

# SX

Autoclaves **SX series**

[SX-300] [SX-500] [SX-700]

**TOMY**



SPEEDY AUTOCLAVES SX SERIES



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[SX-300] [SX-500] [SX-700]

## Maximized chamber ca



[SX-300]



[SX-500]



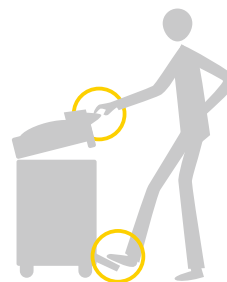
[SX-700]

**NEW!**

### Easy operation using the “Top-open lid”



A top-open lid, which can be operated easily with a single hand or foot, is provided with the SX autoclaves. To open the lid, the lid lock is released by stepping on the foot pedal located at the bottom while pressing the lid down. The lid can be opened with minimal effort owing to mechanical assistance. In addition, the lid can be closed easily just by pressing it down.



# Capacity at Minimum installation space

SPEEDY AUTOCLAVES

## Saving the installation space

The main body is very compact owing to the design which provides thorough installation space saving. In addition, installation space at the side of the main body which is required for models employing a slide-open lid, which is not necessary at SX autoclaves top-open lid. Even when several SX autoclaves are installed side-by-side, the necessary installation space is minimized.

## Cooling fan provided as a standard feature

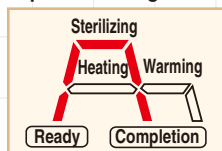
A rapid air-cooling function (vessel-cooling fan) permitting reduction of chamber cool down time is provided as a standard feature. This is most appropriate for lowering the temperature rapidly on completion of the cycle. The time required for lower the temperature is much reduced by employment of the cooling fan in comparison with natural cooling.

## Sterilizing course selection

The optimal sterilizing course can be selected from among five courses, such as the liquid sterilizing course in addition to that for normal sterilization.

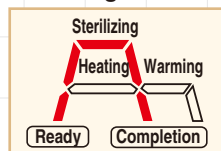


### Liquid sterilizing course



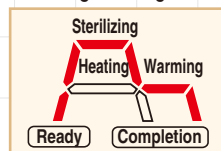
This is most appropriate course setting for prevention of sudden sample boiling

### Sterilizing course



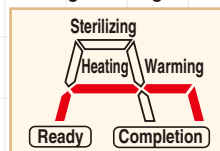
Course for normal sterilization

### Sterilizing-warming course



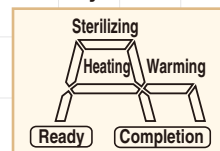
Prevents culture media from coagulating after sterilization.

### Heating-warming course



Extremely convenient for dissolving culture media and warming

### Memory recall



Preferred operating conditions can be recalled up easily.

## Easily viewable "work monitor"

The LED display shows working status for easy monitoring. The process being performed is indicated by an LED indication lamp blinking in red.



The illuminated display on the operating panel shown in the picture is different from the actual display at the time of operation.

## Large indication lamp "Operated"

An easily viewable large indication "Operated" is provided at the upper section of the operating panel. Depending on the pressure status (normal pressure/pressure is applied), the displayed color changes.

## Auto-variable exhaust speed

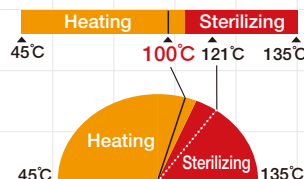
A function allowing the exhaust valve to open automatically after completion of sterilization is provided. The exhaust speed can be set to one of six levels (set to variable for liquid sterilization).

## Lid interlock

A safety device (lid interlock mechanism) for locking the lid during operation is provided. A high level of safety is assured to prevent unanticipated accidents.

## Setting to 100 °C is possible.

Variable temperature setting such as to 100 °C as well as to 121 °C has been made possible. The temperature can be set within the range from 45 °C to 135 °C in steps of one degree (heating mode up to 104 °C).



## Water level detector

A safety device (water level detector) for preventing dry heating is provided. The device is designed to detect the water level through the micro electrolytes of the sterilizing water.

## Pressure fine adjustment function

When the balance between the temperature and pressure deviates during sterilization, fine exhausting is carried out automatically in order to adjust the best chamber condition.

## Timer function

The operation starting time can be preset easily. By presetting the start of operation, otherwise wasted periods at night or early morning, can be used effectively.

## OPTION

### External sensor for the articles to be sterilized

Sensor for directly detecting the temperature of articles to be sterilized. More reliable sterilization monitor can be carried out.

### Data output

The temperature data, pressure data, etc. can be exported. The temperature can be recorded when the external recorder is connected.

