



## Autoclave (SMT-AC-MP14)

The ESOLS Autoclave (Model: SMT-AC-MP14) is a high-performance upright steam sterilization system designed for industrial and laboratory applications, particularly for pre-extraction treatment in edible and non-edible oil processing. With a large working capacity of 150–200 liters, the autoclave is engineered to deliver uniform and reliable sterilization at operating temperatures up to 134 °C and working pressures ranging from 15 to 30 psi. Its Stainless Steel 304 chamber, coupled with durable stainless steel baskets, ensures corrosion resistance, hygiene, and long service life under continuous steam operation.

The SMT-AC-MP14 is equipped with automatic electrical heating controlled by a microprocessor, providing precise temperature regulation with stability of  $\pm 1$  °C. Air removal from the chamber is handled automatically through a solenoid valve, ensuring effective steam penetration and consistent sterilization. Safety and convenience are enhanced through features such as a pressure gauge, pressure safety valve, temperature safety control, and a digital timer that initiates the sterilization cycle only after the preset pressure is achieved. Integrated DAQ software supports real-time monitoring, graphical visualization, and secure login access, while USB connectivity and compatibility with Windows 7, 8.1, and 10 make this autoclave a modern, reliable, and user-friendly solution for industrial and research environments.

## TECHNICAL SPECIFICATIONS

### Specifications:

- **Capacity:** 150-200 liters
- **Material:** Stainless Steel (SS), minimum thickness 3mm
- **Lid:** Pressure-sealing lid for secure operation
- **Basket:** Stainless steel basket for convenient product loading and unloading
- Pressure gauge, pressure safety valve, temperature safety control, digital timer, the sterilization cycle timer starts to count only after preset pressure is achieved.
- Automatic electrical heating controlled by microprocessor Air in the chamber should be removed by solenoid valve automatically.
- Auto start after power failure



**Technical Data:**

**Operation**

- **Heating System:**
  - Equipped with an auto heating system with digital control for precise temperature regulation
  - Digital Temperature control and display
  - Temperature Stability  $\pm 1^{\circ}\text{C}$
- **Steam Supply:**
  - External steam supply required from a separate steam boiler/generator
- **Steam Pressure:**
  - Operating pressure: 15-30 PSI
  - Safety-tested at 30 PSI or 2.068 bar

**Control**

- Touch LCD:
- Set Control parameters (Temperature, Pressure and Time).
- Loads control (On/Off).
- Error Indicator.
- Software:
- DAQ Software for monitoring and control.
- Graphical visualization.
- Security mechanism for login.
- USB Connected
- Compatible with Windows 7,8.1,10.

