

# LECTRODRYER

ADSORPTION TECHNOLOGY EXPERTS



## TYPE CH INDUSTRIAL DRYERS



# TYPE CH LECTRODRYER

Type CH Lectrodryers are designed for the partial dehumidification of air, where low relative humidity conditions are required for comfort, for storage, or for process work. They are intended primarily to handle the latent heat load for a specific air-conditioning-type problem.

Lectrodryer dehumidifier are widely used in the chemical, pharmaceutical and industrial fields where a dependable and economical supply of low humidity air is required to maintain dry conditions. They are particularly suitable for providing the required degree of dryness in rooms where products likely to be affected by moisture are handled, stores, dried or packed. Production is speeded up and continues without interruption. Constant high quality is

## AUTOMATIC OPERATION

The Type CH Lectrodryers are continuous and automatic in operation, removing moisture from the air by means of solid adsorption. Reactivation of the desiccant can be obtained by heating with gas, steam or electricity.

## DRYING IS CONTINUOUS

By means of a simple, slow-moving valve drive mechanism, beds are continuously and automatically removed from service, reactivated, and then returned to service. This operation continues in a regularly predetermined cycle. This assures a continuous flow of evenly dehumidified air at all times.

## CONSTRUCTION

The Type CH Lectrodryer is designed particularly for industrial use where sturdy construction is required. These machines are simple in operation, thorough and dependable in performance. The only moving parts are

the motor, blowers and valve drive mechanism; the desiccant beds are stationary, arranged in flat horizontal trays. Years of continuous duty and real economy of operation are assured

## INSTALLATION

The air-conditioning type Lectrodryer is usually installed just outside the room to be conditioned. In many cases, a simple supply and return duct to the room is all that is necessary. The reactivation exhaust should be piped to outdoors.

The Lectrodryer is completely assembled in our shop, including desiccant, motors, blowers, heating and cooling equipment, controls, electric starters and wiring. Lifting loops are provided for easy handling. Channel skids are included as part of the base for setting the equipment on the floor; no anchor bolts are required. Shipped thus as a package unit, the Lectrodryer is ready to be placed in position and put into operation after duct and service connections are made.

Air conditioning type Lectrodryers are built in several standard sizes, with flow rates ranging from 700 cubic feet of air per minute to 15,000 cfm.

Dryer Size	Alumina Container			Adsorption Air Flow			Reactivation Air Flow	
	No. Beds	Alumina	Valve Cycle	Inlet-CFM	Purge and Leakage-CFM	Outlet-CFM @ 1/4" W.G.	Inlet-CFM	Outlet-CFM @ 1/4" W.G.
CHK	8	390#	27 min.	850	150	700	400	550
CHO	8	850#	32 min.	1800	300	1500	900	1150
CHR	8	1700#	32 min.	3500	500	3000	1500	2000
CHT	16	3200#	46 min.	7000	1000 <sup>1/</sup>	6000	3000	4000
CHU	16	5300#	46 min.	12000	2000 <sup>2/</sup>	10000	4500	6300
CHX	16	8000#	46 min.	17500	2500 <sup>3/</sup>	15000	7500	10000

1/ With Separate Purge Blower, subtract 500 CFM  
 2/ With Separate Purge Blower, subtract 1,000 CFM  
 3/ With Separate Purge Blower, subtract 1,500 CFM