### External sensor and recorder

A temperature sensor and recorder independent of the autoclaves. The chamber temperature can be recorded.

## Functions & Features

- Liquid sterilizing
- Heating
- Warming
- Check
- Last-run memory
- Built-in steam exhaust bottle
- Flat internal surface of the chamber
- Lid opening/closing detection mechanism
- Exhaust bottle detection mechanism
- Leakage breaker provided

## Specifications

| Model                                |               | SX-300  | SX-500   | SX-700  |
|--------------------------------------|---------------|---|--|---|
| Operating temperature range          | Sterilizing   | 105~135°C (0.019MPa~0.212MPa)   |  |   |
|                                      | Heating       | 45~104°C (0~0.015MPa)   |  |   |
|                                      | Warming       | 45~95°C   |  |   |
| Maximum operating pressure           |               | 0.263MPa  |  | 0.25MPa   |
| Temperature                          | Display       | Digital   |  |   |
| Pressure gauge                       | Display       | Analog  |  |   |
|                                      | Display range | 0~0.4MPa  |  |   |
| Heat source                          |               | 1.5 kW electric heater  | 2.0 kW electric heater   | 3.0kW electric heater   |
| Safety device                        |               | • Water level sensor • Current leakage breaker • Lid interlock • Over-heat prevention • Over-pressure prevention<br>• Open temperature sensor detection • Safety valve  |  |   |
| Time                                 | Display       | Digital   |  |   |
|                                      | Display range | 0 : 00~9 : 59 (changeable)  |  |   |
|                                      | Heating       |   |  |   |
|                                      |               | 0~99 hours  |  |   |
| Chamber dimensions                   |               | φ 325×553mm   | φ 325×733mm  | φ 370×774mm   |
| Effective diameter × Effective depth |               | φ 315×458mm   | φ 315×638mm  | φ 360×675mm   |
| Chamber capacity                     |               | Effective internal volume: 36 L<br>Internal volume of the chamber: 44 L   | Effective internal volume: 50 L<br>Internal volume of the chamber: 58 L                      | Effective internal volume: 69 L<br>Internal volume of the chamber: 79 L |
| Chamber material                     |               | SUS304  |  |   |
| Dimensions (mm)                      |               | 410W, 477D, 790H (With projection: 574 D)   | 410W, 477D, 970H (With projection: 574 D)  | 470W, 528D, 1003H (With projection: 625 D)                              |
| Weight                               |               | 50kg  | 60kg   | 72kg  |
| Rated voltage                        |               | 120V AC   |  |   |
| Power input                          |               | 13A/120V  | 17A/120V   | —   |
|                                      |               | 7A/230V   | 9A/230V  | 13A/230V  |
| Required power supply                |               | Single-phase 120 V AC (50/60 Hz) 15 A or more<br>Single-phase 230 V AC (50/60 Hz) 10 A or more  | Single-phase 120 V AC (50/60 Hz) 20A or more<br>Single-phase 230 V AC (50/60 Hz) 15A or more | Single-phase 230 V AC (50/60 Hz) 15A or more                            |
| Power consumption (calorific power)  |               | 1.5kW (1290kcal/h)  | 2kW (1720kcal/h)   | 3kW (2580kcal/h)  |
| Environmental Conditions             |               | When operating the autoclave, observe the environmental conditions given below.<br>Ambient temperature: 10 to 35°C<br>Atmospheric pressure: 860 to 1060hPa<br>Relative humidity: 30 to 85%<br>Maximum gradient: 2°  |  |   |
| Accessories                          |               | Stainless basket (φ 300 x181 mm) 1  | Stainless baskets (φ 300 x 181 mm) 2   | Stainless baskets (φ 345×181mm) 2                                       |
|                                      |               | Chamber bottom plate 1, Caster stoppers 4, Operation manual 1, Clear folder (for storing the operation manual) 1,<br>Screw (for attaching the clear folder) 1, Warranty card 1, Customer card 1, Inspection sheet 1 |  |   |

## Accessories



### Stainless Basket

The entire basket is made of punched metal and is designed for easy penetration of steam.



### Stainless Bucket

Bucket without holes to prevent leakage of liquid from articles being sterilized.



### Stainless Long Basket

Optimal for sterilizing the sterilizing bag. The structure of the lower section is without holes.



### Stand for Testing Durham's Tubes

Convenient for sterilizing test tubes containing culture media. Can be used as a stand independently.



### Sterilizing Bag

Sterilizing bags fit to the vessel dimensions of each model are available.

#### Sales Office:

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#### Manufacturer:

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#### TOMY SEIKO CO., LTD.

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