

**Automated Liquid Handling Systems Market - Focus** on Automated Pipetting Systems and Automated Microplate Washers, 2023-2035: Distribution by Pipetting Technology (Contact Technology, Air **Displacement Technology, Piston / Positive** Displacement Technology, Acoustic Technology and Free-jet Technology), Washing Technology (Ultrasonic Technology, Acoustic Technology and Centrifugal Technology), Modality (Fixed Tips, Disposable Tips), Type of Instrument (Standalone, Individual Benchtop Workstation, Multi Instrument Systems and Others), Application (Serial Dilution, Plate Replication, PCR / qPCR Setup, Plate Reformatting, High-throughput Screening, Whole Genome Amplification, Cell Culture, Cell-based Assays, Bead Washing and Other Applications), End User (Biotechnology and Pharmaceutical Companies, Academic and Government Research Institutes, Hospitals and Diagnostic Centers and Other End Users) and Key Geographical Regions (North America, Europe, Asia-Pacific, Middle East and North Africa, and Latin America): Industry Trends and Global Forecasts

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## **Abstracts**

The global automated liquid handling systems market is expected to reach USD 6.30 billion by 2035 and is anticipated to grow at a CAGR of 7.4% during the forecast period 2023-2035

Technological progress is instrumental in advancing innovation within the life sciences sector, particularly in optimizing assay throughput and frequency. The rising demand for complex biopharmaceuticals has led to a proliferation of laboratories worldwide offering analytical and product development solutions. Throughout various stages of laboratory processes, meticulous control of variables and parameters remains crucial. Liquid handling, the transfer of fluids for testing purposes, stands as a pivotal step in bioprocessing. However, traditional methods, such as manual handling techniques, heighten the risk of procedural errors and limit flexibility due to the high operational costs associated with continuous human resource availability. Additionally, numerous environmental and process-related factors can hinder or influence efficient liquid handling, potentially compromising the integrity of the solution in progress. Hence, ensuring aseptic conditions throughout liquid handling becomes imperative to safeguard the solution's integrity.

Consequently, the introduction of automated liquid handling systems has emerged as a promising alternative, mitigating the drawbacks associated with manual handling. These instruments have diverse applications in clinical research laboratories and academic institutions, capable of dispensing liquid volumes down to nanoliters with exceptional precision and accuracy. The increasing interest among stakeholders in technological advancements and the adoption of automated liquid handling systems is expected to significantly drive growth in the overall automated liquid handling market during the forecast period.

## Report Coverage

The analysis delves into the automated liquid handling systems market, examining pipetting technology, washing technology, modality, instrument type, application, end user, and key geographical regions.

Evaluation of market growth drivers, restraints, opportunities, and challenges that impact the industry.

Assessment of potential advantages and barriers within the market, including



insights into the competitive landscape among top players.

Revenue forecasting for market segments across five major regions.

A concise summary presenting research insights, offering a comprehensive view of the current state, and projecting the anticipated evolution of the automated liquid handling systems market in the medium-to-long term.

A thorough comparative overview of manual, semi-automated, and automated liquid handling systems. This section details the functionality, benefits, and various types of automated pipetting systems, encompassing tip-based and non-tip based systems. It also covers automated microplate washers and outlines ideal system features, while discussing applications, adoption challenges, and future prospects.

Detailed analysis of the current automated pipetting systems market landscape, encompassing factors such as pipetting technology, certification, instrument types, pipetting head options, system weight, compatible labware, application areas, additional features, and end users. This chapter also examines key providers, analyzing their establishment years, company size, and headquarters locations.

In-depth evaluation of automated pipetting system providers based on company strength (years since establishment), product diversity (liquid handling tasks, applications, end users, etc.), and product strength (instrument types, additional features, compatible labware, etc.).

Elaborate profiles of selected companies involved in automated pipetting systems' manufacturing across diverse regions. Each profile includes an overview of the company, product portfolio, financial details (if available), recent developments, and future perspectives.

Comprehensive analysis of the automated microplate washers market, considering factors like instrument types, compatible microplate types, system weight, compatible labware, application areas, applications, end users, key providers, establishment years, company size, and headquarters locations.

