

Intelligent Flow Meter - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

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Report description:

The Intelligent Flow Meter Market size is estimated at USD 3.34 billion in 2024, and is expected to reach USD 4.37 billion by 2029, growing at a CAGR of 5.59% during the forecast period (2024-2029).

The industry is bound to be benefitted from the changing end-user sectors, demanding more accurate and real-time observations for better results.

Key Highlights

- The market growth is majorly driven by the growing need for reliable measurement and monitoring of industrial fluids for optimum utilization. The Industry is also likely to be benefitted from the revival of the oil and gas industry and the expanding infrastructure in the water and wastewater industry in the future.
- The market for Coriolis flowmeter is expected to hold a large share of the intelligent flow meter market during the forecast period because of its applications in inline quality control. For instance, the flow meters' accurate density function can measure Brix and Plato values to ensure the quality of ingredients. Viscosity readings provide continuous measurement to minimize the chance of producing an off-spec product. There is a growing usage of intelligent Coriolis flowmeters to support the demanding hydrogen applications, where accuracy and stability are imperative.
- According to the survey results launched by Honeywell in January 2021, nearly a quarter of workers may quit before returning to a dangerous worksite. About 68% of the global workforce does not feel completely safe in the employers' buildings. Surveyed workers are most worried that the building management may not consistently enforce health and safety guidelines (42%), followed by worry that they may not always invest in new technology to make working in-person safer (30%). Thus, using devices such as flowmeters that provide safety in different aspects of operation is becoming imperative.
- The cost of higher accuracy meters is high, and depending on meter type and flow rate, even a slight increase in accuracy can be

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expensive. Coriolis flowmeters and magnetic flow meters typically have high initial costs, especially for large pipe sizes. According to AlicatScientific, a flow controller company, the Coriolis flowmeters costs around USD 4,000-6,000, while the laminar flowmeter costs around USD 1,000.

-The recent outbreak of COVID-19 posed additional stress on multiple economies across various sectors. The unexpected breakdown in the oil and gas industry, which is a crucial application category, is one of the significant setbacks affecting the growth of the global intelligent flowmeter market. As smart flow meters are used in the oil and gas industry to measure liquid flow in pipes, there is a significant negative influence on the intelligent flowmeter market.

Intelligent Flow Meter Market Trends

Food and Beverages Industry to Witness the Highest Growth

- Raw material measurement and control are crucially significant in the food and beverage manufacturing business. Flow meters for the food industry reduce costs while increasing output. In the food sector, specific processes necessitate sanitary conditions. These include dairy goods, wine, drinks, syrup, chocolate, edible oil, etc. Food-grade automation equipment is required in the food and beverage industry. Ascertain hygienic and safe conditions. The equipment can be sterilized without disassembly using a food-grade flow meter.
- Food grade flow meters can be used to measure edible oil. Many steps in the edible oil manufacturing process necessitate the use of a flow meter to measure the volume and weight of oil flowing out of the pipeline. Flow meters are required for data on the crude oil that is originally refined and the essential oil that is finally refined by companies that produce and process edible oils.
- The beverage industry includes beer, fruit juice, etc., and the flow of big pipes is usually measured with electromagnetic flowmeters. It can be precisely quantified in a large beverage manufacturing facility. Similarly, these meters are also used in breweries, syrup manufacturing, and so on.
- Many industries are going to significant lengths to identify production-enhancing insights from data in the advent of Industry 4.0. These insights aid in enhancing operational efficiency, increasing uptime and lowering maintenance costs, and acceptance in the food and beverage industry. This is bolstering the demand for intelligent flow meters in the food and beverage industry.
- In May 2021, Ecolab Inc., the prominent in water, hygiene, and infection prevention solutions and services, launched Water Flow Intelligence, a digital tool that offers industry real-time awareness of water usage at the enterprise, site, and asset levels. Water Flow Intelligence combines smart water meters and sensors with advanced water flow measurement and monitoring, asset performance insights, and machine learning to help food and beverage producers identify opportunities to improve water management across their operations, meet sustainability goals, and reduce operational costs.

Asia Pacific to Emerge as the Fastest Growing Market

- The Asia Pacific region is expected to continue occupying a significant share of the flowmeter market. Countries such as China, India, Japan, South Korea, Indonesia, Australia, and Singapore continue to impact the global market significantly. The number of investments in water & wastewater, energy and power, refining, chemicals, and industrial infrastructure activities is increasing in the developing economies such as China and India, which drives the demand for integration of IoT, which requires the implementation of intelligent flow measurement solutions for accurate and cost-effective measurement of liquid, gas, or steam flowing through or around the flow meter sensors.
- Japan has been a pioneer in transforming into an automated industrial economy in the Asia-Pacific region. The Industrial version 4.0 is being adopted at a faster pace. The region has emerged as a significant manufacturing hub for automation and digital solutions and is also supplying them to other markets in the Asia-Pacific region alongside international markets.

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- India holds the potential to emerge as a global manufacturing hub, with an annual contribution to the global economy of more than USD 500 billion by 2030. Natural gas output climbed by 18.9%, coal by 18.7%, petroleum refinery output by 6.7%, fertilizers by 0.5%, steel by 9.3%, cement by 21.8%, and electricity by 9% in July 2021.
- The cumulative FDI inflows, between April 2000 and June 2021, into manufacturing subsectors, reached USD 100.35 billion, according to the Department for Promotion of Industry and Internal Trade (DPIIT). India received total foreign direct investment (FDI) inflows of USD 81.72 billion in FY21, up 10% Y-o-Y. Therefore, the growing manufacturing sectors in the region, alongside the significant adoption of automation, are analyzed to boost the intelligent flow meters market growth rate during the forecast period.

Intelligent Flow Meter Industry Overview

The global intelligent flow meter market is fragmented, with each vendor providing multiple flowmeters for various industries. The competitive rivalry among existing competitors is high. Moreover, the demand in the intelligent flowmeter market is expected to be boosted by large companies' product innovation and expansion strategies. The flowmeter market has some major manufacturers, such as Siemens AG, Emerson Electric, Sensirion, and others, contributing to the competitive rivalry. Such vendors are established and have deep penetration in the market for flow meters. Some of the key developments in the area are:

- February 2022 - KROHNE unveiled the FOCUS-1 prototype as an innovation that unites valve and measuring technology with unique diagnostics and control functions in one device. FOCUS-1 is available as a standard product, which is claimed by the company as the world's first intelligent process node specifically developed for the process industries.
- December 2021 - ABB introduced the world's first electromagnetic flowmeter with bidirectional connectivity to enable intelligent water loss management.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

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