

MDS 6890™

Multidimensional System

Introduction

The SGE MDS 6890 is a powerful, yet simple and inexpensive system that allows an upgrade of an existing Agilent Technologies 6890 GC into a fully integrated, multidimensional instrument.

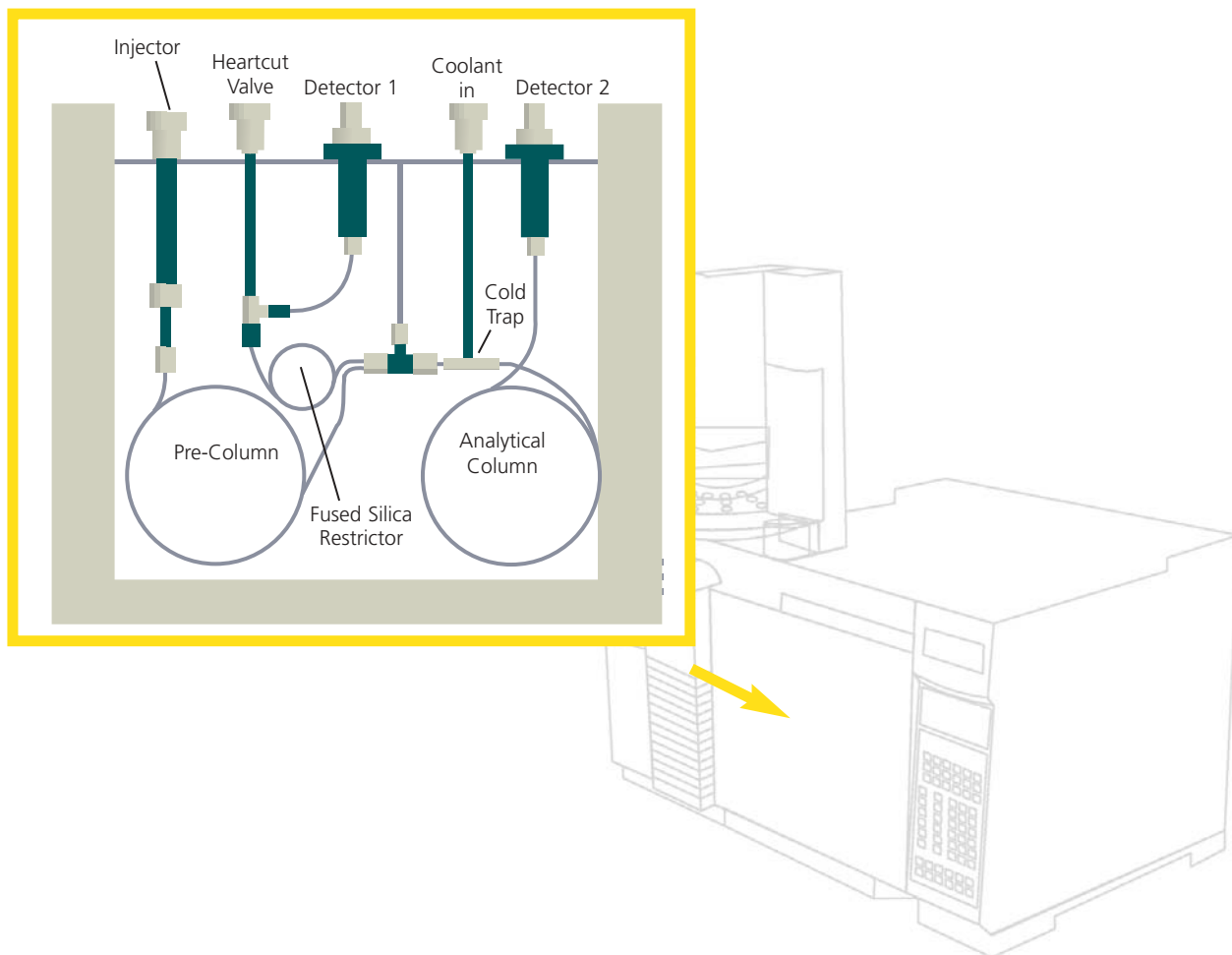
Features and Benefits

- Modular design for 6890 GC.
- Incorporates EPC and external timed events.
- Simple Installation.
- Enables separation of complex mixtures.
- Can be used with multiple detectors (FID, ECD, NPD, TCD & MS).

Technical Aspects

The MDS HP6890 gives enhanced resolution capacity by using two gas chromatography columns in series to create two separation dimensions. Where existing capillary columns cannot provide the necessary resolution of components present in a sample group, that group may be switched to another capillary column more suited to the separation. This avoids the use of very long columns and complex temperature profiles. Apart from the ability to resolve peaks that were previously unresolvable, shorter analysis times and extended column life can be expected. The external events and EPC module of the HP6890 controls all switching on the MDS HP6890. Programming of the function is via the HP6890 keypad or HP Chemstation software.

A diagrammatic representation of the installation of the MDS6890 is shown in the diagram below.



Applications

Essential Oils

- chiral analysis of complex oils
- enrichment of trace components for identification

Petroleum

- analysis of benzene in petrol
- analysis of gasoline

PCBs / Dioxins

- specific congener analysis of these highly toxic compounds

Specifications

HP6890 GC Requirements

The HP6890 GC requires the following options for successful installation and operation of the multidimensional kit.

- 1 x EPC Injection Port
- 2 x atmospheric detectors (eg. FID, ECD, NPD)
- 1 x Auxiliary 3 channel EPC (HP Part No. G1570A)

Gas Supplies

The MDS HP6890 requires a supply of high purity carrier gas, a suitable make up gas and a suitable valve actuation gas. If the cryogenic trap is to be used, a bottle of technical grade CO₂ with a dip tube is also required.

Installation of the MDS 6890

SGE has many years experience in multidimensional chromatography and can offer you personal advice on your analytical problems.

SGE can install the system for you on your existing gas chromatograph and where necessary customize the installation for your particular requirements. Alternatively the MDS 6890 comes with full instructions for self-installation. The MDS 6890 capillary to capillary system can be used with any combination of 0.32mm ID and narrower capillary columns.

Ordering Information

The MDS6890' Multidimensional System is supplied with all valves, cold traps and fittings ready for multidimensional applications. Capillary columns must be purchased separately.

Description	Part No.
MDS6890' Multidimensional System	0933490
Optional Auxiliary EPC for 6890 GC	0933491

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