

# **Automation Solutions for Water Treatment Plants Market Forecasts to 2032 – Global Analysis By Solution (Supervisory Control and Data Acquisition (SCADA), Distributed Control Systems (DCS), Programmable Logic Controllers (PLC), Human-Machine Interface (HMI), Manufacturing Execution Systems (MES), Advanced Process Control (APC) & Optimization Software, Plant Asset Management (PAM) Solutions, and Other Solutions), Process, Application, End User and By Geography**

<https://marketpublishers.com/r/A5E8F60EB1DDEN.html>

Date: September 2025

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: A5E8F60EB1DDEN

## **Abstracts**

According to Statistics MRC, the Global Automation Solutions for Water Treatment Plants Market is accounted for \$24.4 billion in 2025 and is expected to reach \$53.4 billion by 2032 growing at a CAGR of 11.8% during the forecast period. Automation solutions for water treatment plants involve deploying advanced control systems, sensors, and analytics to monitor and manage water purification, chemical dosing, filtration, and waste handling. Automation ensures optimal operation, regulatory compliance, and resource efficiency while minimizing human intervention and errors. Real-time data collection and predictive maintenance improve operational reliability and cost-effectiveness. As urbanization and water scarcity rise globally, demand for sustainable and efficient water management drives adoption, ensuring safe drinking water supply and environmentally responsible wastewater treatment in municipalities and industries.

Market Dynamics:

**Driver:****Rising demand for clean water**

The primary driver for the automation solutions market is the escalating global demand for potable water, intensified by population growth, urbanization, and industrial expansion. Stricter governmental regulations regarding water quality and discharge effluents are compelling plants to adopt advanced automation technologies to ensure compliance and operational consistency. Additionally, the critical need to reduce non-revenue water (NRW) through efficient leak detection and distribution management is pushing utilities toward automated supervisory control and data acquisition (SCADA) systems. This ensures optimal resource utilization, enhances process reliability, and mitigates risks associated with manual operation, thereby fueling market growth.

**Restraint:****Limited technical expertise in developing regions**

The complexity of integrating industrial Internet of Things (IIoT) platforms, programmable logic controllers (PLCs), and other advanced instrumentation requires specialized training. This expertise gap often leads to higher operational costs for training and reliance on external consultants, thereby increasing the total cost of ownership. Moreover, the reluctance to transition from conventional methods due to a lack of technical understanding can hinder the adoption of modern automation solutions, limiting market penetration in these high-potential regions.

**Opportunity:****Integration with renewable energy sources**

Automation solutions can dynamically manage energy consumption by aligning high-power processes like pumping and aeration with periods of renewable energy generation or lower tariff rates. This integration significantly reduces the operational expenditure (OPEX) associated with energy, which is a primary cost component for water utilities. Furthermore, it enhances the sustainability profile of treatment plants, making them more resilient to energy price volatility and appealing for green financing and investments, thus opening new growth avenues.

## Threat:

### Policy uncertainties in public projects

Market growth faces a threat from budgetary constraints and policy ambiguities surrounding public water infrastructure projects, which are a major end-user segment. The allocation of public funds for water treatment plant upgrades is often subject to political shifts, changing fiscal priorities, and bureaucratic delays. Such uncertainties can lead to the postponement or cancellation of capital expenditure (CAPEX) projects, directly impacting the demand for new automation systems. Additionally, lengthy tender processes and renegotiations can create an unpredictable sales pipeline for automation vendors, posing a significant challenge to stable market expansion.

## Covid-19 Impact:

The COVID-19 pandemic initially disrupted the automation solutions market, causing supply chain delays and halting project deployments due to lockdowns and social distancing measures. The ensuing economic pressure led to deferred investments in new infrastructure, particularly in the public sector. However, the crisis subsequently acted as a catalyst, underscoring the critical need for resilient and remotely operable water infrastructure. This accelerated the adoption of IIoT, cloud-based SCADA, and remote asset management solutions to ensure plant continuity with minimal on-site staff, driving a strategic shift toward digitalization and automation.

