

# GAS CHROMATOGRAPHY

Gas Chromatography (GC), is a common type of chromatography used in analytic chemistry for separating and analyzing compounds that can be vaporized without decomposition.

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## Advantages

- High speed
- High resolution
- High accuracy
- High reproducibility
- High quality
- FID detector as default
- TCD detector (Optional)
- Split flow control by MFC and setting via software
- Capillary injector (Split/Splitless)
- Capillary inlet pressure by EPC (Optional)
- H<sub>2</sub> and Air flow control by MFC (Optional)
- Online injection by 6 port valve (Optional)
- PID temperature control
- Oven temperature programming via software (for any step)
- Online software help in any language
- Friendly user software



“GC-2550TG” Gas Chromatograph has been designed and produced by Teif Gostar Faraz Company (TG Co.), “GC-2550TG” made according to international standards. It can be chosen between different detectors according to the analytical problem. All commonly used capillary columns as well as packed and micro packed columns can be used. It is possible to adjust various temperature programs.

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## Applications

- Petrol-Chemistry
- Environmental protection
- Pharmacology
- Scientific research

### Gas Chromatography Software

A chromatography software, also known as a Chromatography data system (CDS), collects and analyzes chromatographic results delivered by chromatography detectors. Many chromatography software packages are provided by manufacturers, and many of them only provide a simple interface to acquire data. They also provide different tools to analyses these data.

GC-2550TG software is "integrator", it computes Areas, Height, Area normalization%, retention time, External and Internal calibration.

It has on line help and on line movies that train the software.

## SPECIFICATIONS

PARAMETER	RANGE	COMMENT
Oven Temperature	Ambient ~ 400 ° C	PID control
Inj – Det Temperature	Ambient ~ 400 ° C	PID control
Injector	Capillary - Packed	1 Port
Capillary mode	Split - Splitless	Automatic
Injection mode	Manual - Online	By 6 port Valve
Multiple Injection	Online by 10 port valve	2 Detector
Detector	FID – TCD	FID default
FID Detector	High speed	Up to 50 Hz
FID Dynamic range	10 e 7	5 level
FID detection limit	3 X 10 e -12 g/s	For Diphenyl
TCD Detector	High speed	Up to 50 Hz
TCD filament	2 – 4 filaments	Rhenium - Tungsten
Gas control	Manual / EPC	4 Chanel EPC
Power	220 V AC – 2.5 KW	50 - 60 Hz
Dimension	59 X 44 X 55	W X H X D cm
Weight	35 Kg	

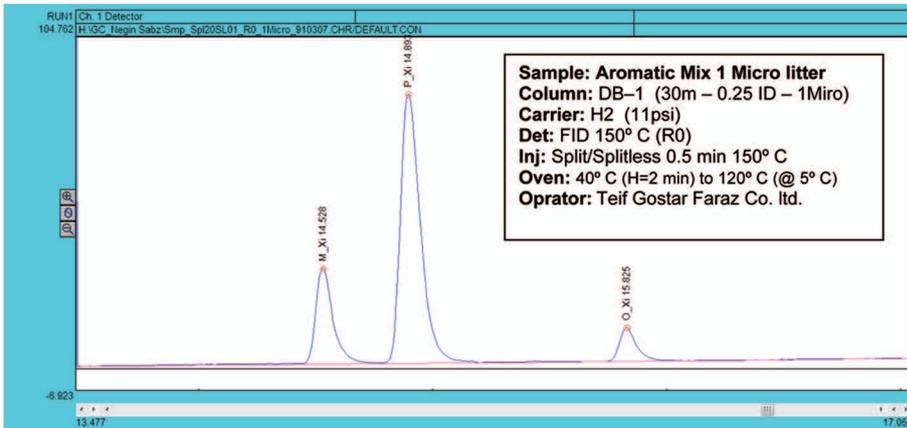
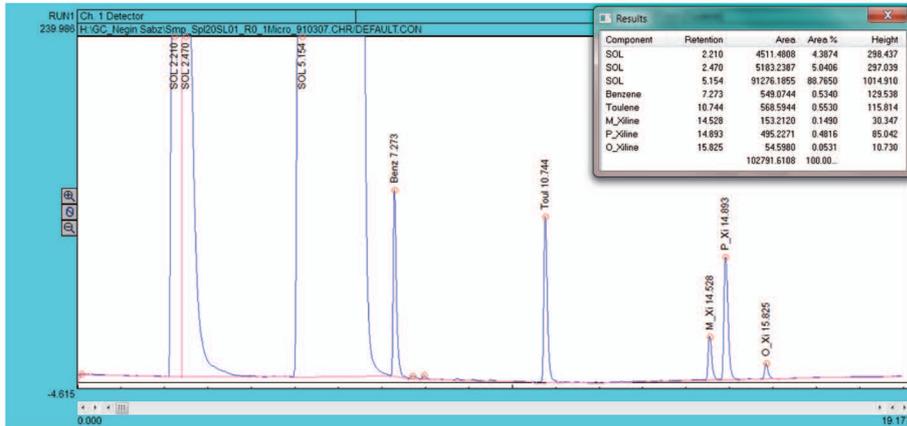
## ACCESSORIES

