### Pointer SA (Manual) Series

Pointer series are pressure control autoclaves, have two versions; the "Manual" version (SA), which requires manual intervention during a session.





### Pointer SA (Manual) Series

#### Features

#### Pointer SA (Manual) Series

- Independent steam generator
- Wide range of usage
- Low water indication (Optional)
- Stainless steel chamber Jacket, door support and steam generator
- Double wall chamber design
- Pre-heating program
- Cylindrical chamber volume: 100, 143, 196, 350 (L)





### Pointer SA (Manual) Series

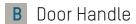
Pointer SA (Manual) Series External View

#### Pointer-SA (Cylindrical chamber)

A Temp. of Chamber

C



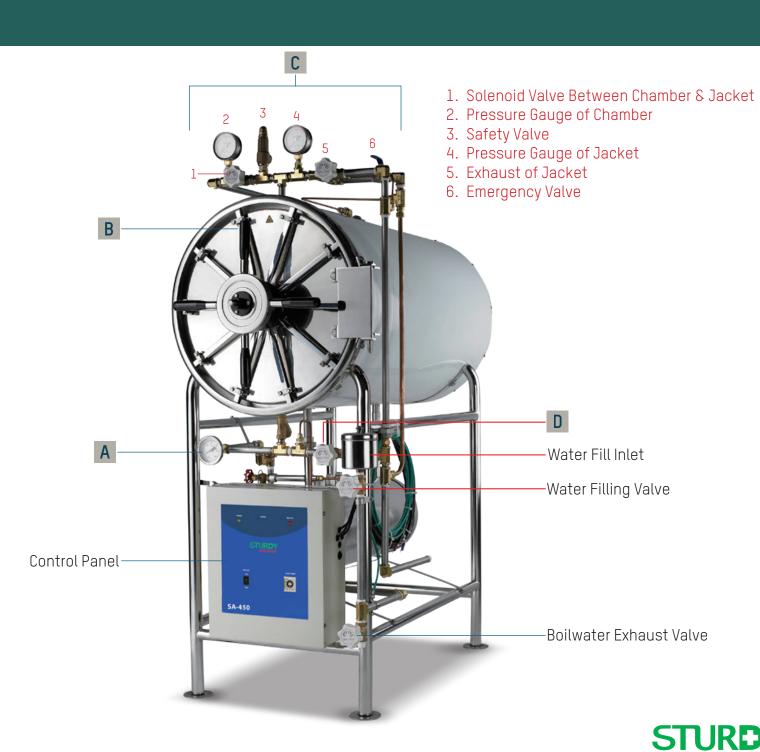




**D** Exhaust of Chamber

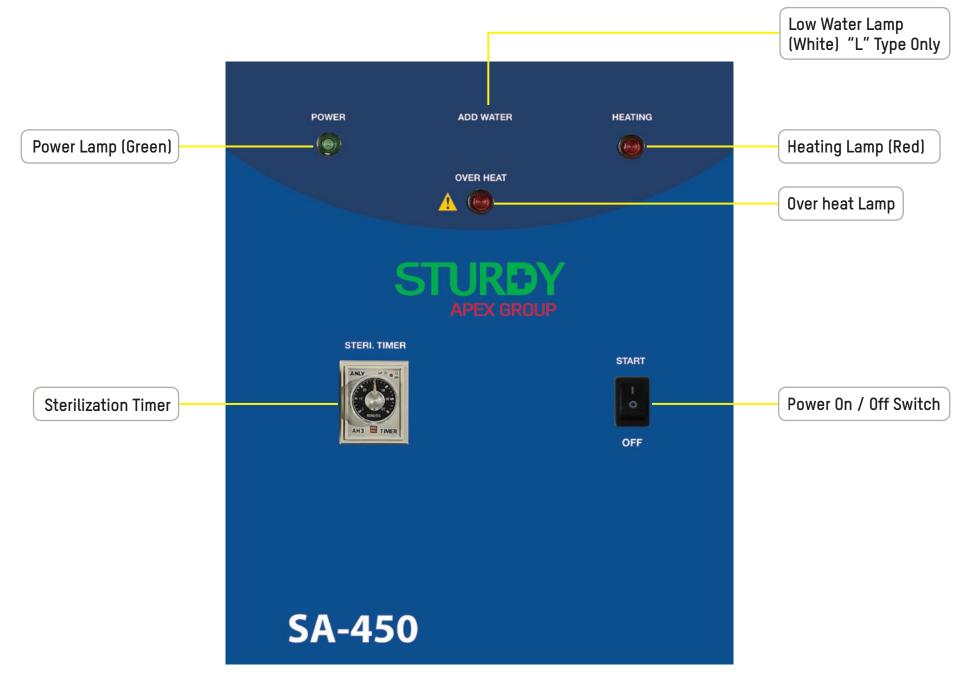






### Pointer SA (Manual) Series

Pointer SA (Manual) Series Control Panel





#### Pointer SA (Manual) Series

Certifications

Sturdy is manufactured in compliance with the following directives and standards:

- 93/42/EEC
- Class IIB (European Directive for Medical Devices)
- 2014/68/EU (Pressure Equipment Directive)
- EN 285 (Large Steam Sterilizers),
- EN 13060 (Small Steam Sterilizers)
- EN 61010-1/-2-040 (Safety Requirements for Electrical Equipment for Measurement
- Control And Laboratory Use Part 1 and Part 2)
- EN 61326-1 (Electrical Equipment for Measurement
- Control And Laboratory Use EMC Requirements Part 1: General Requirements)
- ISO 13485 (Quality Management/Certification)



## Pointer SA (Manual) Series

#### Pointer SA (Manual) Series Specifications

| SPEC/Model NO.                 | SA-400                       | SA-450            | SA-500            | SA-600            |  |  |  |
|--------------------------------|------------------------------|-------------------|-------------------|-------------------|--|--|--|
| Chamber Capacity (L)           | 100 143                      |                   | 196               | 350               |  |  |  |
| Chamber Size                   | /·00 ·· 000                  | 450 x 900         | 500 x 1000        | 610 x 1200        |  |  |  |
| Diam x Depth (mm)              | 400 x 800                    |                   |                   |                   |  |  |  |
| Overall Dimensions             | C70 v 1500 v 1070            | 670 x 1650 x 1250 | 670 x 1660 x 1290 | 800 x 1700 x 1475 |  |  |  |
| $W \times H \times D (mm)$     | 630 x 1520 x 1070            |                   |                   |                   |  |  |  |
| Voltage (V)                    | 230 / 380 (Mono / Tri phase) |                   |                   |                   |  |  |  |