The municipal water treatment plants segment is expected to be the largest during the forecast period

The municipal water treatment plants segment is expected to account for the largest market share during the forecast period due to the immense scale of public water and wastewater treatment infrastructure and the persistent governmental focus on providing clean water to urban populations. Municipalities are major investors in automation to comply with stringent environmental regulations, improve treatment efficiency, and manage the complexities of large-scale distribution networks. Additionally, aging infrastructure in developed nations necessitates modernization through automation for predictive maintenance and reducing non-revenue water, ensuring this segment remains the largest revenue contributor.

The human-machine interface (HMI) segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the human-machine interface (HMI) segment is predicted to witness the highest growth rate, driven by its critical role as the central point of interaction between operators and complex automation systems. Modern HMIs are evolving beyond simple control panels into advanced visualization platforms that integrate data from PLCs, sensors, and cloud analytics. This provides operators with actionable insights for real-time decision-making and process optimization. Moreover, the industry's shift toward user-friendly, intuitive interfaces to mitigate the skills gap and enhance operational situational awareness is fueling increased adoption and investment in next-generation HMI solutions.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share. This leadership is attributed to the presence of a technologically advanced industrial base, stringent Environmental Protection Agency (EPA) regulations, and significant government funding for modernizing aging water infrastructure. The high concentration of leading automation solution providers and a strong emphasis on adopting smart water technologies, such as IIoT and AI for predictive maintenance, further consolidate North America's dominant position. Additionally, high awareness regarding water conservation and quality drives consistent investment in advanced automation solutions across municipalities and industries.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR. This accelerated growth is fueled by rapid industrialization, massive urban population growth, and increasing government initiatives like India's Smart Cities Mission and China's water pollution prevention policies. The region presents immense opportunities for greenfield water treatment projects and the modernization of existing facilities to address severe water scarcity and pollution challenges. Moreover, rising investments in industrial manufacturing and increasing foreign direct investment (FDI) in infrastructure development are key factors propelling the demand for automation solutions in the water treatment sector.

Key players in the market

Some of the key players in Automation Solutions for Water Treatment Plants Market include Xylem, Veolia, Schneider Electric, Siemens, ABB, SUEZ, Rockwell Automation,

Emerson Electric, Honeywell, Mitsubishi Electric, Yokogawa Electric, Endress+Hauser, Pentair, Grundfos, Valmet, Itron, Aquatech International, and DuPont.

#### Key Developments:

In September 2025, Veolia introduced Australia's first AI-powered robot arm at its Bibra Lake Resource Recovery Park in Western Australia. This advanced system sorts seven different types of plastic with 95% accuracy, significantly enhancing recycling efficiency and workplace safety.

In August 2025, Xylem's Emmaboda facility in Sweden achieved a significant milestone by reusing 100% of its process water and over 85% of its iron from recycled materials. This initiative underscores Xylem's commitment to sustainable practices in water treatment.

In June 2025, Rockwell Automation collaborated with Brock Solutions to develop standardized automation solutions for water and wastewater facilities. This approach ensures consistency and efficiency across various plant operations.

In April 2025, Siemens partnered with O? Telef?nica to develop solutions based on 5G network slicing technology. This collaboration enables water utilities to securely connect their entire infrastructure, facilitating efficient monitoring and control across operations.

#### Solutions Covered:

Supervisory Control and Data Acquisition (SCADA)

Distributed Control Systems (DCS)

Programmable Logic Controllers (PLC)

Human-Machine Interface (HMI)

Manufacturing Execution Systems (MES)

Advanced Process Control (APC) & Optimization Software

Plant Asset Management (PAM) Solutions

## Other Solutions

### Processes Covered:

Raw Water Intake & Pumping

Water Purification

Disinfection

Sludge Treatment and Handling

Effluent Treatment and Discharge

### Applications Covered:

Chemical Dosing and Mixing Control

Pump and Blower Control

Valve and Actuator Control

Filter Management and Backwash Control

Quality Monitoring and Analysis

Data Management and Reporting

### End Users Covered:

Municipal Water Treatment Plants

Industrial Water Treatment

### Regions Covered:

## North America

US

Canada

Mexico

## Europe

Germany

UK

Italy

France

Spain

Rest of Europe

## Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

## South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

### Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

### Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

### Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

## Contents

### **1 EXECUTIVE SUMMARY**

### **2 PREFACE**

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
  - 2.4.1 Data Mining
  - 2.4.2 Data Analysis
  - 2.4.3 Data Validation
  - 2.4.4 Research Approach
- 2.5 Research Sources
  - 2.5.1 Primary Research Sources
  - 2.5.2 Secondary Research Sources
  - 2.5.3 Assumptions

