

Global Gas Chromatography Systems Market - Product Types and End-Use Sectors

Market Report | 2023-09-01 | 362 pages | Industry Experts

AVAILABLE LICENSES:

- Single user licence (PDF) \$4500.00
- Enterprise Electronic (PDF) \$7200.00

Report description:

Report Synopsis

Gas Chromatography (GC) is the most commonly used type of Chromatography, comprising mobile and stationary phases. The mobile phase is the inert gas, and the stationary phase is a column within the machine. GC is most widely used to separate volatile mixtures in industries, such as pharmaceuticals, agriculture, environmental, industrial, food & beverage and cosmetics & cleaning.

Pharmaceutical is and will remain the largest, as also the fastest growing, end-use sector for GC Systems because of the technique's significance in identifying & analyzing samples for the presence of chemicals or trace elements, separating compounds based on their element composition & molecular weight, detecting purity of mixture & unknown compounds and in drug development. Overall global market for GC Systems is estimated to be US\$3.1 billion in 2023 and is further projected to reach US\$4.4 billion by 2029.

Research Findings & Coverage

- Global market for Gas Chromatography Systems is analyzed in this report with respect to product segments/sub-segments, end-use sectors, major geographic regions and key countries
- Global market share analysis for GC Systems based on the segmentation mentioned above and current market size estimation, revenue projections for the analysis period through 2029
- The study discusses major growth trends, R&D, technology updates, statutory regulations and emerging applications of GC Systems that influence the market growth
- Key business trends focusing on product innovations/developments, capacity expansions, M&As, JVs and other recent industry developments by the major players
- The report includes 267 charts/data tables covering market numbers by segment and regions with graphical representation for each table
- Brief business profiles of major companies covered - 16
- The industry guide includes the contact details for 171 companies

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Product Outline

The market for product segments/sub-segments of Gas Chromatography Systems analyzed in this report includes:

- Instruments
 - o Autosamplers
 - o Detectors
 - o Fraction Collectors
- Consumables & Accessories
 - o Autosampler Accessories
 - o Columns & Accessories
 - o Fittings & Tubing
 - o Flow Management & Pressure Regulator Accessories
 - o Others

Global market for end-use sectors of Gas Chromatography Systems explored in this study includes:

- Agriculture
- Environmental Sciences
- Food & Beverages
- Petrochemical
- Pharmaceutical
- Others

Analysis Period, Units and Growth Rates

- The report reviews, analyzes and projects the global Gas Chromatography Systems market for the period 2020-2029 in terms of market value in US\$ and the compound annual growth rates (CAGRs) projected from 2023 through 2029

Geographic Coverage

- North America (The United States, Canada and Mexico)
- Europe (France, Germany, Italy, Russia, Spain, the United Kingdom and Rest of Europe)
- Asia-Pacific (China, India, Japan, South Korea and Rest of Asia-Pacific)
- South America (Argentina, Brazil and Rest of South America)
- Rest of World

Table of Contents:

TABLE OF CONTENTS

PART A: GLOBAL MARKET PERSPECTIVE

1. INTRODUCTION

1.1 Product Outline

1.1.1 Chromatography Explained in Brief

1.1.1.1 Major Types of Chromatography

1.1.1.1.1 Gas Chromatography

1.1.1.1.2 High-Performance Liquid Chromatography (HPLC)

1.1.1.1.3 Thin-Layer Chromatography

1.1.1.1.4 Paper Chromatography

1.1.1.2 A Historical Perspective of Chromatography

1.1.2 Gas Chromatography Described

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 1.1.2.1 Challenges in Gas Chromatography
- 1.1.3 Gas Chromatography Systems by Segment
 - 1.1.3.1 Gas Chromatography Instruments
 - 1.1.3.1.1 Gas Chromatography Autosamplers
 - 1.1.3.1.2 Gas Chromatography Detectors
 - 1.1.3.1.3 Gas Chromatography Fraction Collectors
 - 1.1.3.2 Gas Chromatography Consumables & Accessories
 - 1.1.3.2.1 Columns & Accessories
 - 1.1.3.2.2 Fittings and Tubing
 - 1.1.3.2.3 Autosampler Accessories
 - 1.1.3.2.4 Flow Management & Pressure Regulator Accessories
 - 1.1.3.2.5 Other Consumables & Accessories

