

Specifications: High-Temperature Clean Ove CLH Series

Model	CLH-21CD(Ⅲ)		CLH-21CDH(Ⅲ)		CLH-21CD(V)		CLH-35CD(Ⅲ)		CLH-35CDH(Ⅲ)		
System	Forced circulation (side flow)					Front blower-type forced circulation		Forced circulation (side flow)			
Max. operating temperature (*1)	450°C		530°C		500°C		450°C		530°C		
Ordinary operating temperature range (*1)	RT + 70 to 450°C		RT + 70 to 530°C		RT + 70 to 500°C		RT + 70 to 450°C		RT + 70 to 530°C		
Temperature profile accuracy (*2)	±5°C (at 450°C)		±8°C (at 530°C)		±5°C (at 500°C)		±5°C (at 450°C)		±8°C (at 530°C)		
Time to reach max. temperature (*1)	80 minutes or less (RT + 70 to 450°C)		90 minutes or less (RT + 70 to 530°C)		80 minutes or less (RT + 70 to 500°C)		70 minutes or less (RT + 70 to 450°C)		120 minutes or less (RT + 70 to 530°C)		
Cooling time (reference value)	90 minutes or less (450 to 100°C)		100 minutes or less (530 to 100°C)		90 minutes or less (500 to 100°C)		100 minutes or less (450 to 100°C)		120 minutes or less (530 to 100°C)		
Cleanliness	Class 100 (when temperature is stable)										
Filter	Heat-resistant, high-performance filter						Heat-resistant, high-performance filter				
Final oxygen concentration	20 ppm or less										
Time to reach 20 ppm	45 minutes or less (N2 injection 250 L/min)						50 minutes or less (N2 injection 250 L/min)				
Temperature control	Programmer										
Reading accuracy	Less than 500°C: ±0.5°C 500°C or higher: ±(0.1% of displayed value)										
Memory capacity	Total 1024 segments (max. 99 patterns)										
Control operation	PID control with auto tuning										
Heater output	33.6 kW (at 200 V)				21 kW (at 200 V)		48.3 kW (at 200 V)				
Temperature recorder	Single pen recorder (control point record, thermocouple K)										
Thermocouple	K										
External dimensions (mm)	1285 (W) × 2020 (H) × 1605 (D)				1180 (W) × 2110 (H) × 1670 (D)		1285 (W) × 2080 (H) × 1775 (D)				
Internal dimensions (mm)	670 (W) × 700 (H) × 500 (D)				700 (W) × 700 (H) × 500 (D) (*3)		670 (W) × 790 (H) × 670 (D)				
Shelf withstand load (uniformly distributed load)	15 kg/shelf										
Equipment weight	Approx. 1050 kg				Approx. 1100 kg		Approx. 1250 kg				
Internal pressure gauge	0 to 2 kPa										
Clean meter	0 to 1 kPa										
Exhaust port size	1B, ball valve stopper										
Breaker capacity	AC 200 V, 150 A, 3-phase, 50/60 Hz				AC 200 V, 100 A, 3-phase, 50/60 Hz		AC 200 V, 175 A, 3-phase, 50/60 Hz				
Safety equipment	Leakage breaker, overheat prevention gauge, motor overload protector, control-circuit circuit protector, low coolant flow rate detector										
Accessories	2 shelves (shelf holder)										
Applications	Baking and curing for semiconductor wafers and glass substrates										

(*1) Heater temperature rise capability, value at control points inside the heating chamber.

(*2) Effective dimensions are 2/3 of the internal dimensions.

(*3) Internal width is 700 mm, however the opening size is 630 mm.