

Heat of Compression Air Dryer

Energy Conservation by Heat of Compression type compressed air dryer is a breakthrough in compressed air drying technology. The hot air from the oil-free air Compressor at 120°C or higher temp, is used directly for regeneration of the desiccant bed in the compressed air dryer. After regeneration, this air is cooled down to 40°C in the water cooled after cooler and then it is dried in second tower. Thus the use of heaters is eliminated. For eg. in the 6 + 6 Hrs. Cycle the hot air is fed for regeneration of desiccant bed for 4 Hrs. and for balance 2 Hr. a changeover takes place where the air is first cooled in an after cooler, then dried and before going to the outlet, cools the regenerated desiccant bed, thus bringing it down to ambient temperature. This cycle is reversed for the next 6 Hrs. where the Adsorber drying the air in the previous cycle goes for regeneration and vice versa.

There is considerable power saving in these type of Compressed Air Dryers and the dew point is also better than the Refrigerated type of Compressed Air Dryers .

Main Advantage of Heat of Compression Type Compressed air dryer is the energy conservation and heat recovery achieved which is being wasted in After cooler in the conventional air dryers is now used to reactivate the desiccant.



SPECIFICATIONS FOR HEAT OF COMPRESSION TYPE AIR DRYER

MODEL NO.	CAPACITY		PIPE LINE SIZE mm	COOLING WATER REQT. LPM	APPROX. OVERALL DIMENSIONS		
	M ³ / HR	CFM			LENGHT mm	WIDTH mm	HEIGHT mm
HOC-01	81.5	50	25	12	1400	1200	1800
HOC-02	122.7	75	25	18	1500	1200	1800
HOC-03	163.0	100	25	24	1600	1400	1800
HOC-04	244.5	150	40	36	1800	1500	2000
HOC-05	326.0	200	40	48	1800	1500	2000
HOC-06	489.0	300	50	72	2000	1500	2200
HOC-07	652.0	400	50	96	2000	1500	2200
HOC-08	815.0	500	65	120	2000	1800	2200
HOC-09	978.0	600	65	144	2200	1800	2400
HOC-10	1222.0	750	80	180	2400	1800	2400
HOC-11	1630.0	1000	80	240	2500	2000	2600
HOC-12	2037.0	1250	100	300	2500	2000	2800
HOC-13	2445	1500	100	360	2500	2000	3000
HOC-15	3260.0	2000	125	480	3000	2000	3000
HOC-16	4075.0	2500	125	600	3000	2000	3400

The above capacities are rated at an inlet temp. of 40°C., 7kg/ Cm²g Pr. and at an outlet dew point of (-) 40°C. at Atm. Pressure, Supply Voltage of 220 V-1 PH- 50 HZ or 415V-3PH-50 Hz.

Above data is only for estimation and can be changed without notice. For special systems and higher capacities contact us.

Important Limitation : Energy Saving Heat of Compression type air dryer can be used only with oil free air compressors.