



## **Micro Heat Adsorption Dryer**

**Regeneration gas volume:**  $\leq 7\% \sim 11\%$

**Working pressure:** 0.6~1.0Mpa

**Intake oil content:**  $\leq 0.1\text{mg}/\text{m}^3$

**Pressure dew point:**  $-20^{\circ}\text{C} \sim -40^{\circ}\text{C}$

**Desiccant:** activated alumina

**Working cycle:** 2~8 hours

**Intake temperature:**  $0^{\circ}\text{C} \sim 45^{\circ}\text{C}$

The micro-heat regenerative adsorption dryer represents an innovative energy-saving solution developed by our company, achieving advanced domestic standards. This product line effectively merges the benefits of heat regeneration and heatless regeneration, utilizing a mild heating method for the regeneration gas. This approach minimizes regeneration gas consumption, thereby promoting energy efficiency.

By addressing the shortcomings associated with the rapid switching times of heatless regenerative dryers and the significant energy losses found in heat-absorbing dryers, this dryer stands out as a cost-effective energy-saving option within the purification industry. Its applications span various sectors, including metallurgy, electric power, electronics, food processing, chemicals, petroleum, pharmaceuticals, tobacco, instrumentation, and automated control systems.

**Features:**

- A large tower body to ensure optimal airflow rates and extended contact time.
- High-performance adsorbent with stable characteristics and an extended service life.
- A large displacement muffler for noise reduction.
- High-temperature protection, pressure switch detection, and low-density heater for enhanced safety.
- Stainless steel one-way valves, throttle orifices, and air diffusers for improved functionality.
- Temperature-controlled butterfly valve for precise regulation.
- Large flow PLC control for efficient operation.

**Working Principle:**

This series of dryers integrates the principles of pressure swing adsorption and temperature swing adsorption. The adsorption process occurs at ambient temperature under high water vapor partial pressure, while regeneration is conducted at elevated temperatures and lower water vapor partial pressure. During the adsorption phase, moisture is captured by the adsorbent, which can then be effectively eliminated during regeneration through the combined effects of thermal diffusion from high-quality regeneration gas (heated by dry air) and the pressure differential.

## Technical Parameters

Model	Capacity (Nm <sup>2</sup> /min)	Supply	Power (kW)	Weight (kg)	Connection	L*W*H (mm)
SLT-3.8MH	3.8	380V50HZ/3PH	2	388.0	DN25	868*740*1492
SLT-6.5MH	6.5	380V50HZ/3PH	3	485.0	DN40	868*740*1842
SLT-8.5MH	8.5	380V50HZ/3PH	4	525.0	DN40	1018*678*1892
SLT-11.5MH	11.5	380V50HZ/3PH	5	650.0	DN50	1351*697*2050
SLT-13.5MH	13.5	380V50HZ/3PH	6	750.0	DN50	1351*697*2050
SLT-18MH	18.0	380V50HZ/3PH	8	905.0	DN65	1402*833*2372
SLT-22MH	22.0	380V50HZ/3PH	10	1025.0	DN65	1466*833*2372
SLT-25MH	25.0	380V50HZ/3PH	12	1120.0	DN80	1520*838*2580
SLT-32MH	32.0	380V50HZ/3PH	15	1205.0	DN80	1520*838*2580
SLT-45MH	45.0	380V50HZ/3PH	21	1525.0	DN100	1885*966*2650
SLT-55MH	55.0	380V50HZ/3PH	27	2350.0	DN100	2350*1105*2780
SLT-65MH	65.0	380V50HZ/3PH	30	2950.0	DN100	2460*1196*2800
SLT-85MH	85.0	380V50HZ/3PH	40	4170.0	DN125	2644*1366*3090
SLT-100MH	100.0	380V50HZ/3PH	45	4250.0	DN150	2644*1366*3090