### **3 MARKET TREND ANALYSIS**

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Application Analysis
- 3.7 End User Analysis
- 3.8 Emerging Markets
- 3.9 Impact of Covid-19

### **4 PORTERS FIVE FORCE ANALYSIS**

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

## **5 GLOBAL AUTOMATION SOLUTIONS FOR WATER TREATMENT PLANTS MARKET, BY SOLUTION**

- 5.1 Introduction
- 5.2 Supervisory Control and Data Acquisition (SCADA)
- 5.3 Distributed Control Systems (DCS)
- 5.4 Programmable Logic Controllers (PLC)
- 5.5 Human-Machine Interface (HMI)
- 5.6 Manufacturing Execution Systems (MES)
- 5.7 Advanced Process Control (APC) & Optimization Software
- 5.8 Plant Asset Management (PAM) Solutions
- 5.9 Other Solutions

## **6 GLOBAL AUTOMATION SOLUTIONS FOR WATER TREATMENT PLANTS MARKET, BY PROCESS**

- 6.1 Introduction
- 6.2 Raw Water Intake & Pumping
- 6.3 Water Purification
- 6.4 Disinfection
- 6.5 Sludge Treatment and Handling
- 6.6 Effluent Treatment and Discharge

## **7 GLOBAL AUTOMATION SOLUTIONS FOR WATER TREATMENT PLANTS MARKET, BY APPLICATION**

- 7.1 Introduction
- 7.2 Chemical Dosing and Mixing Control
- 7.3 Pump and Blower Control
- 7.4 Valve and Actuator Control
- 7.5 Filter Management and Backwash Control
- 7.6 Quality Monitoring and Analysis
- 7.7 Data Management and Reporting

## **8 GLOBAL AUTOMATION SOLUTIONS FOR WATER TREATMENT PLANTS MARKET, BY END USER**

- 8.1 Introduction
- 8.2 Municipal Water Treatment Plants

## 8.3 Industrial Water Treatment

# **9 GLOBAL AUTOMATION SOLUTIONS FOR WATER TREATMENT PLANTS MARKET, BY GEOGRAPHY**

## 9.1 Introduction

## 9.2 North America

### 9.2.1 US

### 9.2.2 Canada

### 9.2.3 Mexico

## 9.3 Europe

### 9.3.1 Germany

### 9.3.2 UK

### 9.3.3 Italy

### 9.3.4 France

### 9.3.5 Spain

### 9.3.6 Rest of Europe

## 9.4 Asia Pacific

### 9.4.1 Japan

### 9.4.2 China

### 9.4.3 India

### 9.4.4 Australia

### 9.4.5 New Zealand

### 9.4.6 South Korea

### 9.4.7 Rest of Asia Pacific

## 9.5 South America

### 9.5.1 Argentina

### 9.5.2 Brazil

### 9.5.3 Chile

### 9.5.4 Rest of South America

## 9.6 Middle East & Africa

### 9.6.1 Saudi Arabia

### 9.6.2 UAE

### 9.6.3 Qatar

### 9.6.4 South Africa

### 9.6.5 Rest of Middle East & Africa

# **10 KEY DEVELOPMENTS**

- 10.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 10.2 Acquisitions & Mergers
- 10.3 New Product Launch
- 10.4 Expansions
- 10.5 Other Key Strategies

## **11 COMPANY PROFILING**

- 11.1 Xylem
- 11.2 Veolia
- 11.3 Schneider Electric
- 11.4 Siemens
- 11.5 ABB
- 11.6 SUEZ
- 11.7 Rockwell Automation
- 11.8 Emerson Electric
- 11.9 Honeywell
- 11.10 Mitsubishi Electric
- 11.11 Yokogawa Electric
- 11.12 Endress+Hauser
- 11.13 Pentair
- 11.14 Grundfos
- 11.15 Valmet
- 11.16 Itron
- 11.17 Aquatech International
- 11.18 DuPont