Extensive evaluation of automated microplate washer providers based on company strength, product diversity, and product strength criteria, considering



factors such as system weight, residual volume, additional features, application areas, and end users.

Detailed profiles of prominent companies engaged in automated microplate washer manufacturing across diverse global regions, encompassing company overview, product portfolio, financial details (if available), recent developments, and future prospects.

In-depth examination of industry partnerships since 2018, analyzing parameters like partnership year, type, automated liquid handling system type, geography, popular products, and active players based on the number of partnerships.

Comprehensive analysis of patents filed or granted concerning automated liquid handling systems since 2018. Factors considered include patent publication year, type, jurisdiction, CPC symbols, applicant types, focus areas, leading players, individual assignees, patent benchmarking, and valuation analysis based on citation count.

Detailed discourse on industry-related trends, key drivers, challenges, strengths, weaknesses, opportunities, and threats using a SWOT framework. Additionally, visual representation of these factors through a Harvey ball analysis.

## **Key Market Companies**

Agilent Technologies

Beckman Coulter Life Sciences

Eppendorf

Hamilton Robotics

MyGenostics

Tecan

Thermo Fisher Scientific



## **Contents**

## 1. PREFACE

- 1.1. Introduction
- 1.2. Key Market Insights
- 1.3. Scope of the Report
- 1.4. Research Methodology
- 1.5. Frequently Asked Questions
- 1.6. Chapter Outlines

## 2. EXECUTIVE SUMMARY

#### 3. INTRODUCTION

- 3.1. Chapter Overview
- 3.2. Overview of Automated Liquid Handling Systems
- 3.3. Manual versus Automated Liquid Handling
- 3.4. Automated Pipetting Systems
  - 3.4.1. Working Mechanism of Automated Pipetting Systems
  - 3.4.2. Types of Automated Pipetting Systems
    - 3.4.2.1. Tip-based Pipetting Systems
  - 3.4.2.2. Non-tip based Pipetting Systems
  - 3.4.3. Advantages of Automated Pipetting Systems
- 3.5. Automated Microplate Washers
  - 3.5.1. Features of an Ideal Automated Microplate Washer
- 3.6. Applications of Automated Liquid Handling Systems
- 3.7. Challenges in Adoption of Automated Liquid Handling Systems
- 3.8. Future Perspectives

### 4. AUTOMATED PIPETTING SYSTEMS: MARKET LANDSCAPE

- 4.1. Chapter Overview
- 4.2. Automated Pipetting Systems: Overall Market Landscape
  - 4.2.1. Analysis by Type of Technology
  - 4.2.2. Analysis by Pipetting Technology
  - 4.2.3. Analysis by Certification(s)
  - 4.2.4. Analysis by Type of Instrument(s) by Assembly
  - 4.2.5. Analysis by Pipetting Head Option(s)



- 4.2.6. Analysis by Weight of Automated Pipetting System (in Kg)
- 4.2.7. Analysis by Compatible Labware
- 4.2.8. Analysis by Application Area(s)
- 4.2.9. Analysis by Application(s)
- 4.2.10. Analysis by Additional Feature(s)
- 4.2.11. Analysis by End User(s)
- 4.3. Automated Pipetting System Providers Landscape
  - 4.3.1. Analysis by Year of Establishment
  - 4.3.2. Analysis by Company Size
- 4.3.3. Analysis by Location of Headquarters (Region-wise)
- 4.3.4. Analysis by Company Size and Location of Headquarters (Region-wise)
- 4.3.5. Analysis by Location of Headquarters (Country-wise)
- 4.3.6. Most Active Players: Analysis by Number of Automated Pipetting Systems Manufactured

# 5. AUTOMATED PIPETTING SYSTEM PROVIDERS: COMPETITIVENESS ANALYSIS

- 5.1. Chapter Overview
- 5.2. Assumptions and Key Parameters
- 5.3. Methodology
- 5.4. Company Competitiveness Analysis: Automated Pipetting System Providers
  - 5.4.1. Companies based in North America (Peer Group I)
  - 5.4.2. Companies based in Europe (Peer Group II)
  - 5.4.3. Companies based in Asia-Pacific and Rest of the World (Peer Group III)