| Heater (KW)                    | 7                            |                   | 9                 | 12                |  |  |  |
| Water Fill *                   | Manual                       |                   |                   |                   |  |  |  |
| Chamber Type                   | Cylindrical                  |                   |                   |                   |  |  |  |
| Pressure Option (bar)          | 1.4                          |                   |                   |                   |  |  |  |
| Selectable Sterilization Timer | 0-60 min.                    |                   |                   |                   |  |  |  |
| Selectable Dry Timer           | 0-60 min.                    |                   |                   |                   |  |  |  |
| Digital Printer                | N/A                          |                   |                   |                   |  |  |  |
| 6-Point Temp Sensor Recorder   | N/A                          |                   |                   |                   |  |  |  |
| 1-Point Temp Sensor Recorder   | N/A                          |                   |                   |                   |  |  |  |
| Liquid                         | 0                            |                   |                   |                   |  |  |  |

<sup>\* &</sup>quot;Manual" - Water must be added manually. Manual water fill with optional piping.



#### Pointer SA (Manual) Series

#### Pointer SA (Manual) Series Specifications

| SPEC/Model NO.                     | SA-400 | SA-450 | SA-500 | SA-600 |  |  |  |  |
|------------------------------------|--------|--------|--------|--------|--|--|--|--|
| Temperature Indicator              | Gauge  |        |        |        |  |  |  |  |
| Pressure Indicator *2              | Gauge  |        |        |        |  |  |  |  |
| Progress Indicator (bar or lights) | S      |        |        |        |  |  |  |  |
| Power Indicator                    | S      |        |        |        |  |  |  |  |
| Pressure Auto Lock                 | 0      |        |        |        |  |  |  |  |
| Reset                              | N/A    |        |        |        |  |  |  |  |
| Standby * <sup>3</sup>             | N/A    |        |        |        |  |  |  |  |
| Program Selector                   | N/A    |        |        |        |  |  |  |  |
| Pre-Vacuum                         | N/A    |        |        |        |  |  |  |  |
| Post Dry Vacuum                    |        | N/A    |        |        |  |  |  |  |
| Water Pump                         |        | N/A    |        |        |  |  |  |  |

Note: "S" - Standard configuration. "0" - Optional configuration.

