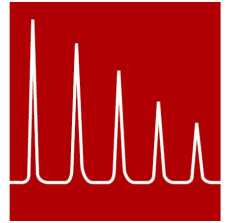


Series 100 TCD Gas Chromatograph

AGC
INSTRUMENTS

Gas Chromatography since 1965



% / ppm Analysis using Thermal Conductivity

Features:

Proven TCD design

Rapid response time

Packed Column solutions

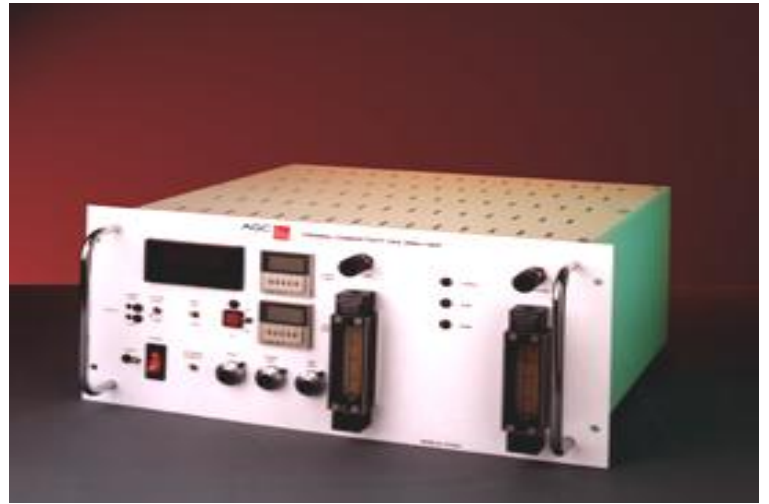
Tried & tested technology

Tested & tough design for all environments

Maximum uptime

Customised manufacture to specific application from client

Cost effective & reliable



Thermal Conductivity Detector (TCD)

Target Market:

- Air Separation Units
- Industrial Gas Producers
- Petrochemical
- Refineries
- LNG / NGL Plants
- Power Generation
- Gas Turbine Control
- Ethylene Plants

Applications:

Purity Measurement of Gases

Medical N₂ Analysis to Pharmacopeia

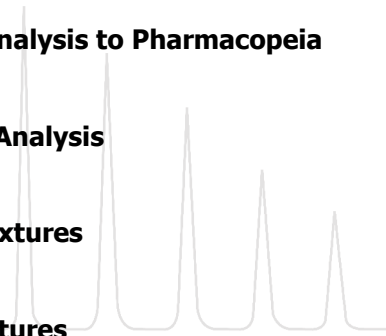
Natural Gas Analysis

Laser Gas Mixtures

Fuel Gas Mixtures

Blood Gas Mixtures

Helium Analysis



AGC
INSTRUMENTS

**Formerly known as
GOW-MAC Instrument Co. (Ireland) Ltd**

Gas Chromatography since 1965

Our Detector:

Four sensing elements are connected to form an electrical Wheatstone bridge circuit. These elements are miniature rhenium-tungsten filaments, which are mounted in a metallic cell block. A flow through type thermal conductivity cell is normally used in this analyser. A diffusion type detector may also be fitted. This cell contains a sample and reference gas flow geometry. Two elements are installed in each flow system. An electrical current from a regulated power source heats the elements. Changes in thermal conductivity of the sample gas result in an output voltage change.

Our Solution:

We work closely with each client in order to ensure that all aspects of the application are understood. Then our applications design team will design a solution specifically with the application in mind. All our systems can be designed for corrosive applications and are manufactured with corrosion resistance materials.

Our After Sale Support:

Installation and Commissioning support is essential to providing a total Turnkey solution. Through our dedicated Distribution Network we are able to provide local support and back-up, in both native language and in English. All our Distribution partners have been selected having the technical skills required to provide an excellent support. Ongoing training is provided with specific training focused on Industrial and Specialty Gas applications.

Specifications:

Detector

Name: Thermal Conductivity Detector
Linearity: $> 10^4$
Temp Range: Ambient to 400°C
Sensitivity: $< 5\text{pm}$ (application dependent)
Response Time: < 1 second
Noise: $10\mu\text{V}$ maximum, depending on operating parameters

Power Requirements

110/220/240V , 50/60 Hz

Operating Conditions

Temperature Range: $+10^\circ\text{C}$ to 40°C

Gases Required

Carrier Gas: He , Ar or H₂
Actuator Gas: Clean dry air @ 3 bar

Dimensions

W = 19" ; D = 400mm ; H = 10U (450mm)

Output Signal:

0-1 V ⁽²⁾

Sample Inlet

Gas Sample Valve (6 Port or 10 Port) ⁽³⁾

Gas Connections

1/8" stainless steel with Swagelok fittings

How to Order:

- (1) Carrier selection depends on components to be analyzed.
- (2) Can be adjusted to the input specification of the customer's recorder/integrator/data handling system
For automatic operation AGC recommends TrendVision Data system, see separate brochure – AGC-TVS
- (3) Can be switched manually or automatically, controlled by Data System.
- (4) For multiple or sequenced sample inlet lines, please let us know your application, we provide you with the customised solution.

How to Order:

Each AGC Series 100 TCD GC is manufactured specific to a particular application. Please contact AGC Instruments direct or our local Distributor. We will discuss each aspect of your application to understand your exact requirements. Through this close development we can build and design a configuration for you.

Contact Details:

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