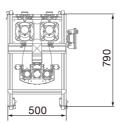
#### **Dimensions** / Part Names (Unit: mm)

#### 30L-tank specifications (Model)



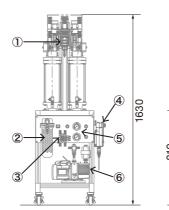


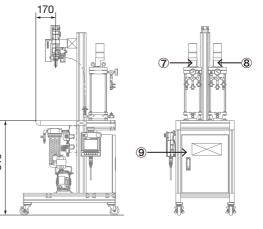
#### Dimensions / Part Names (Unit: mm) 4L-tank specifications (Model)



1) Twin module unit ② Silica gel for source pressure air ③ Solenoid valve ④ Handy touch panel (5) Air panel <sup>(6)</sup> Vacuum pump

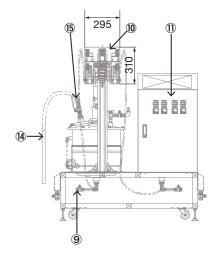
- (7) B-agent tank (4L pressure-resistance glass)
- (8) A-agent tank (4L pressure-resistance glass)
- (9) Control panel (electrical section)





#### SUPER SHOT SERIES [TW Series]

- (9) Drain valve
- 1 Twin module unit
- ① Control panel(500×836×300)
- ③ Strainer
- <sup>(13)</sup> Maintenance valve
- (4) Material suction pipe
- (5) Material suction valve
- 16 Holder for material suction pipe



#### Standard Specifications of Model STW

Amount dispensed	0.1~10ml/sec
Mixing ratio	100:2~100:100
Metering pump	High-precision gear pump
Drive motor for metering pump	Brushless motor
Mixer	Wonder Mix
Mixer drive motor	Servo motor
Material viscosity	~20,000mPa.s
Power supply	Three-phase 200V
Power consumption	30L:20A
	4L:10A
Air source	0.5MPa~
Unit weight	30L:Approx. 350 kg
	4L:Approx. 150 kg

\*Specifications and outside appearance may change without advanced notice The device is not explosion- or water-proof

Special specifications other than those noted above are available (optional).

ase inquire with our sales representative if you wish to add optional specification

Ensures injection of liquid material into the smallest areas of the product to resolve problems with air bubbles!!

# Vacuum injection system SSVSETIES Vacuum injection machine

Enables injection of liquid into areas that are difficult to fill under atmospheric injection Select from a diverse range of pumps to suit your purpose. We can suggest the vacuum chamber best suited to the product size.





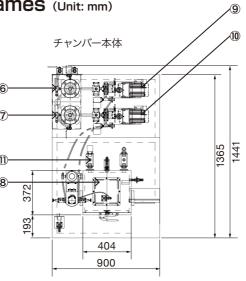
#### **⊕**Use

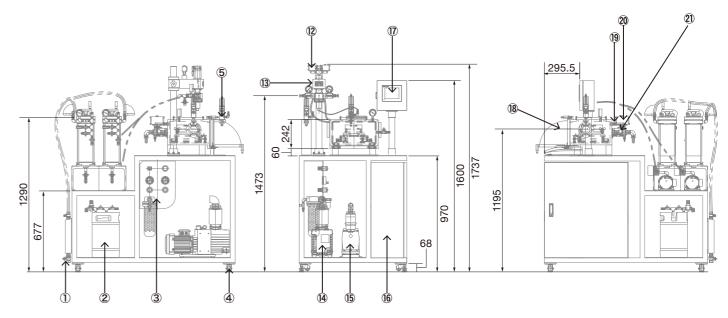
Power transformer, ignition coil, motor, hydraulic cylinder, suspension

#### Dimensions / Part Names (Unit: mm)

#### ① Material suction pipe

- ② Washing tank %10L SUS
- ③ Air panel④ Caster with adjuster
- 5 Valve holder for washing
- <sup>6</sup> B-agent tank
- (4L pressure-resistance glass) ⑦ A-agent tank
- (4L pressure-resistance glass)
- ⑧ Chamber top plate
- 9 B-agent metering unit
- ① A-agent metering unit
- ① Exhaust valve





