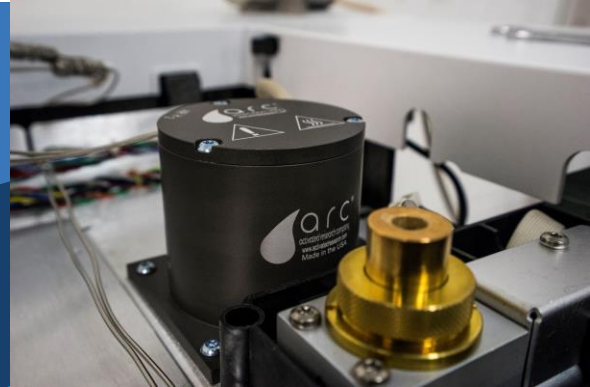


The Polyarc[®] System

Universal GC/FID Response

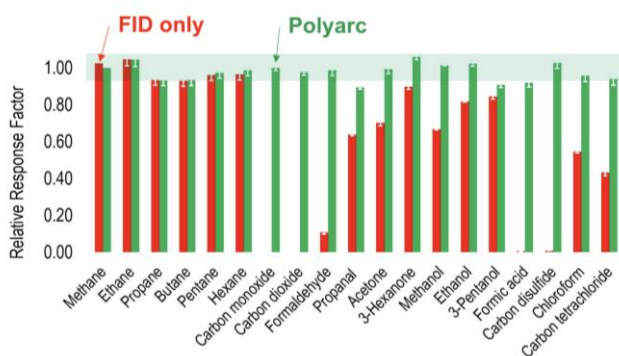


For use with these GC models:
Agilent 5890, 6890, 7820, 7890, 8890

What is it?

The Polyarc is the next evolution of flame ionization detection (FID). It converts the FID into a truly universal carbon detector using proprietary catalytic reactors that convert organic molecules to methane immediately prior to detection.

Polyarc/FID vs. FID Relative Response Factors (RRF)

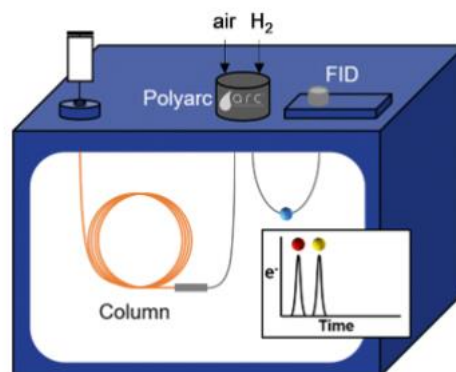


Why is it important?

The FID has two main challenges: Lack of uniform response and low response to certain compounds. The Polyarc enhances your FID to solve these challenges by giving your FID a uniform response to nearly all organic molecules. The result is more accurate data, improved productivity, lab efficiencies, and the ability to detect more compounds

How it Works

1. The Polyarc is always located between the column and the FID but can be mounted in many different locations.
2. It is a two chamber microreactor with an initial combustion reaction followed by a reduction step, resulting in complete conversion of all organic molecules to methane.
3. Only methane passes is detected by the FID. This results in a uniform response for all compounds.



Benefits of the Polyarc

- Polyarc converts all compounds to methane allowing for the universal detection of millions of organic compounds.
- >99% conversion to methane
- Reduce the need for traditional calibrations.
- Quantify compounds with unavailable commercial standards.
- Increase sensitivity for compounds that respond poorly in the FID (e.g., CO, CO₂, formic acid, formaldehyde)