## 6. AUTOMATED PIPETTING SYSTEM PROVIDERS: COMPANY PROFILES

- 6.1. Chapter Overview
- 6.2. Beckman Coulter Life Sciences
  - 6.2.1. Company Overview
  - 6.2.2. Financial Information
  - 6.2.3. Product Portfolio
  - 6.2.4. Recent Developments and Future Outlook
- 6.3. Eppendorf
  - 6.3.1. Company Overview
  - 6.3.2. Financial Information
  - 6.3.3. Product Portfolio
  - 6.3.4. Recent Developments and Future Outlook



- 6.4. Hamilton Robotics
  - 6.4.1. Company Overview
  - 6.4.2. Product Portfolio
  - 6.4.3. Recent Developments and Future Outlook
- 6.5. MyGenostics
  - 6.5.1. Company Overview
  - 6.5.2. Product Portfolio
  - 6.5.3. Recent Developments and Future Outlook

## 7. AUTOMATED MICROPLATE WASHERS: MARKET LANDSCAPE

- 7.1. Chapter Overview
- 7.2. Automated Microplate Washers: Overall Market Landscape
  - 7.2.1. Analysis by Type of Instrument(s) by Assembly
  - 7.2.2. Analysis by Compatible Microplate(s)
  - 7.2.3. Analysis by Weight of Automated Microplate Washer (in Kg)
  - 7.2.4. Analysis by Compatible Software
  - 7.2.5. Analysis by Compatible Labware
  - 7.2.6. Analysis by Application Area(s)
  - 7.2.7. Analysis by Application(s)
  - 7.2.8. Analysis by End User(s)
- 7.3. Automated Microplate Washer Providers Landscape
  - 7.3.1. Analysis by Year of Establishment
  - 7.3.2. Analysis by Company Size
  - 7.3.3. Analysis by Location of Headquarters (Region-wise)
  - 7.3.4. Analysis by Company Size and Location of Headquarters (Region-wise)
- 7.3.5. Analysis by Location of Headquarters (Country-wise)
- 7.3.6. Most Active Players: Analysis by Number of Automated Microplate Washers Manufactured

# 8. AUTOMATED MICROPLATE WASHER PROVIDERS: COMPETITIVENESS ANALYSIS

- 8.1. Chapter Overview
- 8.2. Assumptions and Key Parameters
- 8.3. Methodology
- 8.4. Company Competitiveness Analysis: Automated Microplate Washer Providers
  - 8.4.1. Companies based in North America (Peer Group I)
  - 8.4.2. Companies based in Europe (Peer Group II)



## 8.4.3. Companies based in Asia-Pacific and Rest of the World (Peer Group III)

#### 9. AUTOMATED MICROPLATE WASHER PROVIDERS: COMPANY PROFILES

- 9.1. Chapter Overview
- 9.2. Agilent Technologies
  - 9.2.1. Company Overview
  - 9.2.2. Financial Information
  - 9.2.3. Product Portfolio
  - 9.2.4. Recent Developments and Future Outlook
- 9.3. Tecan
  - 9.3.1. Company Overview
  - 9.3.2. Financial Information
  - 9.3.3. Product Portfolio
  - 9.3.4. Recent Developments and Future Outlook
- 9.4. Thermo Fisher Scientific
  - 9.4.1. Company Overview
  - 9.4.2. Financial Information
  - 9.4.3. Product Portfolio
  - 9.4.4. Recent Developments and Future Outlook

## 10. PARTNERSHIPS AND COLLABORATIONS

- 10.1. Chapter Overview
- 10.2. Partnership Models
- 10.3. Automated Liquid Handling Systems: Partnerships and Collaborations
  - 10.3.1. Analysis by Year of Partnership
  - 10.3.2. Analysis by Type of Partnership
  - 10.3.3. Analysis by Year and Type of Partnership
  - 10.3.4. Analysis by Type of Automated Liquid Handling System(s)
  - 10.3.5. Analysis by Product and Type of Partnership
  - 10.3.6. Most Popular Products: Distribution by Number of Partnerships
  - 10.3.7. Most Active Players: Analysis by Type of Partnership
  - 10.3.8. Analysis by Geography
    - 10.3.8.1. Local and International Agreements
    - 10.3.8.2. Intracontinental and Intercontinental Agreements