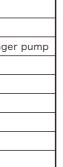
#### Standard Specifications

Amount dispensed	20ml/sec MAX
Mixing ratio	100:20~100:100
Metering pump	Select from gear pump, snake pump, and plung
Mixer	Select from Power Mixer and Static Mixer
Material viscosity	~200,000mPa·s
Usable time	30 minutes or more
Power supply	Three-phase 200V
Air source	0.5Mpa~
Unit weight	Approx. 750 kg *Differs according to specification

\*\*Specifications and outside appearance may change without advanced notice. \*\*The device is not explosion- or water-proof. \*\*Special specifications other than those noted above are available (optional). Please inquire with our sales representative if you wish to add optional specifications.

#### SUPER SHOT SERIES [SOVAC UNIT]

- 12 Air solvent switching valve
- 13 Mixer
- (4) Vacuum pump for chamber
- 15 脱泡用真空ポンプ
- 16 Control panel
- ⑦ Operation panel※Touch panel system
- 18 Chamber door
- (19) Pirani sensor
- 2 Vacuum valve (large)
- 2 Vacuum valve (small)



For large volume dispensing of low-viscosity urethane, epoxy and silicone

### **Dual-liquid low-pressure injection machine**

# LIM Series Low-Pressure Injection Machine

DSEV

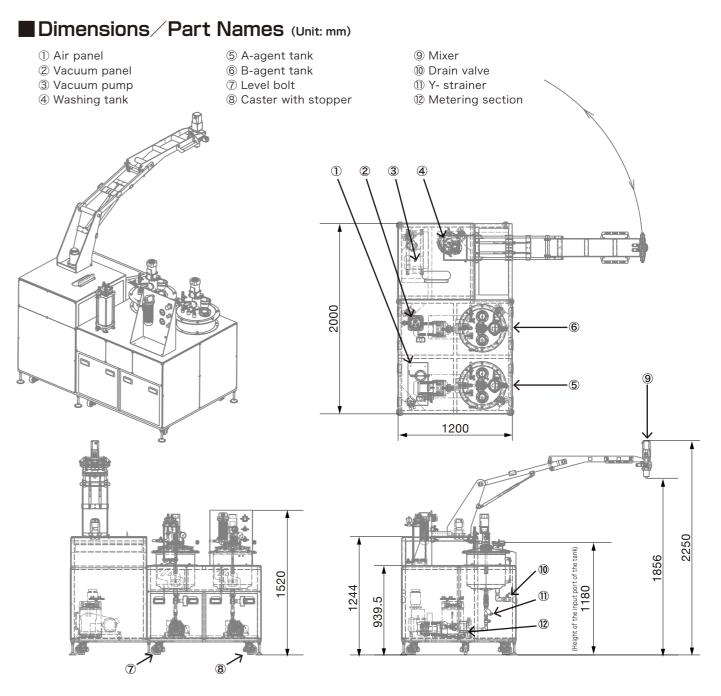
MODEL LM800

Large-volume dispenser enabling maximum dispensing of 133.3ml/sec.

Use of gear pump method for measuring enables simple change in dispensing amount by changing timer. The device can be used for diverse purposes, including prototype casting, potting, and supplying liquid to roll coaters.

#### 🕀 Use

Prototype casting, potting on large parts, and supplying liquid to large roll coaters.



#### Standard Specifications

Amount dispensed	33.3~133.3ml/sec
Mixing ratio	100:20~100:100
Metering pump	Gear pump
Mixer	Power Mixer
Material viscosity	~10,000mPa·s
Usable time	20 seconds or more
Power supply	Three-phase 200V
Air source	0.5Mpa~
Unit weight	Approx. 750 kg *Differs according to specification

%Specifications and outside appearance may change without advanced notice. The device is not explosion- or water-proof.
%Special specifications other than those noted above are available (optional). Please inquire with our sales representative if you wish to add optional specifications.



#### SUPER SHOT SERIES [LM-800]

00:100		
	00:100	1
		1
		1
		1
		1
		1
		1
		1
		1