

TD CLEAN-CUBE

Thermo Conditioner



- up to 20 TD tubes (1/4" x 3.5 ") can be conditioned with inert gas
- temperature programming (3 ramps, max. 400 °C)
- method storage
- fast cooling down and automatic gas supply shutdown when tubes are removed
- time and cost-saving device for it is independent of the TD system

TD CLEAN-CUBE

Thermal desorption (TD) is a sample preparation technique for gas chromatography to measure volatile and semi-volatile organic compounds in air and materials. It simplifies and speeds a lot of chromatographic applications because it can save many hours of manual sample preparation. Sample tubes filled with an adsorbent are used to collect the analytes before they are transferred via the Thermal Desorption System into the gas chromatograph.

Absolutely clean TD tubes are essential for a highly sensitive and reproducible measurement using thermal desorption. Here you can apply the CLEAN-CUBE to remove impurities from the tubes before they are used for sample collection: Up to 20 tubes are heated simultaneously under precisely controlled conditions. For high purity requirements a gas filter can be added at the purge gas in-port.

The conditioning procedure is completely independent of the TD-System so that the CLEAN-CUBE saves time and protects GC column and detector.

Procedure

For the conditioning procedure, the tubes (industry standard 1/4" x 3.5") are inserted into the CLEAN-CUBE base plate. After sliding in the drawer, the upper cube part with the heating block is pushed down and the conditioning cycle starts.



A temperature program is started which enables temperatures up to 400 °C and the sequence of three ramps. This depends on the sorbent as well as the type of monitoring for which the tube will be used. The thermo conditioner provides default methods and the possibility to save individual temperature programs.



At the end of the conditioning cycle the heating block is moved up while the purge gas is still flowing. This provides fast cooling of the tubes and also saves time. An automatic gas shut-off is implemented stopping the purge gas flow as soon as the tubes are removed.



SPECIFICATIONS

capacity	20 sample tubes, 1/4" x 3.5 "
temperature range	30 °C to 400 °C
gas ports	1/8" (in/out)
gas flow	ca. 20 - 130 ml/min per tube
control	integrated, with pressure valve
size	H: 28/37* cm (11/14.6 in), W: 22 cm (8.7 in), D: 30/50* cm (11.8/19.7 in) (*opened)
weight	16.5 kg (35.3 lb)
electric parameters	110-230 V, 50/60 Hz

Article	Order No.
TD CLEAN-CUBE Thermo Conditioner for standard tubes (1/4" x 3.5")	TK 1000 20 00
Gas-Filter System (hydro carbon, moisture and oxygen), incl. bracket (for gas inlet)	TK 1000 20 00 OPT020
Spare Part Triple Filter (hydro carbon, moisture and oxygen)	TK 1000 20 20