For using 2550TG, users will need to supply some accessories by themselves or via our company such as:

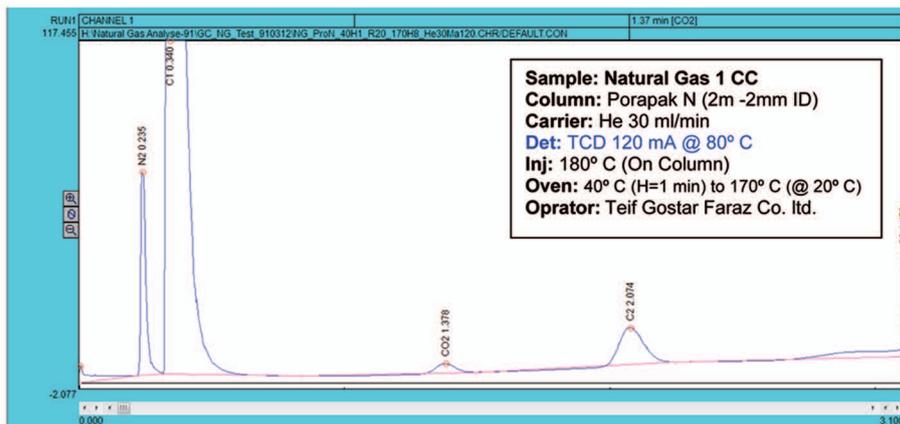
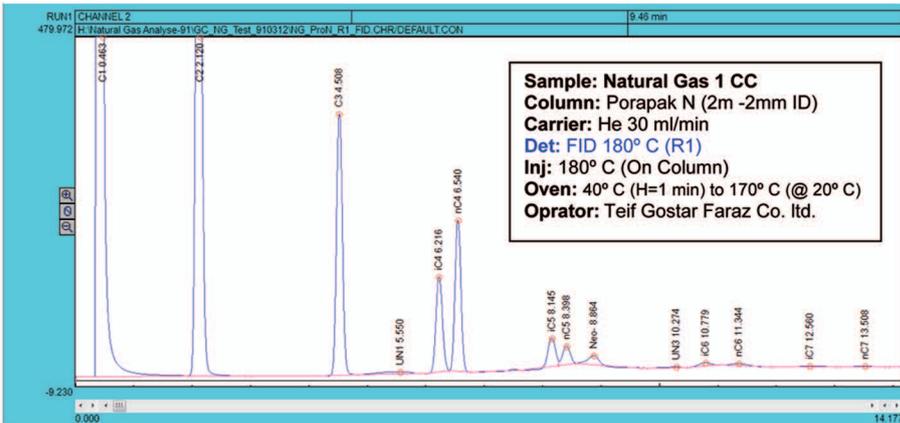
- Hydrogen generator for supplying support gas for FID and also for carrier gas.
- Oil free Air compressor or Air capsule with regulator for FID
- Helium capsule for carrier gas with appropriate regulator if H2 is not selected for carrier.
- Syringe for liquid sample injection in micro litter range or for gas sample injection in milliliter range.
- PC computer with windows XP program
- Standard sample for calibration
- Suitable bench (70 X 150 cm)



Fundamental Studies



ANALYSIS IN DETERMINING THE AMOUNT OF AROMATICS BENZENE, TOLUENE AND XYLENE



NATURAL GAS ANALYSIS AND DETERMINATION C1 TO C7 & CO2 & N2 WITH USING TCD AND FID DETECTORS, TO CALCULATE THE HEATING VALUE, GAS DENSITY AND OTHER PARAMETERS