2. END-USE SECTOR ANALYSIS - A MARKET SNAPSHOT

- 2.1 Agriculture
- 2.2 Environmental Sciences
- 2.3 Food & Beverages
- 2.4 Petrochemical
 - 2.4.1 Column Selection According to Sample Volatility
 - 2.4.2 Refinery Oil Assays
- 2.5 Pharmaceutical
 - 2.5.1 Basic Procedure
 - 2.5.2 Impurity Profiling
 - 2.5.3 GC in the Identification of Functional Groups
 - 2.5.4 GC in Metabolomics
- 2.6 Other End-Use Sectors
 - 2.6.1 Forensics
 - 2.6.2 Lithium-Ion Batteries
 - 2.6.3 Cannabis

3. KEY MARKET TRENDS

- 3.1 Gas Chromatography Being Augmented by Innovative Technologies
- 3.2 GC-MS Technology Finding Wider Application Owing to Various Factors
- 3.3 Separation of Food-Borne Pesticides Simplified with GC Coupled with Other Technologies
- 3.4 GC Combined with Additional Techniques Eases Analysis of Polysorbates
- 3.5 PID-Equipped Portable Gas Chromatograph Allows VOC Monitoring at Industrial Sites
- 3.6 GC-IDIR Offers a Revolutionary Technique for Analyzing Purity of Peptides
- 3.7 MOFs & ILs Combine with GC to Offer a Groundbreaking Separation Technology

4. KEY MARKET PLAYERS

- Agilent Technologies, Inc. (United States)
- Chromatotec (France)
- Cytiva (United Kingdom)
- GL Sciences Inc. (Japan)
- LECO Corporation (United States)
- Merck KGaA (Germany)
- OI Analytical (United States)

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Perkinelmer, Inc. (United States)
Phenomenex, Inc. (United States)
Restek Corporation (United States)
Scion Instruments NL BV (Netherlands)
Shimadzu Corp (Japan)
SRI Instruments (United States)
Teledyne Analytical Instruments (United States)
Thermo Fisher Scientific, Inc. (United States)
Trajan Scientific and Medical (Australia)

5. KEY BUSINESS & PRODUCT TRENDS

6. GLOBAL MARKET OVERVIEW

6.1 Global Gas Chromatography Systems Market Overview by Segment
6.1.1 Global Gas Chromatography Instruments Market Overview by Sub-Segment
6.1.2 Gas Chromatography Instruments Market Overview by Global Region
6.1.2.1 Gas Chromatography Instruments Sub-Segment Market Overview by Global Region
6.1.2.1.1 Gas Chromatography (GC) Autosamplers
6.1.2.1.2 Gas Chromatography (GC) Detectors
6.1.2.1.3 Gas Chromatography (GC) Fraction Collectors
6.1.3 Global Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment
6.1.4 Gas Chromatography Consumables & Accessories Market Overview by Global Region
6.1.4.1 GC Consumables & Accessories Sub-Segment Market Overview by Global Region
6.1.4.1.1 Gas Chromatography (GC) Autosampler Accessories
6.1.4.1.2 Gas Chromatography (GC) Columns & Accessories
6.1.4.1.3 Gas Chromatography (GC) Fittings & Tubing
6.1.4.1.4 Gas Chromatography (GC) Flow Management & Pressure Regulator Accessories
6.1.4.1.5 Other Consumables & Accessories for Gas Chromatography (GC) Systems
6.2 Global Gas Chromatography Systems Market Overview by End-Use Sector
6.2.1 Gas Chromatography Systems End-Use Sector Market Overview by Global Region
6.2.1.1 Agriculture
6.2.1.2 Environmental Sciences
6.2.1.3 Food & Beverages
6.2.1.4 Petrochemical
6.2.1.5 Pharmaceutical
6.2.1.6 Other End-Use Sectors

PART B: REGIONAL MARKET PERSPECTIVE

REGIONAL MARKET OVERVIEW

7. NORTH AMERICA

7.1 North American Gas Chromatography Systems Market Overview by Geographic Region
7.2 North American Gas Chromatography Systems Market Overview by Segment
7.2.1 North American Gas Chromatography Instruments Market Overview by Sub-Segment
7.2.2 North American Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment
7.3 North American Gas Chromatography Systems Market Overview by End-Use Sector

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

7.4 Major Market Players

- Agilent Technologies, Inc. (United States)
- LECO Corporation (United States)
- OI Analytical (United States)
- Perkinelmer, Inc. (United States)
- Phenomenex, Inc. (United States)
- Restek Corporation (United States)
- SRI Instruments (United States)
- Teledyne Analytical Instruments (United States)
- Thermo Fisher Scientific, Inc. (United States)

