## TurboMatrix Tube Conditioning Oven and Dry Purge Accessory

### **Gas Chromatography**



# Increase the Throughput of Your Lab with Dedicated Tube Conditioning

Whether you're a lab that analyzes air quality, monitors occupational health and safety or is characterizing flavor and aroma profiles, you have

chosen the performance and precision that thermal desorption (TD) provides. It's the ideal sample preparation technique for trace level measurement of volatile organic compounds (VOCs) and most semi-volatile organic compounds (SVOCs).

#### **Save Valuable Instrument Time**

From environmental to industrial to food and beverage analysis, these analyses often have time critical requirements that create higher throughput demands. So having contaminant-free, new or re-conditioned TD tubes readily available, and not take instrument time to condition or dry purge, is a must. PerkinElmer has the solution.

You can condition tubes individually on your TD instrument. Or, you can use an offline conditioner/dry purge accessory to prepare several tubes at once, which is more efficient since your instrument can still run samples. Imagine being able to condition or dry purge 20 tubes at once - and the overall time and cost savings you can enjoy. That's what you can expect with our new PerkinElmer TurboMatrix™ 220 TD tube conditioning oven.



#### Make it Simple, Fast and Easy

The PerkinElmer TD tube conditioning oven is a faster, easier, more cost-efficient way to re-condition your glass or stainless steel tubes. You've already chosen in favor of a more streamlined automated approach for your GC and GC/MS analyses through automated sample preparation - now you can free up your instruments for more analysis time and ultimately achieve the results you need from your samples and your lab operations.

#### **HIGHLIGHTS**

- Condition or dry purge up to 20 TD stainless steel and glass tubes without wasting expensive helium
- Dual 10-position heating manifolds can be independently controlled to maximize productivity
- Temperature controllers allow four controlled heating ramps up to 30 °C/min and four temperature plateaus with a maximum temperature of 400 °C
- Unique hood interlock safety feature does not allow tubes to be removed when hot
- Automatically controlled fan design cools the oven manifolds in minutes after conditioning
- Built-in manifold is easier to load and avoids leakage
- Tubes off gas through the top of the oven, which minimizes chance for tube contamination and enables the user to safely vent the fumes.

#### **Specifications**

TurboMatrix TC 220 Specifications	
Number of temperature ramps/ number of soaks	4 temperature ramps/4 soaks
Oven temperature range	Ambient – 400 °C
Heating ramp rate	5 - 30 °C/min
Isothermal time range	0.00-99.59 min
Minimum temperature steps	1 °C
Minimum settable temperature	20 °C
Maximum settable temperature	400 °C
Oven heater cartridge elements	150 W – 24 VAC
Adjustable flow rate range	25 – 150 ml/min.
Tube snubbers nominal flow range	50 ml/min @ 30 PSI ± 7% F.S.
Weight	16.0 kg
Dimensions L x D x H (cm)	45 x 40 x 23 (cm)
Supply voltage	120 or 230 VAC - FACTORY SET
Supply voltage frequency	50/60 Hz
Maximum current consumption	2.0A at 120 VAC, 1.0A at 230 VAC, 300 VA maximum power
Ambient working temperature	From +5 °C to + 40 °C
Relative humidity	80% maximum without condensation
Protection degree IP (IEC 60529)	IP20

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Figure 1. Even if the oven is partially loaded, gas will only flow to the cells that contain TD tubes, leaving you with no wasted purge gas and flexibility in your work flow.

#### **The Bottom Line**

PerkinElmer is an industry leading provider of thermal desorption technology. Our solutions deliver unrivaled precision and can be integrated with GC systems from any manufacturer - and it's no different with the competitively priced TD tube conditioning/ dry purge accessory. It comes ready to install and operate out of the box, whether you have a word-class TurboMatrix Thermal Desorber, or other vendor instrumentation - you'll be preparing samples in less time, at lower costs.

PerkinElmer also offers a full line of thermal desorber tubes - unconditioned or conditioned tubes, glass or stainless steel, empty tubes or packed - to meet your specific lab needs.



Figure 2. PerkinElmer thermal desportion tubes.

