# Gas Chromatography

◆ Features

★ Control system: designed for monitoring and controlling the instrument via the computer.

★ Column Compartment/oven with superior thermal performance, multistage (10 ramps) programmed temperature control function. (supported by "control system")

★ Advanced built-in data acquisition system , supporting real time instrument status monitoring, detection signal acquisition and PC control

★ Column oven accommodates up to 3 chromatographic columns, and supports quick heat-up and rapid cool-down with automated back-door opening.

  (400℃ to 50℃ in 6 min at 25℃ cambient)

★ Flexible sample introduction system: 3 sample injectors could be installed and operated simultaneously with independent temperature control.

★ High sensibility and stability detector.

★ 2 independent and analog signals output.

★ M6 software, compatible with GLP/FDA-21 CFR Part11 requirements and regulations. (electronic records and signatures)

◆ Gas chromatography and accessories

★ Carrier Gas System + Sample Introduction System + Separation System + Temperature Control System + Detector

★ Carrier Gas System: air source/ purification and desiccation device/ flow rate control device

★ Sample Introduction System: sample injector

★ Separation System: chromatographic column(packed column and capillary column)

★ Temperature Control System (Column Oven): constant temperature and programmed temperature

★ Detector: FID/ FPD/ NPD

◆ Advanced Microcomputer Control System

★ Superior performance with advanced, microcomputer-based temperature control system

★ High temperature accuracy (optimum ± 0.02℃), high reliability, and anti-interference

★ Self-diagnosis/ self-protection function (overheat protection, power-off protection, etc.)

★ Intuitive display of timing program, detector status, measurement range, current setting, etc
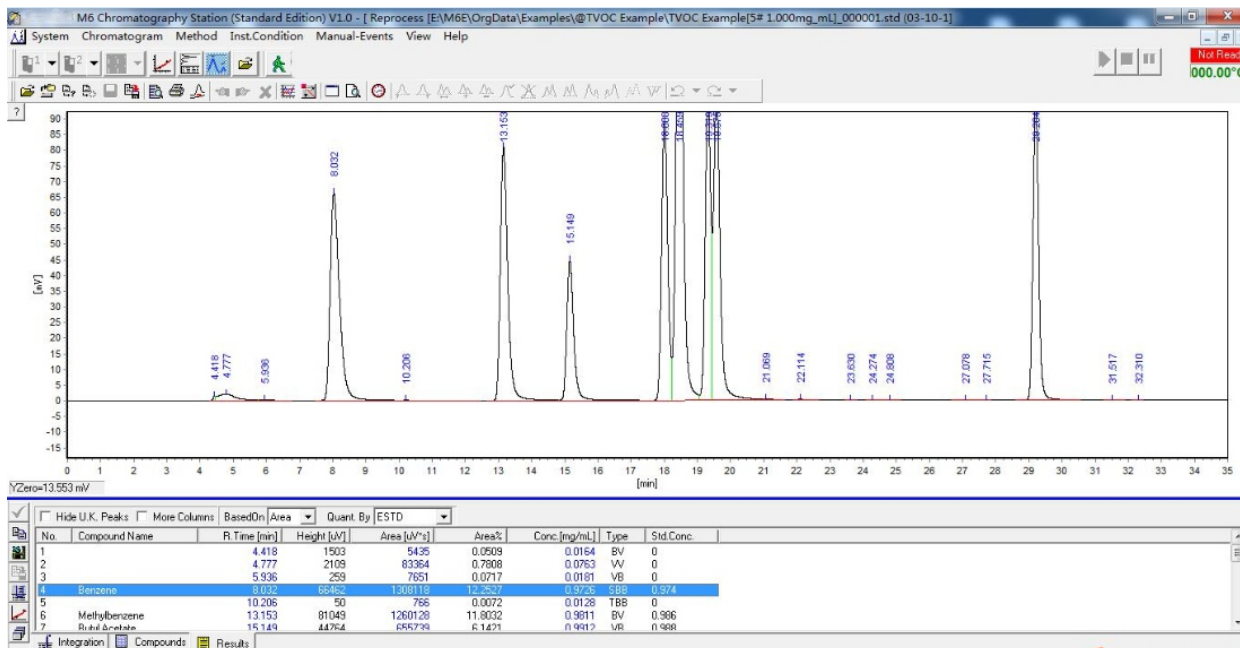
M6 Software interface

◆ **Technical parameters**

Model#		DW-GC1120
Sample Introduction System		sample injector and evaporation chamber
Column Oven	Temperature range	Ambient temperature +7℃～400℃ (in 1℃ increment)
	Temperature accuracy	±0.02℃
	Cooling time	400℃ to 50℃ in 6 min at 25℃ ambient
	Programmed temperature setting	0.1℃～40℃/min (in 1℃ increment)
	Program ramps	7 ramps in total (10 ramps available with control workstation①)
	Size (L*W*H)	284*280*241mm(inside)340*345*281mm(outside)
Flame Ionization Detector (FID)	Detection limit	≤3×10^{-12}g/s (C$_{16)}$
	Best test result	≤3×10^{-12}g/s (C$_{16)}$
	Drift	≤6×10^{-13}A/30min
	Noise	≤5×10^{-14}A
	Linearity range	≥106
Thermal Conductivity Detector(TCD)	Sensitivity	≥5000mV, mL/mg (C16)
	Baseline noise	≤20μV
	Drift	≤60μV/h
	Linearity range	≥104
Flame Photometric Detector(FPD)	Detection limit	≤8×10^{-13}g/s(P) ; ≤8×10^{-11}g/s(S)
	Drift	≤2×10^{-11}A/30min
	Baseline noise	≤5×10^{-12}A
Nitrogen-Phosphorus Detector(NPD)	Detection limitnge	≤5×10^{-13}g/s(P)（Malathion）; ≤5×10^{-12}g/s(N)（Azobenzene）