

LUCIFER FURNACES

Manufacturer of Industrial Heat Treating Furnaces and Ovens



Series 5000 EQ - Heavy Duty Elevator Quench Controlled Atmosphere Furnaces



Elevator Quench Furnaces designed for 1900°F operation combine a hardening chamber, elevator vestibule and quench tank in one complete assembly. The workload is processed in the furnace chamber, transferred into the holding vestibule and lowered by an air-operated elevator into a quench tank while the parts are protected by atmosphere during the entire cycle. The furnaces are complete with an alloy muffle which separates the atmosphere and workload from refractory and elements, and an inner door which separates the furnace chamber from the vestibule section. An outer door provides a positive seal against the vestibule. The EQ Models operate under a positive flow of protective atmosphere to minimize scale and oxidation on most tool steels. This design achieves lower dew points, reduces atmosphere consumption and shortens purge time.

Ruggedly constructed and rated for work loads up to 40 lbs. per square foot of hearth area. All models are completely wired, test fired and shipped ready for connection to main power and regulated atmosphere pressure of 5 PSI. Simple, safe, dependable operation. Available in 18 standard sizes. All models will operate with inert atmosphere. Flammable atmosphere may be used with the addition of Atmosphere Safety System per NFPA Code 86 C.

Standard Features

- Welded angle iron frame construction with sheet steel and plate lining.
- Heavy gauge coil wound low watt density heating elements for longer life.
- High grade alloy corrugated muffle with inlet pipe and front flange.
- Air operated vertical lift inner door.
- Manual vertical lift outer vestibule door.
- Stainless steel roller hearth for easy transfer of workload.
- Air operated elevator quench basket.
- Quench tank constructed from continuously welded mild steel complete with agitation, liquid sight gauge and drain.
- Multi-layered energy efficient lightweight firebrick and mineral block insulation for maximum heat storage and minimum heat loss.
- Elements mounted in easy-to-replace holders located on side walls, and below the hearth for uniform temperature.
- Silicon carbide hearth plate for full muffle support and thermal transfer from floor elements.
- Honeywell digital temperature controller with type K thermocouple and contactor.
- Controls are mounted in separate side mounted NEMA 1 panel and operate on 115 volts.

LUCIFER FURNACES



Manufacturer of Industrial Heat Treating Furnaces and Ovens

5055 EQ Model Specifications

MODEL	CHAMBER H" W" L"	OVERALL H" W" L"	KW	VOLTAGE	MAX WORK LOAD (LBS.)	QUENCH TANK (GAL.)	WEIGHT (LBS.)
55EQ-81218	8 12 18	72 46 84	12	230/460/3	60	100	1750
55EQ-81224	8 12 24	72 46 96	16	230/460/3	80	135	2275
55EQ-81236	8 12 36	72 46 120	20	230/460/3	120	205	3325
55EQ-101518	10 15 18	76 49 84	17	230/460/3	75	125	2880
55EQ-101524	10 15 24	76 49 96	20	230/460/3	100	170	3500
55EQ-101536	10 15 36	76 49 120	24	230/460/3	150	255	5250
55EQ-121212	12 12 12	84 46 72	12	230/460/3	40	70	1750
55EQ-121218	12 12 18	84 46 84	17	230/460/3	60	100	2625
55EQ-121224	12 12 24	84 46 96	19	230/460/3	80	135	3325
55EQ-121236	12 12 36	84 46 120	22	230/460/3	120	205	4930

5052 EQ Model Specifications

MODEL	CHAMBER H" W" L"	OVERALL H" W" L"	KW	VOLTAGE	MAX WORK LOAD (LBS.)	QUENCH TANK (GAL.)	WEIGHT (LBS.)
52EQ-121824	12 18 24	84 52 96	22	230/460/3	120	205	4930
52EQ-121836	12 18 36	84 52 120	32	230/460/3	180	305	7310
52EQ-151524	15 15 24	90 49 96	23	230/460/3	100	170	5100
52EQ-151530	15 15 30	90 49 102	29	230/460/3	125	210	6120
52EQ-151536	15 15 36	90 49 120	33	230/460/3	150	255	7650
52EQ-181818	18 18 18	100 52 84	24	230/460/3	90	155	5610
52EQ-181824	18 18 24	100 52 96	31	230/460/3	120	205	7310
52EQ-181836	18 18 36	100 52 120	36	230/460/3	180	305	10400

Options: Flow meters, regulators, oxygen analyzers, dew point indicators, muffle thermocouples, cascade and multi-zone control systems, supervised flame curtains, supervised burn-off systems, program controls, over temperature safety systems, cooling systems, timers, recorders, computer interface, special voltages, gloves, and tongs.

2048 Bunnell Road - Warrington, PA 18976
Email: info@luciferfurnaces.com

Tel: 800-378-0095 Fax: 215-343-7388
www.luciferfurnaces.com