PAL SYSTEM
Ingenious sample handling

PAL Purge and Trap
with CDS 7000C

The Comprehensive
Purge & Trap Solution

PAL Purge and Trap with CDS 7000C

Transforming Purge and Trap from tradition to present-day analytics

Purge and Trap (P&T) is well-established since 1974 for analysis of volatile compounds with trace level sensitivity. Research and contract labs rely on P&T for environmental assessment, waste water, drinking water or beverage analysis applications, and worldwide applied protocols (DIN-EN ISO 15009; US-EPA 500-, 8000-series...). However, the P&T setups have evolved so far with several downsides of inflexible setups, laborious daily routines, and high running costs on one dedicated instrumentation (e.g. P&T-GC/MS).

The PAL Purge and Trap was built to overcome these limitations, and to meet today`s working comforts:

- P&T Methods and Data processing integrates to GC/MS with only one sample list
- Full network capabilities and handshaking over TCP/IP.
- Run several different methods on the same instrument using Robotic Tool Change e.g. static and dynamic headspace, SPME fiber and Arrow or liquid injection.
- PAL Dilutor automates P&T calibrations, e.g. with EPA MegaMix® Standards

Highlights of the PAL P&T

- Highest degree of P&T automation
- Multi-point calibrations
- Method flexibility to SPME, Headspace, Liquid
- Ease of use for routine and expert users
- Standalone or GC mounted for small footprint
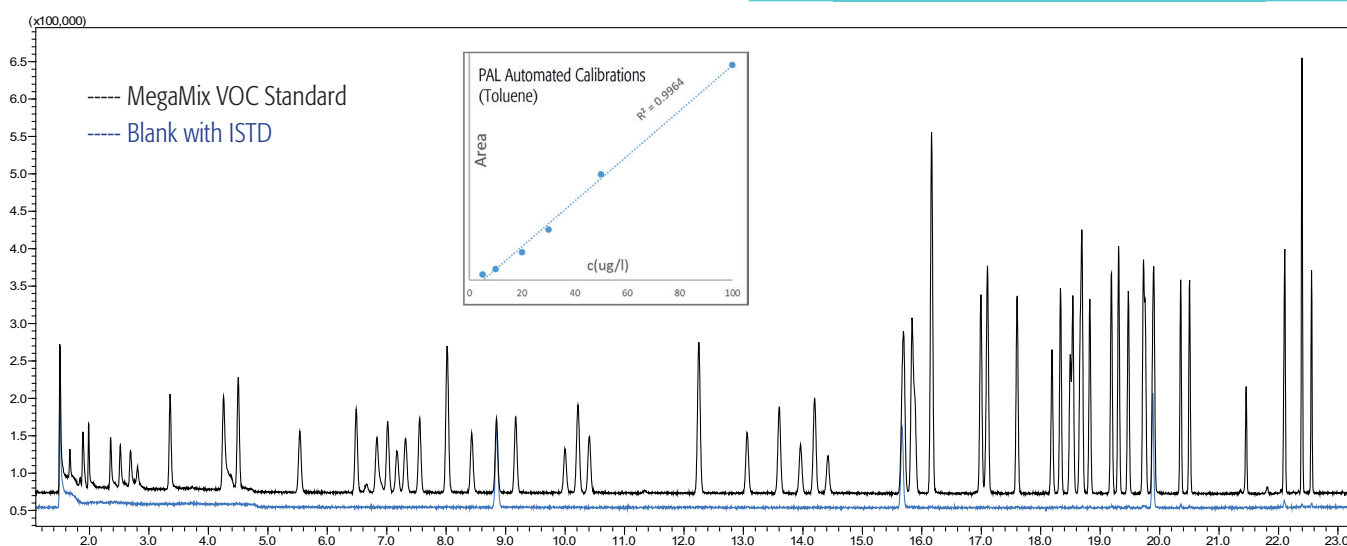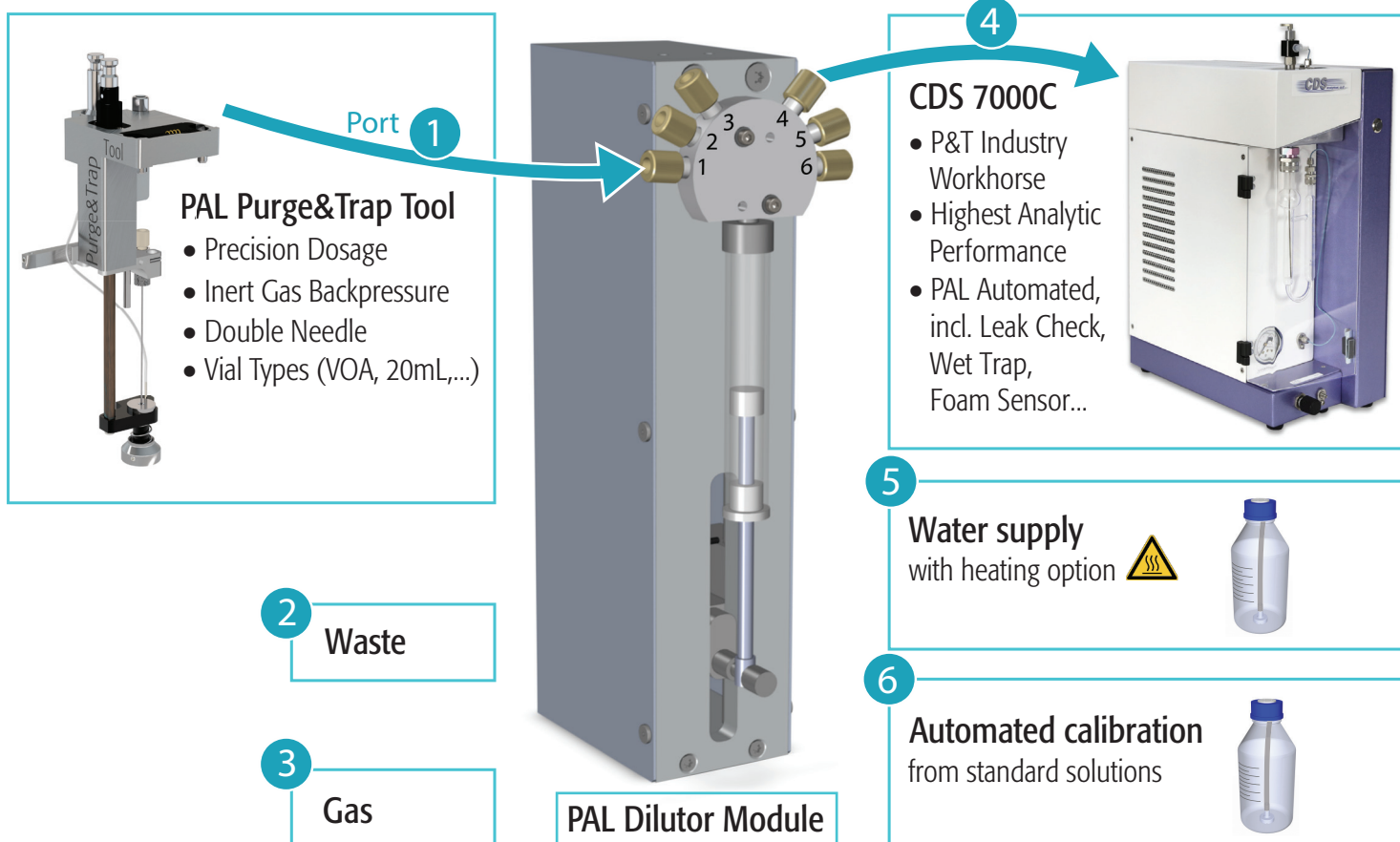- PAL workflows and reliability

Figure 1: Chromatogram of volatiles at 20 ppb.

