

Oil Bath (Large Capacity)

BOA200/310

Operating temp. range	RT+10°C~200°C	RT+10°C~270°C
	BOA200	BOA310

Large capacity 37L oil bath with temperature control of up to 200/270°C

Operation and functions

- High temperature distribution accuracy by adopting jet stirring
- Advanced supportive functions
- Standard equipped with external alarm output, temperature output terminal (4~20mA, 1~5V adjustable) RS485 communication function, key lock function, calibration offset function

Safety features

- 3 overheating preventors (Heater cut off automatically when reaching setting temperature + 6°C, overheating preventor, Individual overheating preventor)
- Standard equipped with emergency stop switch. Forces cut off of the overcurrent circuit in case of emergency
- Float switch for empty boil prevention
- Float switch for oil overflow prevention
- Glass control panel protect from liquid dripping
- Large operation lamp lighting during operation for attention
- Self diagnostic function, overheat prevention device, over current leakage breaker, key lock function, power failure compensation function

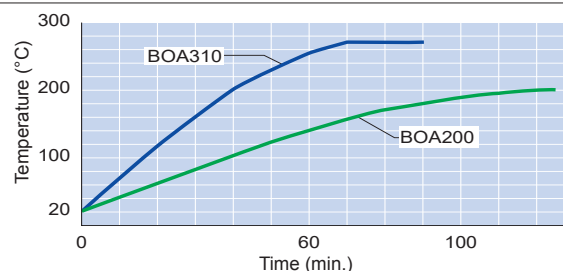


Operate with exhaust device such as fume hood

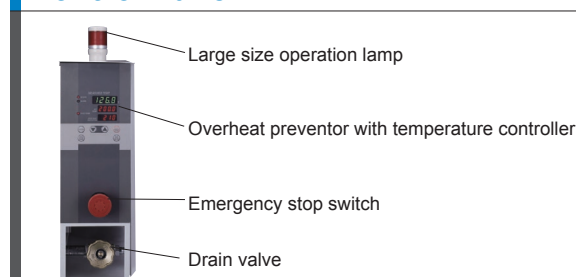


BOA200

Temperature Rising Curve



Control Panel



Recommended silicone oil

Silicone oil is one of the heat transfer media. Please select silicone oil (heat resistant dimethyl silicone oil, viscosity 100mm²/s [cSt] or less)

Maker	Toshiba Silicone (or equivalent)	
Product name	TSF458-50	TSF458-100
Recommended temp.	200°C or less	200°C to 270°C
Appearance	Pale yellow transparent	Pale yellow transparent
Specific gravity (25°C)	0.961	0.963
Viscosity (25°C)	50mm ² /s (cSt)	100mm ² /s (cSt)
Volatilization (150°C, 24h)	0.3%	0.3%
Viscosity temperature coefficient	0.59	0.59
Flash point	325°C	342°C
Pour point	-50°C or less	-50°C or less
Viscosity increase rate (300°C, 168h)	40%	35%

Degradation rate (change in viscosity) of silicone oil is different at different temperatures.

When using TSF458-100 over 200°C, viscosity barely changes, 1000 hours at 250°C and 100 hours at 270°C. Please inquire with silicon oil maker when purchasing.

Specifications

Product code	222111	222112
Model	BOA200	BOA310
Operating temp. range*1	RT+10 to 200°C	RT+10 to 270°C
Temp. adjustment accuracy*1	±0.1°C	
Temp. distribution accuracy*1	±0.2°C	±0.3°C
Max. temp. reaching time*1	120 min.	70 min.
Temp. control	PID control	
Sensor	Double sensor: Pt100Ω (Temp. controller) + K Thermocouple (Overheat prevention device)	
Operation function	Fixed Operation	
Stirring method	Water Jet Stirring	
Heater	SUS316 Pipe Heater 2kW	SUS316 Pipe Heater 4.5kW
Safety device	Electric over current leakage breaker, Self diagnosis function, Temp. sensor error, Heater error, Automatic overheat prevention function, Overheat prevention device, Independent overheat prevention device (BOA200 fixed at 230°C, BOA310 fixed at 300°C), Oil level overflow detection float switch, Detection float switch, Emergency stop switch	
Other functions	Drain valve, Large operation indicator lamp, External alarm output terminal, Temp. output terminal (1 to 5V, 4 to 20mA switching type), RS485 communication function, key lock function, Power failure compensation function, Calibration offset function, External communication adapter (option)	
Effective internal dimensions	W296×D340×H270mm	
Bath capacity	37L	
External dimensions*2	W531×D520×H578 (oil bath depth 397) mm	
Power source (50/60Hz)	AC220V 10A Single phase with step-down transformer	AC220V 21A Single phase with step-down transformer
Weight	Approx. 37kg	
Accessories	Shelf 1pc., lid 1pc.	

*1 The performance data is based on a set temperature of 200°C, room temperature of 20°C, no load, rated power supply voltage of 50Hz, and the use of Toshiba TSF458-100. The performance will vary depending on the ambient temperature, the silicone oil used and the operating temperature.

*2 Do not include protrusions.

The length of the power cord is about 2m outside the unit.