

Application report: SpectraA CIP cleaning equipment

FOOD





Maximum client satisfaction with conductivity sensor ILM-4 in CIP (clean-in-place) process

SpectraA Technology Solutions Pvt. Ltd. has earned a reputation as a global leader in manufacturing equipments for breweries, food and drink industries and the pharmaceutical sector. They offer end to end solutions to clients from visualizing the requirements to validating, financial along with installation, commissioning and training staffs. With substantial time in providing custom made solutions for various processes in the industry, SpectraA Technology guarantees the clients with higher efficiency and consistent quality, which also applies to the measuring instruments used. SpectraA therefore relied on the modular ILM-4 conductivity sensor from Anderson-Negele for its CIP systems. Highest measuring accuracy, process reliability and robust design are warrants for permanently successful applications.

The application

SpectraA Technology designs and builds, among others, complete tailor-made turnkey CIP systems for hygienic applications. The company defines its mission as follows: "To provide world class engineering technology solutions with top quality partner to our clients, with a consistent exchange of high innovation, calibre through our advanced products, processes and systems". In regards with these refined thoughts while selecting a suitable conductivity sensor in CIP return lines they evaluated several suppliers to find a reliable and sustainable solution for their customer, they finally concluded to use Anderson-Negele ILM-4 conductivity sensor.

Application advantages

- » Reliable process control with clear reduction of batch to batch contamination and extended product shelf life
- » Reduced lifetime cost due to modular sensor design with Smart Replace Technology
- » Intensive and client-oriented support and service to guarantee maximum customer satisfaction

The Anderson-Negele solution

as the best of class in measurement accuracy. This ensures a precise switching between the different media in the CIP process such as acid / caustic / product. For the system user, this means: maximum recycling of the cleaning media through precise inline analysis, maximum water savings, and a reduction in the duration of the CIP process without impacting the required process quality.

In its instrument comparison, SpectraA determined the ILM-4 Our conductivity sensor ILM-4 does not only show clear advantages in process efficiency but also its robust design with a stainless-steel body ensures many years of use and easy cleaning. The installation is simplified due to the hygienic, dead-leg free front flush design and the special CLEANadapt process connection.



- 66 In our tests, the ILM-4 proved to be the best in class in terms of measuring accuracy. But we were also convinced by its solid, hygienic stainless-steel construction, its modular concept and its service friendliness. The support from Anderson-Negele was also exemplary in any respect, so that we found the best product and the most suitable partner for us at the same time. 55
- Naveen Kumar S, Dep. of Engineering SpectraA

A particular feature of ILM-4 is its design based on the modular platform. With its application-specific configuration, the modular sensor platform offers equipment that is tailored to requirements and cost-optimized. It enables simple replacement of individual components such as display or electronics. The optional remote version also features separate sensors and electronics housings. The electronics are identical for all sensor types and recognize them independently. This "Smart Replace Design" means that each sensing device can be replaced simply by exchanging and connecting, and only one replacement unit of electronics housing and cable is necessary for all sensor types.

Sensors used in the application

Conductivity ILM-4



Option: Remote version ILM-4R



Advantages

- · Extremely compact and robust conductivity sensor
- Hybrid technology with digital + analog interface (IO-Link + 4...20 mA): from simple data transfer to intelligent communication
- · Fast sensor response time: approx. 1.2 s

Advantages

- Remote version with Smart Replace Design: Easy replacement of each component just by plugging in
- Reduced stock for replacement devices: Electronic device can be used for all other sensors of the modular platform such as turbidity and level measurement
- · Cable length up to 30 m