## List Of Tables

### LIST OF TABLES

Table 1 Global Automation Solutions for Water Treatment Plants Market Outlook, By Region (2024-2032) (\$MN)

Table 2 Global Automation Solutions for Water Treatment Plants Market Outlook, By Solution (2024-2032) (\$MN)

Table 3 Global Automation Solutions for Water Treatment Plants Market Outlook, By Supervisory Control and Data Acquisition (SCADA) (2024-2032) (\$MN)

Table 4 Global Automation Solutions for Water Treatment Plants Market Outlook, By Distributed Control Systems (DCS) (2024-2032) (\$MN)

Table 5 Global Automation Solutions for Water Treatment Plants Market Outlook, By Programmable Logic Controllers (PLC) (2024-2032) (\$MN)

Table 6 Global Automation Solutions for Water Treatment Plants Market Outlook, By Human-Machine Interface (HMI) (2024-2032) (\$MN)

Table 7 Global Automation Solutions for Water Treatment Plants Market Outlook, By Manufacturing Execution Systems (MES) (2024-2032) (\$MN)

Table 8 Global Automation Solutions for Water Treatment Plants Market Outlook, By Advanced Process Control (APC) & Optimization Software (2024-2032) (\$MN)

Table 9 Global Automation Solutions for Water Treatment Plants Market Outlook, By Plant Asset Management (PAM) Solutions (2024-2032) (\$MN)

Table 10 Global Automation Solutions for Water Treatment Plants Market Outlook, By Other Solutions (2024-2032) (\$MN)

Table 11 Global Automation Solutions for Water Treatment Plants Market Outlook, By Process (2024-2032) (\$MN)

Table 12 Global Automation Solutions for Water Treatment Plants Market Outlook, By Raw Water Intake & Pumping (2024-2032) (\$MN)

Table 13 Global Automation Solutions for Water Treatment Plants Market Outlook, By Water Purification (2024-2032) (\$MN)

Table 14 Global Automation Solutions for Water Treatment Plants Market Outlook, By Disinfection (2024-2032) (\$MN)

Table 15 Global Automation Solutions for Water Treatment Plants Market Outlook, By Sludge Treatment and Handling (2024-2032) (\$MN)

Table 16 Global Automation Solutions for Water Treatment Plants Market Outlook, By Effluent Treatment and Discharge (2024-2032) (\$MN)

Table 17 Global Automation Solutions for Water Treatment Plants Market Outlook, By Application (2024-2032) (\$MN)

Table 18 Global Automation Solutions for Water Treatment Plants Market Outlook, By

Chemical Dosing and Mixing Control (2024-2032) (\$MN)

Table 19 Global Automation Solutions for Water Treatment Plants Market Outlook, By Pump and Blower Control (2024-2032) (\$MN)

Table 20 Global Automation Solutions for Water Treatment Plants Market Outlook, By Valve and Actuator Control (2024-2032) (\$MN)

Table 21 Global Automation Solutions for Water Treatment Plants Market Outlook, By Filter Management and Backwash Control (2024-2032) (\$MN)

Table 22 Global Automation Solutions for Water Treatment Plants Market Outlook, By Quality Monitoring and Analysis (2024-2032) (\$MN)

Table 23 Global Automation Solutions for Water Treatment Plants Market Outlook, By Data Management and Reporting (2024-2032) (\$MN)

Table 24 Global Automation Solutions for Water Treatment Plants Market Outlook, By End User (2024-2032) (\$MN)

Table 25 Global Automation Solutions for Water Treatment Plants Market Outlook, By Municipal Water Treatment Plants (2024-2032) (\$MN)

Table 26 Global Automation Solutions for Water Treatment Plants Market Outlook, By Industrial Water Treatment (2024-2032) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

## I would like to order

Product name: Automation Solutions for Water Treatment Plants Market Forecasts to 2032 – Global Analysis By Solution (Supervisory Control and Data Acquisition (SCADA), Distributed Control Systems (DCS), Programmable Logic Controllers (PLC), Human-Machine Interface (HMI), Manufacturing Execution Systems (MES), Advanced Process Control (APC) & Optimization Software, Plant Asset Management (PAM) Solutions, and Other Solutions), Process, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/A5E8F60EB1DDEN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/A5E8F60EB1DDEN.html>