## 11. PATENT ANALYSIS



- 11.1. Chapter Overview
- 11.2. Scope and Methodology
- 11.3. Automated Liquid Handling Systems: Patent Analysis
  - 11.3.1. Analysis by Patent Publication Year
  - 11.3.2. Analysis by Annual Number of Granted Patents and Patent Applications
  - 11.3.3. Analysis by Geography
  - 11.3.4. Analysis by CPC Sections
  - 11.3.5. Word Cloud Analysis: Emerging Focus Areas
  - 11.3.6. Analysis by Type of Organization
  - 11.3.7. Leading Industry Players: Analysis by Number of Patents
  - 11.3.8. Leading Non-Industry Players: Analysis by Number of Patents
- 11.3.9. Leading Individual Assignees: Analysis by Number of Patents
- 11.4. Automated Liquid Handling Systems: Patent Benchmarking Analysis
  - 11.4.1. Analysis by Patent Characteristics
- 11.5. Automated Liquid Handling Systems: Patent Valuation Analysis
- 11.6. Leading Patents: Analysis by Number of Citations

#### 12. MARKET SIZING AND OPPORTUNITY ANALYSIS

- 12.1. Chapter Overview
- 12.2. Methodology and Key Assumptions
- 12.3. Global Automated Liquid Handling Systems Market, 2023-2035
- 12.3.1. Automated Liquid Handling Systems Market: Distribution by Type of Automated Liquid Handling System
  - 12.3.1.1. Automated Pipetting Systems Market: 2023-2035
- 12.3.1.1. Automated Pipetting Systems Market: Distribution by Pipetting Technology, 2023 and 2035
- 12.3.1.1.1. Automated Pipetting Systems Market for Contact Technology, 2023-2035
- 12.3.1.1.2. Automated Pipetting Systems Market for Air Displacement Technology, 2023-2035
- 12.3.1.1.3. Automated Pipetting Systems Market for Piston / Positive Displacement Technology, 2023-2035
- 12.3.1.1.4. Automated Pipetting Systems Market for Acoustic Technology, 2023-2035
- 12.3.1.1.5. Automated Pipetting Systems Market for Free-jet Technology, 2023-2035
- 12.3.1.1.2. Automated Pipetting Systems Market: Distribution by Modality, 2023 and 2035



- 12.3.1.1.2.1. Automated Pipetting Systems Market for Fixed Tips, 2023-2035
- 12.3.1.1.2.2. Automated Pipetting Systems Market for Disposable Tips, 2023-2035
- 12.3.1.1.3. Automated Pipetting Systems Market: Distribution by Type of Instrument, 2023 and 2035
  - 12.3.1.1.3.1. Automated Pipetting Systems Market for Standalone, 2023-2035
- 12.3.1.1.3.2. Automated Pipetting Systems Market for Individual Benchtop Workstation, 2023-2035
- 12.3.1.1.3.1. Automated Pipetting Systems Market for Multi Instrument System, 2023-2035
  - 12.3.1.1.3.2. Automated Pipetting Systems Market for Others, 2023-2035
- 12.3.1.1.4. Automated Pipetting Systems Market: Distribution by Application, 2023 and 2035
  - 12.3.1.1.4.1. Automated Pipetting Systems Market for Serial Dilution, 2023-2035
- 12.3.1.1.4.2. Automated Pipetting Systems Market for Plate Replication,
- 2023-2035
- 12.3.1.1.4.3. Automated Pipetting Systems Market for PCR / qPCR Setup, 2023-2035
- 12.3.1.1.4.4. Automated Pipetting Systems Market for Plate Reformatting, 2023-2035
- 12.3.1.1.4.5. Automated Pipetting Systems Market for High-throughput Screening, 2023-2035
- 12.3.1.1.4.6. Automated Pipetting Systems Market for Whole Genome Amplification, 2023-2035
  - 12.3.1.1.4.7. Automated Pipetting Systems Market for Cell Culture, 2023-2035
- 12.3.1.1.4.8. Automated Pipetting Systems Market for Other Applications, 2023-2035
- 12.3.1.1.5. Automated Pipetting Systems Market: Distribution by End User, 2023 and 2035
- 12.3.1.1.5.1. Automated Pipetting Systems Market for Biotechnology and Pharmaceutical Companies, 2023-2035
- 12.3.1.1.5.2. Automated Pipetting Systems Market for Academic and Government Research Institutes, 2023-2035
- 12.3.1.1.5.3. Automated Pipetting Systems Market for Hospitals and Diagnostic Centers, 2023-2035
- 12.3.1.1.5.4. Automated Pipetting Systems Market for Other End Users, 2023-2035
- 12.3.1.1.6. Automated Pipetting Systems Market: Distribution by Key Geographical Regions, 2023 and 2035
  - 12.3.1.1.6.1 Automated Pipetting Systems Market in North America, 2023-2035