7.5 Country-wise Analysis of North American Gas Chromatography Systems Market

7.5.1 The United States

7.5.1.1 United States' Gas Chromatography Systems Market Overview by Segment

7.5.1.1.1 United States' Gas Chromatography Instruments Market Overview by Sub-Segment

7.5.1.1.2 United States' Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment

7.5.1.2 United States' Gas Chromatography Systems Market Overview by End-Use Sector

7.5.2 Canada

7.5.2.1 Canadian Gas Chromatography Systems Market Overview by Segment

7.5.2.1.1 Canadian Gas Chromatography Instruments Market Overview by Sub-Segment

7.5.2.1.2 Canadian Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment

7.5.2.2 Canadian Gas Chromatography Systems Market Overview by End-Use Sector

7.5.3 Mexico

7.5.3.1 Mexican Gas Chromatography Systems Market Overview by Segment

7.5.3.1.1 Mexican Gas Chromatography Instruments Market Overview by Sub-Segment

7.5.3.1.2 Mexican Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment

7.5.3.2 Mexican Gas Chromatography Systems Market Overview by End-Use Sector

8. EUROPE

8.1 European Gas Chromatography Systems Market Overview by Geographic Region

8.2 European Gas Chromatography Systems Market Overview by Segment

8.2.1 European Gas Chromatography Instruments Market Overview by Sub-Segment

8.2.2 European Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment

8.3 European Gas Chromatography Systems Market Overview by End-Use Sector

8.4 Major Market Players

- Chromatotec (France)
- Cytiva (United Kingdom)
- Merck KGaA (Germany)
- Scion Instruments NL BV (The Netherlands)

8.5 Country-wise Analysis of European Gas Chromatography Systems Market

8.5.1 France

8.5.1.1 French Gas Chromatography Systems Market Overview by Segment

8.5.1.1.1 French Gas Chromatography Instruments Market Overview by Sub-Segment

8.5.1.1.2 French Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

8.5.1.2 French Gas Chromatography Systems Market Overview by End-Use Sector

8.5.2 Germany

8.5.2.1 German Gas Chromatography Systems Market Overview by Segment

8.5.2.1.1 German Gas Chromatography Instruments Market Overview by Sub-Segment

8.5.2.1.2 German Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment

8.5.2.2 German Gas Chromatography Systems Market Overview by End-Use Sector

8.5.3 Italy

8.5.3.1 Italian Gas Chromatography Systems Market Overview by Segment

8.5.3.1.1 Italian Gas Chromatography Instruments Market Overview by Sub-Segment

8.5.3.1.2 Italian Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment

8.5.3.2 Italian Gas Chromatography Systems Market Overview by End-Use Sector

8.5.4 Russia

8.5.4.1 Russian Gas Chromatography Systems Market Overview by Segment

8.5.4.1.1 Russian Gas Chromatography Instruments Market Overview by Sub-Segment

8.5.4.1.2 Russian Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment

8.5.4.2 Russian Gas Chromatography Systems Market Overview by End-Use Sector

8.5.5 Spain

8.5.5.1 Spanish Gas Chromatography Systems Market Overview by Segment

8.5.5.1.1 Spanish Gas Chromatography Instruments Market Overview by Sub-Segment

8.5.5.1.2 Spanish Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment

8.5.5.2 Spanish Gas Chromatography Systems Market Overview by End-Use Sector

8.5.6 The United Kingdom

8.5.6.1 United Kingdom Gas Chromatography Systems Market Overview by Segment

8.5.6.1.1 United Kingdom Gas Chromatography Instruments Market Overview by Sub-Segment

8.5.6.1.2 United Kingdom Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment

8.5.6.2 United Kingdom Gas Chromatography Systems Market Overview by End-Use Sector

8.5.7 Rest of Europe

8.5.7.1 Rest of Europe Gas Chromatography Systems Market Overview by Segment

8.5.7.1.1 Rest of Europe Gas Chromatography Instruments Market Overview by Sub-Segment

8.5.7.1.2 Rest of Europe Gas Chromatography Consumables & Accessories Market Overview by Sub-Segment

8.5.7.2 Rest of Europe Gas Chromatography Systems Market Overview by End-Use Sector

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Global Gas Chromatography Systems Market - Product Types and End-Use Sectors

Market Report | 2023-09-01 | 362 pages | Industry Experts

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scott's-international.com

ORDER FORM:

Select license	License	Price
	Single user licence (PDF)	\$4500.00
	Enterprise Electronic (PDF)	\$7200.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scott's-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-22"/>
		Signature	<input type="text"/>

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scott's-international.com

www.scott's-international.com