# TYPE CH LECTRODRYER

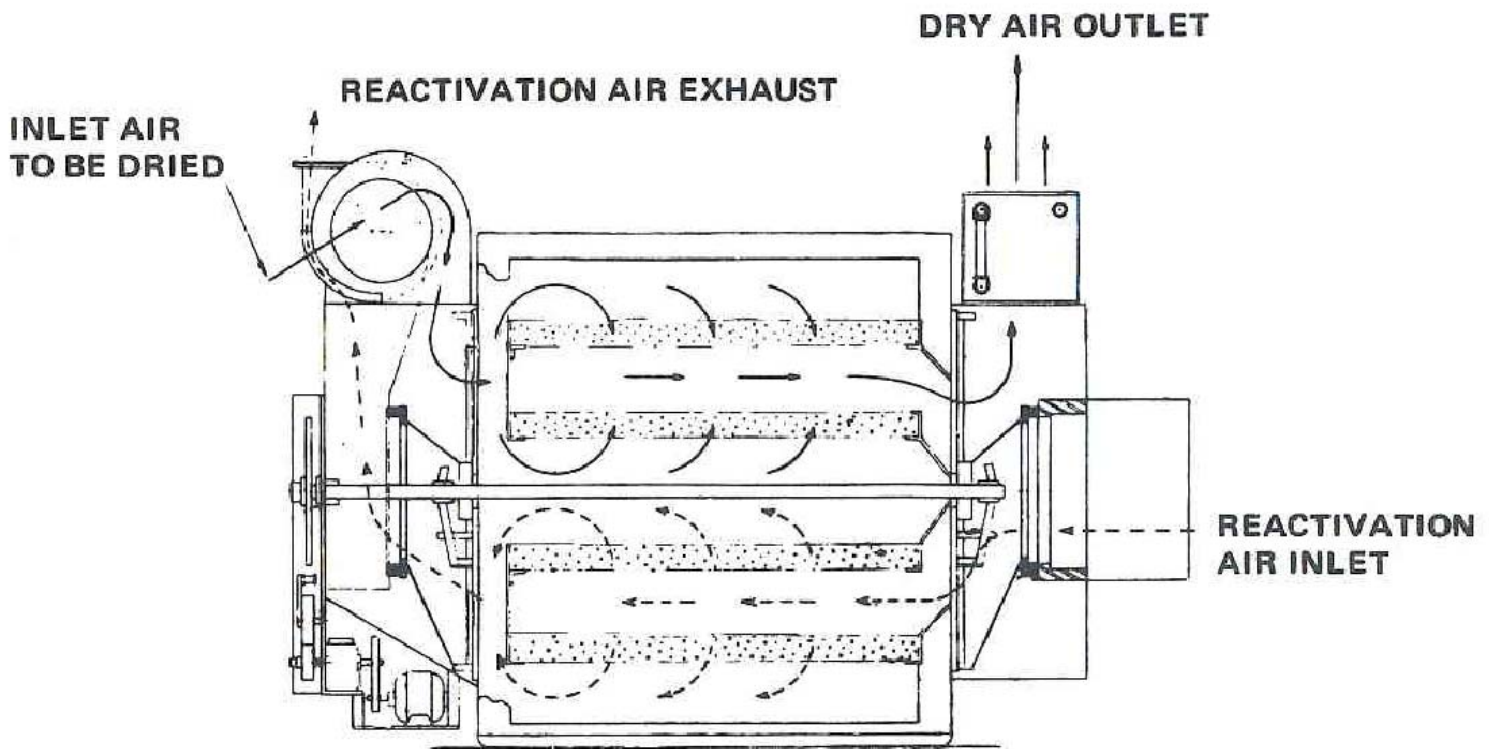
## SPECIFICATIONS\*

Std. voltage 220 or 440, 3 phase, 60 cycle	CHK	CHO	CHR	CHT	CHU	CHX
Standard Air Flow, CFM	700	1500	3000	6000	10000	15000
A. Height	4'-8"	5'-11"	7'-5"	9'-5"	9'-11"	10'-10"
B. Width	3'-8"	4'-3"	7'-0"	6'-8"	8'-2"	10'-2"
C. Length	7'-8"	10'-1"	13'-0"	14'-0"	22'-10"	26'-8"
Approximate shipping wt. in lbs.	2000	4000	7000	12000	20000	30000
1000 BTU Gas, CFH (Gas React.)	80	150	280	560	950	1400
Steam Lbs. per hour (Steam React.)	90	165	300	600	1000	1600
Electric Load, KW (Electric React.)	20	45	80	160	275	400
Cooling water GPM	6	12	24	48	80	120
Motor Load, HP	¼ & 1	¼ & 2	¼ & 3	¼ & 7 ½	7 ½ & 1/3	10,5 & 1/3

\*Specifications subject to change without notice.

## SCHEMATIC FLOW DIAGRAM

Air-conditioning type Lectrodryers are multi-adsorber units with air distribution valves located at the opposite ends of the desiccant container. Inlet air to be dried is directed through the beds of desiccant and is discharged through the cooling coil. At the same time, heated air is directed through the spent adsorber for reactivation.



# LECTRODRYER HAS THE SOLUTION FOR ALL COMPRESSED AIR AND GAS DRYING PROBLEMS

**Lectrodryer offers a complete range of drying and purification equipment:**  
**For atmospheric or high pressure conditions**  
**For very small or very large air volumes**  
**For air, gases, and certain organic fluids**

## Regenerative Adsorption Dryer

### Typical applications:

Drying compressed air for instruments; purging of refrigeration coils, compressors, and systems; drying air for ozone generators; vacuum-breaking operations controlled atmosphere gas



### Features:

Carbon steel pressure vessels with ASME Code (where applicable) for up to 150 PSIG Stainless steel perforated metal desiccant support and inlet flow diffuser, sheathed or non sheathed heating element in which each adsorber vessel with thermostatic over temperature protection in the heater bundle, two 4-way lubricated plug valves with air piston operator and solenoid valve controls, thermal pressure relief valves, pressure gages, dial thermometer in the purge outlet, 110 volt controls and NEMA 1 electrical enclosures.

### Optional Features:

Special controls and electrical enclosures.

## Refrigeration-Type Industrial Gas Dryer

### Typical Application:

Low pressure situations for controlling atmospheric gases.



### Features:

Power-on light, high temperature warning light, on/off switch, refrigeration analyzer gage, gas-out gage, gas-in temperature gage, low suction pressure cut-out, high head pressure cut-out, hot gas bypass capacity control, start push button pump down shut off cycle, oil pressure control, and suction accumulator.

### Optional Features:

Special control and electrical enclosures.

## Lectrodryer Filters

The Lectrodryer type SF and type F filters provide high efficiency filtration with ten sizes available in each type for flows to 8400 SCFM, larger sizes available on application. Both types have a high level filter efficiency of 99.985% retention (0.015 DOP penetration) for filtration to a 0.3 micron



## Lube Oil / Air Tanks

Lectrobreather tank vent dryers prevent atmospheric moisture from entering storage during "breathing" due to ambient temperature changes and draining periods. Valuable oils and chemical solutions remain free of water contamination.



CONTINUING THE TRADITION OF QUALITY AND SERVICE SINCE 1932

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