#### Other notes:

- Standard Chamber / Jacket / Door / Housing are made of Stainless Steel #304. #316 Stainless steel optionally avaiable for Chamber / Jacket / Door.
- Heater material is Stainless Steel #316.
- Standard Accessories: Tray\*1, Glass Viewer Tube \* 2
- Optional Accessories: Trolley / Plate Set / Basket
- Sturdy also offers customized sizes up to 2000 L.



<sup>\*2 &</sup>quot;Gauge" - Includes both Jacket and Chamber pressure gauges.

<sup>\*&</sup>lt;sup>3</sup> "Standby" - Allows the Big Autoclave to maintain jacket temperatures betweeen sterilization sessions.

### Pointer SA (Manual) Series

#### Comparison Table - Floor Stand Series Feature Comparison

| Model NO. Specification                            | НР                        | SAT        | SAP   | Pointer-Auto                    | Pointer-Manual |  |
|--|---------------------------|------------|---|---------------------------------|----------------|--|
| Control System                                     | Digital Temp. PLC Control |            | Mechanical Pressure Control Optional: (T) for Digital Temp. Control | Mechanical Pressure Control     |                |  |
| Program for selection Wrapped/Unwrapped/Liquid     |                           | Yes        |   | N/A                             |                |  |
| Air Removal  | Vacuum P                  | ump        | Gravity   |                                 |                |  |
| Pre-Vacuum Function                                | Yes                       |            | N/A   |                                 |                |  |
| Post(Dry)-Vacuum Function                          | Yes                       |            | Optional (V)  |                                 | N/A            |  |
| Dry function                                       |                           | Yes (Auto) |   |                                 |                |  |
| Printer & USB storage                              | Yes N/A                   |            |   |                                 |                |  |
| 1-point temp. recorder                             | N/A                       | Yes        | Optional (X)  | N/A                             |                |  |
| 6-point temp. recorder                             | N/A                       |            | Optional (Y)  | N/A                             |                |  |
| Double Door  | Optional (D)              |            |   | N/A                             |                |  |
| Fill water system* (Water pressure 2 bar required) | Auto                      |            |   | Manual<br>Optional (B) for auto | Manual         |  |
| Chamber/Jacket Pressure display                    | Gauge / LCD Display       | Display    |   |                                 |                |  |
| Stand-by Switch                                    | Yes                       |            | N/A   |                                 |                |  |
| Emergency/Reset Switch                             | Yes                       |            |   | N/A                             |                |  |
| Add-Water Pump                                     | Optional (W)              |            |   | Optional (BW)                   | N/A            |  |
| Water level Protection                             | Yes Optional (I           |            |   | Optional (L)                    |                |  |
| Pressure door auto-lock                            | Yes Optional (K)          |            |   |                                 |                |  |

Option Codes (e.g. Optional (V)) listed in the table above are only reference codes used by other documentation.



### Pointer SA (Manual) Series

**Option Codes** 

Option Codes (e.g. Optional (V)) listed in the table above are only reference codes used by other documentation.

B: AUTO-ADD WATER PLUMBING (WATER PRESSURE OF 2 BARS REQUIRED)

D: DOUBLE DOOR DEVICE

K: PRESSURE DOOR AUTO-LOCK DEVICE

L: WATER LEVEL CONTROLLER (LOW WATER INDICATOR)

T: DIGITAL DISPLAYED TEMP. CONTROLLER

V: DRY VACUUM PUMP

W: ADD WATER PUMP

X: 1-POINT TEMP. RECORDER

Y: 6-POINT TEMP. RECORDER



### Pointer SA (Manual) Series

Accessories





**B** Plate Set



C.1 Optional Trolley



**D** Filter



C.2 Optional Trolley