Closing the Gaps in P&T Automation, Method Design and Analysis

Technical principle: Simple, robust and complied with established method protocols

Port **1**

PAL Purge&Trap Tool
- Precision Dosage
- Inert Gas Backpressure
- Double Needle
- Vial Types (VOA, 20mL,...)

3 **4** **2** **5** **1** **6**

CDS 7000C
- P&T Industry Workhorse
- Highest Analytic Performance
- PAL Automated, incl. Leak Check, Wet Trap, Foam Sensor...

4

2 Waste

3 Gas

PAL Dilutor Module

5 Water supply
with heating option ⚠️

6 Automated calibration
from standard solutions

CDS 7000C Specifications
- Pressure transducer for leak check
- 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
- Desorb pre-heat option
- Maximum Operating Temperatures
- 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")
- Valve oven 350°C
- Transfer Line 350°C
- Wet Trap 300°C
- Adsorbent Trap 300°C

CDS 7000C Options
- Hot water rinse module
- Heated sparge vessel module
- Electronic mass flow controller
- ISTD addition module

PAL P&T Plugin Software: Seamless integrates to your familiar instruments
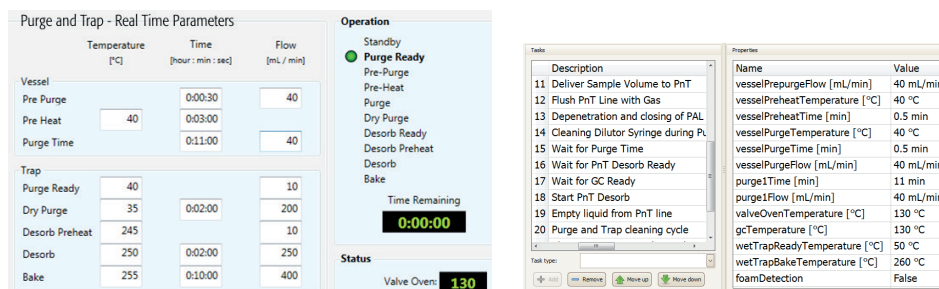
Figure 2: Routine P&T controls (left) and method design on expert level (right).

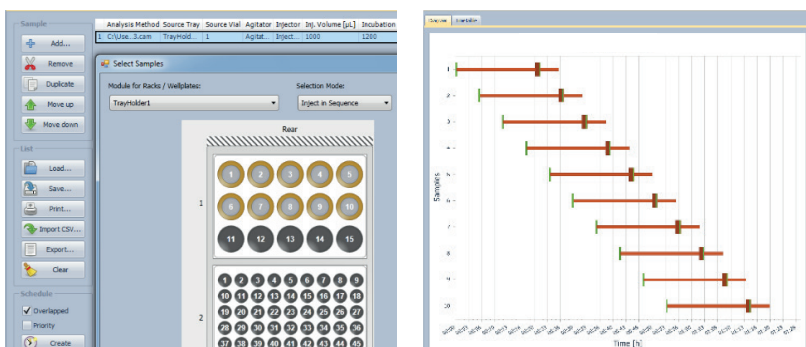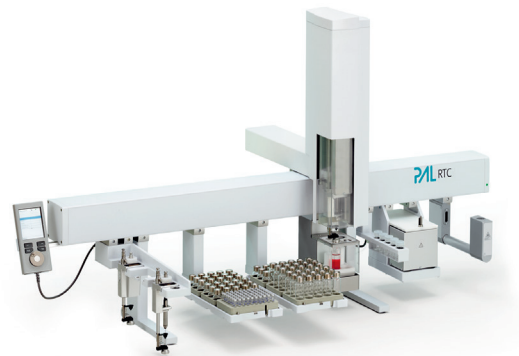## PAL Sample Control: Acquisition software with boosted productivity

Figure 3: Easy user interface (left) and time optimized processing (right).

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www.palsystem.com