

Enclosed Electric Furnace Laboratory Cast Iron Heating Plate

Item Number: KT-DLN



Introduction

Engineered for high performance laboratory heating, this enclosed electric furnace features a rugged cast iron heating plate, corrosion resistant steel housing, and electronic temperature regulation to deliver dependable thermal precision across industrial, mining, healthcare, academic, and research applications worldwide.

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Application	Description	Key Benefit
Industrial Quality Assurance	Performing rapid drying, moisture volatilization, resin curing, and standard thermal evaluation of raw industrial chemicals and materials.	Consistent, uniform heat conduction prevents thermal degradation of sensitive batches and accelerates sample turnaround times.
Mining and Metallurgical Digestion	Carrying out acid digestion, mineral leaching, and ore sample decomposition under sustained high-temperature boiling in assay laboratories.	The cast iron enclosed heating surface withstands abrasive ore crucibles and aggressive acidic vapor environments without degradation.
Agricultural and Soil Science	Heating soil suspensions, fertilizer extractions, and Kjeldahl-related organic matter preparations for nutrient monitoring and environmental testing.	Smooth electronic power regulation maintains gentle refluxing and prevents violent boiling or sample cross-contamination.
Healthcare and Clinical Diagnostics	Preparing chemical reagents, warming biological sample matrices, and conducting sterile reagent heating within medical and pathology laboratories.	Protective powder-coated housing ensures high hygiene standards and easy wipe-down decontamination following clinical protocols.
Academic and University Instruction	Facilitating undergraduate and graduate chemistry teaching experiments, organic syntheses, basic distillations, and general educational heating demonstrations.	Fully enclosed design eliminates open-coil electrical hazards, providing an intrinsically safer heating environment for student workstations.
Chemical Synthesis and Distillation	Driving reflux reactions, solvent extractions, and fractional distillations requiring continuous, steady thermal energy input over prolonged cycles.	Stepless electronic temperature control enables fine adjustment to match precise boiling curves across varying solvent systems.
Environmental Testing Facilities	Digesting municipal wastewater samples, surface water extracts, and environmental sludge for trace element detection and chemical oxygen demand analysis.	Multi-position configurations allow simultaneous processing of multiple extraction vessels under identical thermal conditions.

Model Number	Furnace Type	Heating Positions	Rated Power (W)	Net Weight (kg)	Gross Weight (kg)	Temperature Control
KT=DL-1-1000	Universal Open-Top	Single Unit (1-Gang)	1000	2.3	2.4	Electronic Stepless Regulation
KT=DL-1-2000	Universal Open-Top	Single Unit (1-Gang)	2000	3.0	3.2	Electronic Stepless Regulation
KT=DL-2-2000	Universal Open-Top	Dual Unit (2-Gang)	2 × 1000	4.0	4.2	Electronic Stepless Regulation
KT=DL-4-4000	Universal Open-Top	Quad Unit (4-Gang)	4 × 1000	7.6	8.2	Electronic Stepless Regulation
KT=DL-6-6000	Universal Open-Top	Six Unit (6-Gang)	6 × 1000	11.4	12.2	Electronic Stepless Regulation
KT=DL-FL-1	Enclosed Cast Iron	Single Unit (1-Gang)	1000	2.6	2.7	Electronic Stepless Regulation
KT=DL-FL-2	Enclosed Cast Iron	Single Unit (1-Gang)	1500	1.8	2.0	Electronic Stepless Regulation

Parameter	Technical Specification	Operational Impact
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Chassis Construction	High-strength cold-rolled steel plate	Delivers rigid structural integrity, resisting denting and frame distortion under heavy vessel loading.
Chassis Surface Finish	Industrial electrostatic spray-coated powder finish	Provides exceptional corrosion resistance against caustic washdowns, acidic splatters, and solvent vapors.
Heating Surface (Enclosed Type)	Heavy-duty machined cast iron cover plate	Completely seals internal heating coils, providing massive thermal inertia, impact resistance, and spill protection.
Temperature Modulation	Integrated solid-state electronic temperature regulator	Grants smooth, continuous thermal output adjustment to accommodate sensitive evaporation or high-energy boiling.
Modular Format Availability	Standalone single-gang and multi-gang integrated banks (2, 4, 6)	Enables flexible laboratory space allocation and scales batch sample digestion throughput efficiently.
Operating Sectors	Industrial, agricultural, mining, clinical, academic, research	Built to satisfy universal laboratory heating compliance across both commercial and institutional testing facilities.