



*Leaders In GC Sample Introduction Technology*



## **CDS 7000C PAL System Purge and Trap Plugin**

● The Industries **First** Purge and Trap Concentrator  
for PAL Autosamplers

## Introduction

If gas chromatography plays a role in your daily operations, you already know CDS Analytical as the world's leading manufacturer of pyrolysis instrumentation. But we also manufacture world-class Purge & Trap GC front-end sampling instruments.

The legendary CDS-7000E was acknowledged as a workhorse in the industry for years as the most cost effective Purge and Trap concentrator. Now the 7000C delivers the same combination of qualities that made the 7000 such a reliable instrument, but with plug and play connectivity to the world's leading autosampler platform, the CTC Combi PAL. The 7000C features our industry standard foam sensor, a newly redesigned wet trap for moisture control, and our original exchangeable sample pneumatics system, all providing the highest available performance and unrivalled chromatographic resolution.

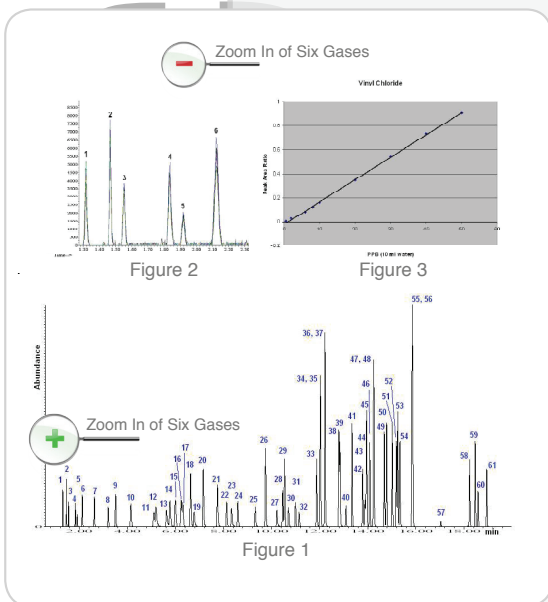


Figure 1: VOC's at 20 ppb concentration purged from water.  
 Figure 2: Multiple runs of the six gases at 500 ppt.  
 Figure 3: Linearity for Vinyl Chloride from 500 ppt to 50 ppt

1. Dichlorodifluoromethane
2. Chloromethane
3. Vinyl chloride
4. Bromomethane
5. Chloroethane
6. Trichlorofluoromethane
7. 1,1-Dichloroethylene
8. Methylene chloride
9. trans-1,2-Dichloroethene
10. 1,1-Dichloroethane
11. 2,2-Dichloropropane
12. cis-1,2-Dichloroethene
13. Bromochloromethane
14. Chloroform
15. 1,1,1-Trichloroethane
16. Carbon tetrachloride
17. 1,2-Dichloropropane
18. Benzene
19. 1,2-Dichloroethane
20. Fluorobenzene (I.S.)
21. Trichloroethylene
22. 1,2-Dichloropropane
23. Dibromomethane
24. Bromodichloromethane
25. cis-1,3-Dichloropropene
26. Toluene
27. trans-1,3-Dichloropropene
28. 1,1,2-Trichloroethane
29. Tetrachloroethylene
30. 1,3-Dichloropropane
31. Dibromochloromethane
32. 1,2-Dibromoethane
33. Chlorobenzene
34. 1,1,1,2-Tetrachloroethane
35. Ethylbenzene
36. m-Xylene
37. p-Xylene
38. o-Xylene
39. Styrene
40. Tribromomethane
41. Isopropyl benzene
42. Bromobenzene
43. 1,1,2,2-Tetrachloroethane
44. 1,2,3-Trichloropropane
45. n-Propyl benzene
46. 2-chlorotoluene
47. 1,3,5-Trimethyl benzene
48. 4-Chlorotoluene
49. tert-Butyl benzene
50. 1,2,4-Trimethyl benzene
51. sec-Butyl benzene
52. 1,3-Dichlorobenzene
53. p-Isopropyl toluene
54. 1,4-Dichlorobenzene
55. 1,4-Dichlorobenzene, d-4
56. 1,2-Dichlorobenzene
57. 1,2-Dibromo-3-chloropropane
58. 1,3,5-Trichlorobenzene
59. Hexachlorobutadiene
60. Naphthalene
61. 1,2,3-Trichlorobenzene

## Product Specifications

- Programmable times: 0– 999.9 minutes
- Trap: 0.3 cm OD x 28.5 cm Length
- Transfer Line: 1.5 m stainless steel clad fused silica, in flexible heated jacket
- Desorb pre-heat option
- Maximum Operating Temperatures
  - Valve oven 350°C
  - Transfer Line 350°C
  - Wet Trap 300°C
  - Adsorbent Trap 300°C
- Vocarb or Tenax Adsorbent Trap
- Weight: 9.5 kg/21 lbs
- 18 cm W x 50 cm H x 33 cm D (7" X 19.5" X 13")

### Options:

- Hot water rinse module
- Heated sparge vessel module
- Internal reference standard addition module
- Electronic mass flow controller
- Pressure transducer for leak check

