



Homogenizer (SMT-ST-H18)

The ESOLS Engineering Homogenizer, Model SMT-ST-H18, is a robust and high-performance solution designed to meet the diverse needs of industrial and commercial mixing applications. With a 500-liter capacity, this machine is engineered using food-grade SS-304 stainless steel for the main tank, ensuring hygienic and corrosion-resistant operation. The unit features a double-jacketed design using SS-201 and mild steel for enhanced insulation and durability, making it ideal for both heating and cooling processes. Whether used in dairy, cosmetics, or pharmaceutical production, the SMT-ST-H18 guarantees consistent particle size reduction and stable emulsions.

Equipped with a 5 HP, 2800 RPM motor and a three-phase inverter, this homogenizer offers superior energy efficiency and operational flexibility. Its modern touchscreen LCD interface allows precise control of motor with options for manual and automatic operation, ensuring ease of use for operators and process engineers. Built with attention to detail and industrial-grade reliability, the SMT-ST-H18 homogenizer is the perfect blend of performance, technology, and safety, ready to support demanding production environments with confidence.

TECHNICAL SPECIFICATIONS

Specifications:

- Heavy-duty build for industrial and laboratory-grade homogenization.
- SS-304 grade tank ensures food-grade and corrosion-resistant processing.
- Double-jacket tank design allows thermal insulation or heating/cooling fluid circulation.
- Inverter-based control allows high-efficiency single-phase operation.
- User-friendly touch lcd with real-time control and status monitoring.
- Set rpm, temperature and time to control the process with touch lcd.
- Suitable for dairy, cosmetics, pharmaceutical, and food processing industries
- Process control via PID. If temperature increase in main tank from set point its control the speed of motor automatics.



Technical Data:

- **Main Tank:**
 - **Main Tank Material:** Stainless Steel (SS-304)
 - **Main Tank Thickness:**
 - Side Walls: 14-gauge
 - Bottom Plate: 3 mm thick SS-304
 - **Tank Capacity:** 500 Liters
 - **Double Jacket:** Stainless Steel (SS-201), 16-gauge
 - **Jacket Bottom Support:** Mild Steel (MS), 3 mm thick
 - **Mounting Legs:** SS tubular legs for support and stability
- **Motor & Drive System**
 - **Motor Rating:** 5 HP (Horsepower)
 - **Motor Speed:** 2800 RPM
 - **Motor Connection:** Three-phase (for motor)
 - **Stirring Shaft:** Vertically mounted downward drive
- **Power & Control**
 - **Operating Voltage:** 380V AC 3-phase
 - **Inverter Rating:** 5 HP Inverter Drive
 - **Control Panel:** Touchscreen LCD
 - Real-time RPM display on LCD
 - Real-time temperature display on LCD
 - Auto and manual operation modes using PID
 - RPM adjustment settings on LCD
 - Motor ON/OFF control via LCD