

## Specifications: High-Temperature Inert Gas Oven INH Series

Model	INH-9N1	INH-21CD	INH-51N2	INH-100N2
System	Forced circulation (side flow)			
Max. operating temperature (*1)	600°C			
Ordinary operating temperature range (*1)	RT +60 to 600°C			
Temperature profile accuracy (*2)	±8°C (at 600°C), ±5°C (at 350°C)			
Final oxygen concentration	20 ppm or less			
Time to reach max. temperature (Reference value) (*1)	120 minutes or less (RT +60 to 600°C)	90 minutes or less (RT +60 to 600°C)	90 minutes or less (RT +60 to 600°C)	
Time to reach 20 ppm	50 minutes or less (N <sub>2</sub> injection 50 L/min)	60 minutes or less (N <sub>2</sub> injection 250 L/min) injection 90 L/min)	90 minutes or less (N <sub>2</sub> injection 250 L/min) injection 150 L/min)	90 minutes or less (N <sub>2</sub> injection 250 L/min) injection 250 L/min)
Temperature control	Programmer		Touch panel installed on program controller	
Reading accuracy	Less than 500°C: ±0.5°C 500°C or higher: ±(0.1% of displayed value)		±0.3% FS±1 digit Sampling frequency: 500 ms	
Memory capacity	Total 1024 segments (max. 99 patterns)		30 segments/program	
Control operation	PID control with auto tuning			
Cooling mechanism	External forced cooling mechanism			
Heater output	7.5 kW (at 200 V)	12.0 kW (at 200 V)	25.3 kW (at 200 V)	44.3 kW (at 200 V)
Internal pressure gauge	0 to 2 kPa			
Thermocouple	K			
External dimensions (mm)	1105 (W) × 1650 (H) × 840 (D)	1255 (W) × 1800 (H) × 1120 (D)	1606 (W) × 1991 (H) × 1300 (D)	1806 (W) × 2210 (H) × 2060 (D)
Internal dimensions (mm)	450 (W) × 450 (H) × 450 (D)	600 (W) × 600 (H) × 600 (D)	800 (W) × 800 (H) × 800 (D)	1000 (W) × 1000 (H) × 1000 (D)
Exhaust port size	1B, ball valve stopper		1.5B, ball valve stopper	
Breaker capacity	AC 200 V, 30 A 3-phase, 50/60 Hz	AC 200 V, 50 A 3-phase, 50/60 Hz	AC 200 V, 175 A 3-phase, 50/60 Hz	AC 200 V, 180 A 3-phase, 50/60 Hz
Shelf withstand load (uniformly distributed load)	15 kg/shelf			
Safety equipment	Leakage breaker, overheat prevention gauge, motor overload protector, control circuit protector			
Accessories	2 shelves (shelf holder), temperature recorder		2 shelves (shelf holder), temperature recorder function (built into control system)	Temperature recorder function (built into control system)
Applications	Annealing of electronic components, annealing of mounted substrates, debinding of MLCC and LTCC (*3), debinding of inductors (*3), degreasing of ceramics (*3), annealing of glass substrates, others			

(\*1) Indicates the value at control points inside the heating chamber.

(\*2) Effective dimensions INH-9, INH-21: 2/3 of internal dimensions; INH-51, INH-100: 4/5 of internal dimensions

(\*3) Separate safety equipment is required. Please contact us from (link to Inquiries page).

☆ A coolant is required to protect the seal packing.

☆ The thermocouple is a consumable part.