

Bakeable Molecular Sieve Adsorption Trap

Features:

- Molecular Sieve Adsorber
- Bakeable
- Polished Stainless Steel
- Large 3/4" I.D. Knurled Nut

Molecular Sieve Traps are effective for trapping hydrocarbons and water vapor. They are used in between the roughing vacuum pump and diffusion or turbomolecular pump to prevent contamination of the system. Molecular sieve traps utilize synthetic zeolite with a high surface area per unit volume. Pressures below one micron are readily achieved. Traps operate at room temperature, eliminating necessity of refrigerants. A built-in heater reprocesses the sieve material when necessary at a bakeout temperature of 300°C

Molecular sieve traps are fabricated of type 304 stainless steel and are offered with a choice of hose, flange or combination connections.

Bake out is accomplished by connecting the heater leads to 115 VAC power source. Always connect a ground wire to the ground lug for safety. In some cases a three-wire heater with built-in ground wire and grounded twist connector can be used. Heat is self-regulating when connected directly to the power source for 90 minutes. Typically, a timer is used. During bake-out the mechanical pump must be running and should be gas ballasted. During this bake out, pressures in the foreline will rise to more than 10^{-1} Torr. Mass 55 peaks (oil vapor) can rise to levels in excess of an untrapped pump on the high vacuum side of the trap during bake-out. Therefore, it is suggested that the MAT trap be valved off from the system during this process. Normal cycle is 90 minutes with Heater on, valves off and a 90 minute cool-down period.



► Tech Tip Molecular Sieve Traps will efficiently trap water vapor.

Replacement Charges

RSC sealed charges are pre-baked out and ready to use. Eventually, the sieve charge should be replaced as there is some oil residue that is baked on. Suggested sieve charge replacement is every year or after 10 bake-outs.

Part No.	Body Dimensions	Tubulation	Capacity	Replacement Charge #	Price
MT-075	4 1/2" OD x 5 1/4"	3/4" Pipe - 3/4" pipe	5 CFM	MT100MSC	
MT-100	4 1/2" OD x 5 1/4"	1" pipe - 1" pipe	8 CFM	MT100MSC	
MT-150	4 1/2" OD x 7 7/8"	1 1/2" pipe - 1 1/2" pipe	17 CFM	MT150MSC	
MT-752K	4 1/2" OD x 5 1/4"	NW16 flange - NW16 flange	5 CFM	MT100MSC	
MT-1002K	4 1/2" OD x 5 1/4"	NW25 flange - NW25 flange	8 CFM	MT100MSC	
MT-1502K	4 1/2" OD x 7 7/8"	NW40 flange - NW40 flange	17CFM	MT150MSC	
MT-752MS	4 1/2" OD x 5 1/4"	1.33" CF flange - 1.33" CF flange	5 CFM	MT100MSC	
MT-1502MS	4 1/2" OD x 7 7/8"	2.75" CF flange - 2.75" CF flange	17 CFM	MT150MSC	

Replacement Charges

Part No.	Description	Price
MT-100MSC	Molecular Sieve Replacement Charge (MT-75/MT-100)	
MT-150MSC	Molecular Sieve Replacement Charge (MT-150)	