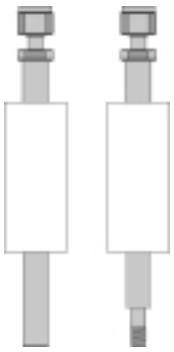
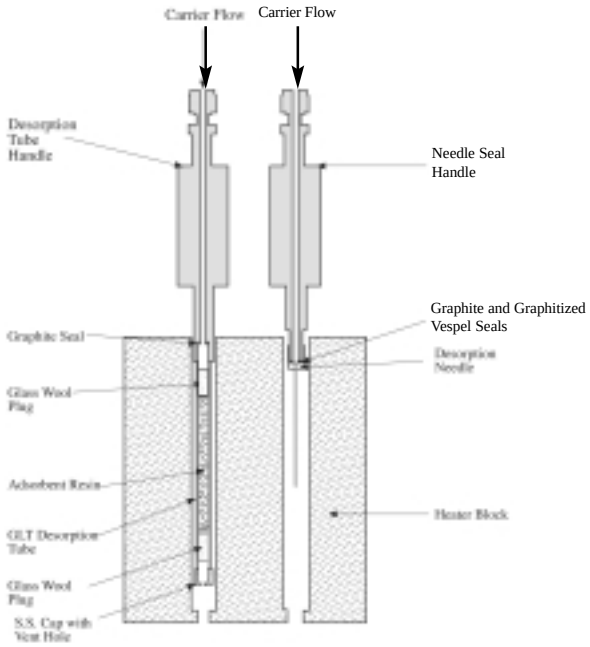
6 Tube Desorption Tube Conditioning System For Cleaning & Baking Out Thermal Desorption Tubes.

Accessories for Desorption Tube Conditioning System



S.S. Desorption Tube Handles for Conditioning Tubes (Part # 781013)

S.S. Desorption Needle Handles for Cleaning Needles (Part # 781014)



Desorption Tube Conditioning System Theory of Operation

The Desorption Tube Conditioning System is used for the flow conditioning of both empty and packed glass-lined stainless steel (GLT) desorption tubes as well as for the flow conditioning of the desorption tube needles. A high purity gas such as helium or nitrogen is used to purge the packed desorption tubes and needles while they are baked out at elevated temperatures. By proper conditioning of the desorption tubes with adsorbents and needles, no foreign contaminants will interfere with or contribute to the composition of the samples being analyzed. Sample "memory effects" due to cross contamination will be eliminated.

The Desorption Tube Conditioning System consists of six adjustable flow rotameters (0-50 ml/min) and a heater block with six ports (I.D. 0.40" x 4.0" deep) for cleaning of six desorption tubes or needles simultaneously at temperatures up to 350°C. A Watlow precision programmable temperature controller provides the heater circuit to heat the heater block and permit the programming of the temperature at which the tubes are to be conditioned. Temperature programs of up to six steps with various ramp cycles and hold times can be programmed into the controller for the unattended conditioning of the desorption tubes. Programs are stored in the system's memory.

A single electrically operated solenoid valve (Gas Valve) turns off or on the gas to all the ports via the Gas Switch on the front panel. On the top of the Conditioning System six quick disconnects connect to 1/8" flexible nylon tubing to provide gas flow through the desorption tubes and needles during conditioning. When the quick disconnect is removed, the gas flow is automatically closed to that port.

Two types of handles are included with the Conditioning System. Six desorption tube handles are included for the conditioning of the desorption tubes and two desorption needle handles are included for the conditioning of desorption needles. Each of the handles consists of a stainless steel hollow center shaft with a Teflon insulated handle. Additional handles are also available. Graphite seals with metal inserts are used for sealing the desorption tubes to the desorption tube handles, due to their high temperature properties up to the maximum 350°C temperature limit of the system. Other seals could be used at lower temperatures.

Electrical Specifications

Power Requirements
Voltage - 110 VAC, grounded
Current - 10 amp maximum
Fuse Sizes 10 amp each

Temperature Controller

Heater Circuit, Accuracy +/-0.1% of full scale reading
Temperature Range - up to 350°C
Input - Platinum Resistance Thermometer
Digital Readout 3 or 4 digit
Programmable - Autocalibration temperature controller
Temperature protection circuitry for maximum temperature and maximum case temperature

Gas / Flow Specifications

6 adjustable Flow bubble rotameters
Maximum pressure - 60 P.S.I.
Quick disconnects for each sample
Gases - either high purity helium or nitrogen

Weight and Dimensions

Weight - 12 pounds
Size - 9" wide x 9" deep x 13" high

Warranty - 90 days parts and labor

Part No.	Description
781051A	Desorption Tube Conditioning Oven, Conditions 6 sample tubes simultaneously, 6 rotameters, programmable temperature controller, 6 desorption tube handles, 2 needle handles and seals
781013F	Connection Handle for Desorption Tube
781014F	Connection Handle for needle
781015	Graphite top seal with metal insert
781007	S.S. Cap with 0.040" hole for conditioning GLT tube