- 12.3.1.1.6.2. Automated Pipetting Systems Market in Europe, 2023-2035
- 12.3.1.1.6.3. Automated Pipetting Systems Market in Asia-Pacific, 2023-2035
- 12.3.1.1.6.4. Automated Pipetting Systems Market in Middle East and North Africa, 2023-2035
  - 12.3.1.1.6.5. Automated Pipetting Systems Market in Latin America, 2023-2035
  - 12.3.1.2. Automated Microplate Washers Market: 2023-2035
- 12.3.1.2.1. Automated Microplate Washers Market: Distribution by Washing Technology, 2023 and 2035
- 12.3.1.2.1.1. Automated Microplate Washers Market for Ultrasonic Technology, 2023-2035
- 12.3.1.2.1.2. Automated Microplate Washers Market for Acoustic Technology, 2023-2035
- 12.3.1.2.1.3. Automated Microplate Washers Market for Centrifugal Technology, 2023-2035
- 12.3.1.2.2. Automated Microplate Washers Market: Distribution by Application, 2023 and 2035
  - 12.3.1.2.2.1. Automated Microplate Washers Market for ELISA, 2023-2035
- 12.3.1.2.2.2. Automated Microplate Washers Market for Cell-based Assays, 2023-2035
  - 12.3.1.2.2.3. Automated Microplate Washers Market for Bead Washing, 2023-2035
- 12.3.1.2.2.4. Automated Microplate Washers Market for Other Applications,
- 2023-2035
- 12.3.1.2.3. Automated Microplate Washers Market: Distribution by End User, 2023 and 2035
- 12.3.1.2.3.1. Automated Microplate Washers Market for Biotechnology and Pharmaceutical Companies, 2023-2035
- 12.3.1.2.3.2. Automated Microplate Washers Market for Academic and Government Research Institutes, 2023-2035
- 12.3.1.2.3.3. Automated Microplate Washers Market for Hospitals and Diagnostic Centers, 2023-2035
- 12.3.1.2.3.4. Automated Microplate Washers Market for Other End Users, 2023-2035
- 12.3.1.2.4. Automated Microplate Washers Market: Distribution by Key Geographical Regions, 2023 and 2035
  - 12.3.1.2.4.1. Automated Microplate Washers Market in North America, 2023-2035
  - 12.3.1.2.4.2. Automated Microplate Washers Market in Europe, 2023-2035
  - 12.3.1.2.4.3. Automated Microplate Washers Market in Asia-Pacific, 2023-2035
- 12.3.1.2.4.4. Automated Microplate Washers Market in Middle East and North Africa, 2023-2035



## 12.3.1.2.4.5. Automated Microplate Washers Market in Latin America, 2023-2035

## 13. SWOT ANALYSIS

- 13.1. Chapter Overview
- 13.2. Automated Liquid Handling Systems: SWOT Analysis
- 13.3. Comparison of SWOT Factors
  - 13.3.1. Weaknesses
  - 13.3.2. Opportunities
  - 13.3.3. Threats
- 13.4. Concluding Remarks

## 14. CONCLUDING REMARKS

15. APPENDIX I: TABULATED DATA

16. APPENDIX II: LIST OF COMPANIES AND ORGANIZATIONS



## I would like to order

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