## Product Features



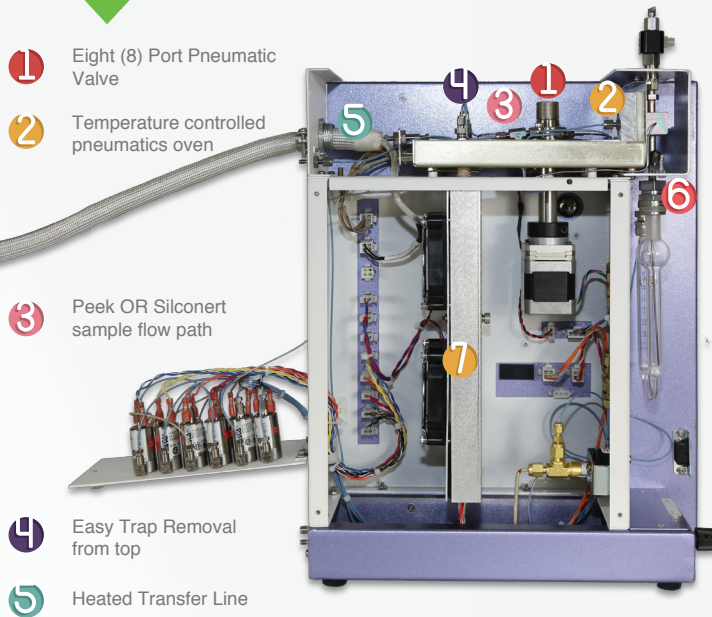
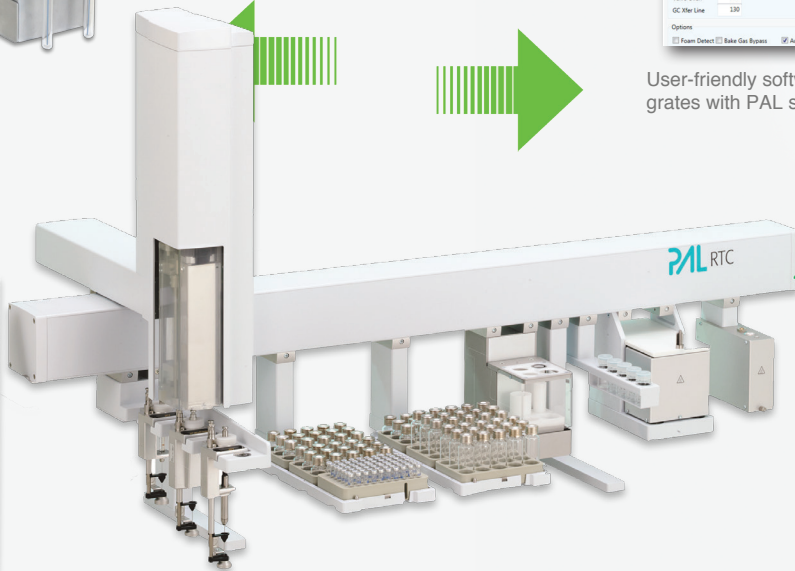
Optional Internal Reference Standard module (ISTD) accurately delivers 1 $\mu$ L of internal reference standard from one of the two internal reference standard reservoirs

Purge and Trap - Real Time Parameters			
	Temperature (°C)	Time (hour: min: sec)	Flow (mL/min)
Vessel			
Pre Purge	40	00:00	40
Pre Heat	40	00:00	
Purge Time		01:00	40
Trap			
Purge Ready	40		10
Dry Purge	35	00:00	200
Desorb Preheat	245		10
Desorb	250	00:00	250
Bake	255	01:00	400
Wet Trap			
Heads	50		
Bake	260		
Set Point			
Valve Open	130		
GC Xfer Line	130		

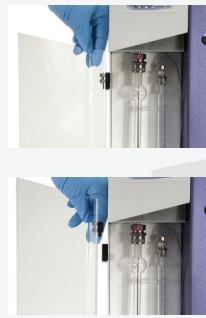
Operation	
Standby	● Purge Ready
Pre Purge	
Pre Heat	
Purge	
Dry Purge	
Desorb Ready	
Desorb Preheat	
Desorb	
Bake	
Time Remaining	
	0:00:00
Status	
Valve Open	130
GC Xfer Line	130
Trap	30
Wet Trap	40
Vessel	26
MFC mL/min	6
System Pressure	19

User-friendly software (P&T Plugin) integrates with PAL software seamlessly



- 1 Eight (8) Port Pneumatic Valve
- 2 Temperature controlled pneumatics oven
- 3 Peek OR Silconert sample flow path
- 4 Easy Trap Removal from top
- 5 Heated Transfer Line

- 6 Foam sensor
- 7 Wet & Sorbant trap compartment
- 8 Quick release sparge door



Analytical  
 Solutions

Make CDS Your Universal Inlet Partner



Thermal Desorption

Pyrolysis

Purge and Trap

**CDS Analytical Headquarters:**

465 Limestone Road P.O. Box 277 Oxford, PA 19363-0277 Tel: 800.541.6593 610.932.3636 [www.cdsanalytical.com](http://www.cdsanalytical.com)