



More than **sensors + automation**



Application

# Cleaning in Place (CIP)



# Cleaning in Place (CIP) with JUMO – the efficient way of saving resources.

Nowadays, Cleaning in Place (CIP) is the standard cleaning method in the food processing and pharmaceutical industry. CIP is a process during which cleaning and disinfecting solutions circulate and in which the production and bottling equipment is cleaned without dismounting. The precise combination of factors such as chemicals, temperature, mechanical equipment, and time makes cleaning a reliable and reproducible process. CIP cleaning minimizes the risk of contamination and cross-contamination, thereby ensuring product safety at all times.

## How you can reduce the use of your resources through perfect conductivity measurement.

The change of cleaning medium during CIP cleaning is measured by the conductivity of the cleaning solutions. After cleaning with lye, for example, the entire system is rinsed with water. By using the JUMO tecLine Ci conductivity sensor you can pinpoint the time at which the lye has been completely washed out of the plant. This way, the rinsing process can be reduced to the necessary time and thereby also the water consumption.

## How to find the right device – tailored to your particular application.

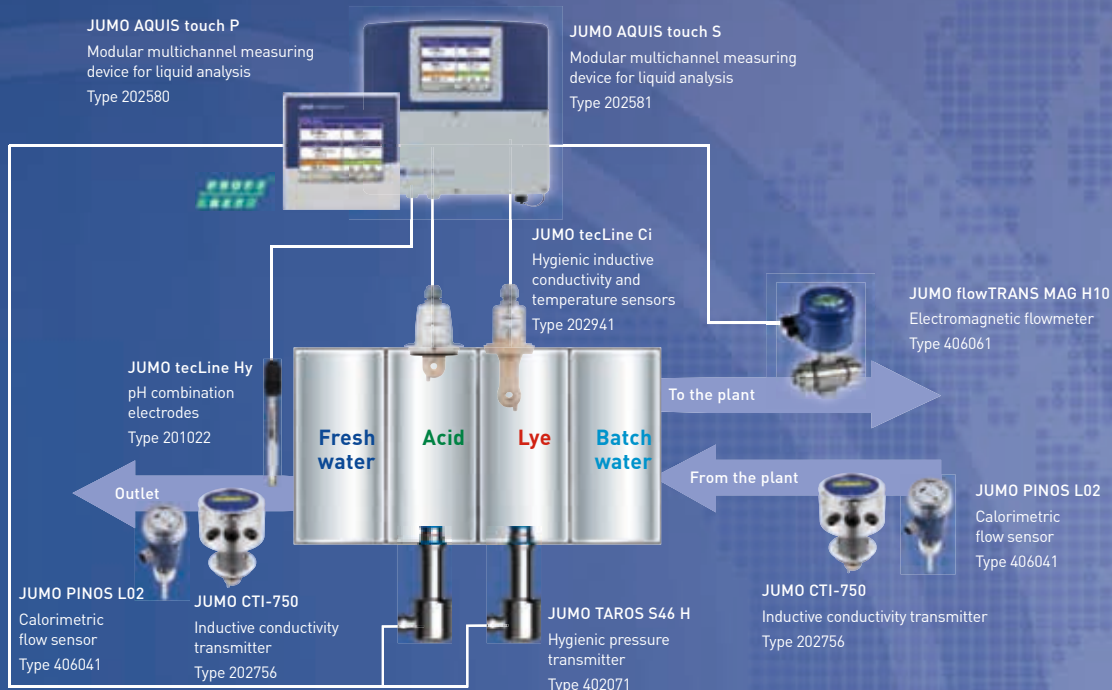
Thanks to the way in which your system is created, the various evaluation devices can be adapted to every application. The JUMO AQUIS touch series devices, to which up to 4 analysis sensors can be connected, are the ideal solution for mobile systems and stand-alone units. For systems with a connected PLC, the JUMO CTI-750 head transmitter is the device to use.

## How you are always up to date through reliable data recording.

To further optimize your process, would you like to reliably register and monitor your data over the long term? The integrated recording function of our JUMO AQUIS touch series helps you reliably record, monitor, and optimize your data. The web server function, for example, will notify you immediately in the event of a malfunction or failure.

## Your benefits in a nutshell:

The solution especially designed by JUMO for CIP cleaning gives you control over all aspects of cleaning. You have reproducible conditions, remain flexible, and also reduce your resource use.



## JUMO tecLine Ci – hygienic inductive conductivity and temperature sensor

The sensor detects the electrolytic conductivity of a process fluid and works in accordance with the inductive measurement principle. An integrated, fast-response temperature probe detects the process temperature at the same time. The overall construction of the sensor complies with the EHEDG specifications. The joint and gap-free design as well as high quality of the finish allow it to meet the highest standards for hygienic processes. Because the sensor measures inductively, it is practically maintenance-free compared to the conductive measurement method. Deposits, grease films, or oil films on the surface of the sensor have virtually no effect on measuring accuracy. The JUMO tecLine Ci sensor is designed for connection to the JUMO AQUIS 500 Ci and JUMO CTI-750 transmitters as well as the JUMO AQUIS touch S and P multichannel measuring devices.



## JUMO flowTRANS MAG H10 – electromagnetic flowmeter

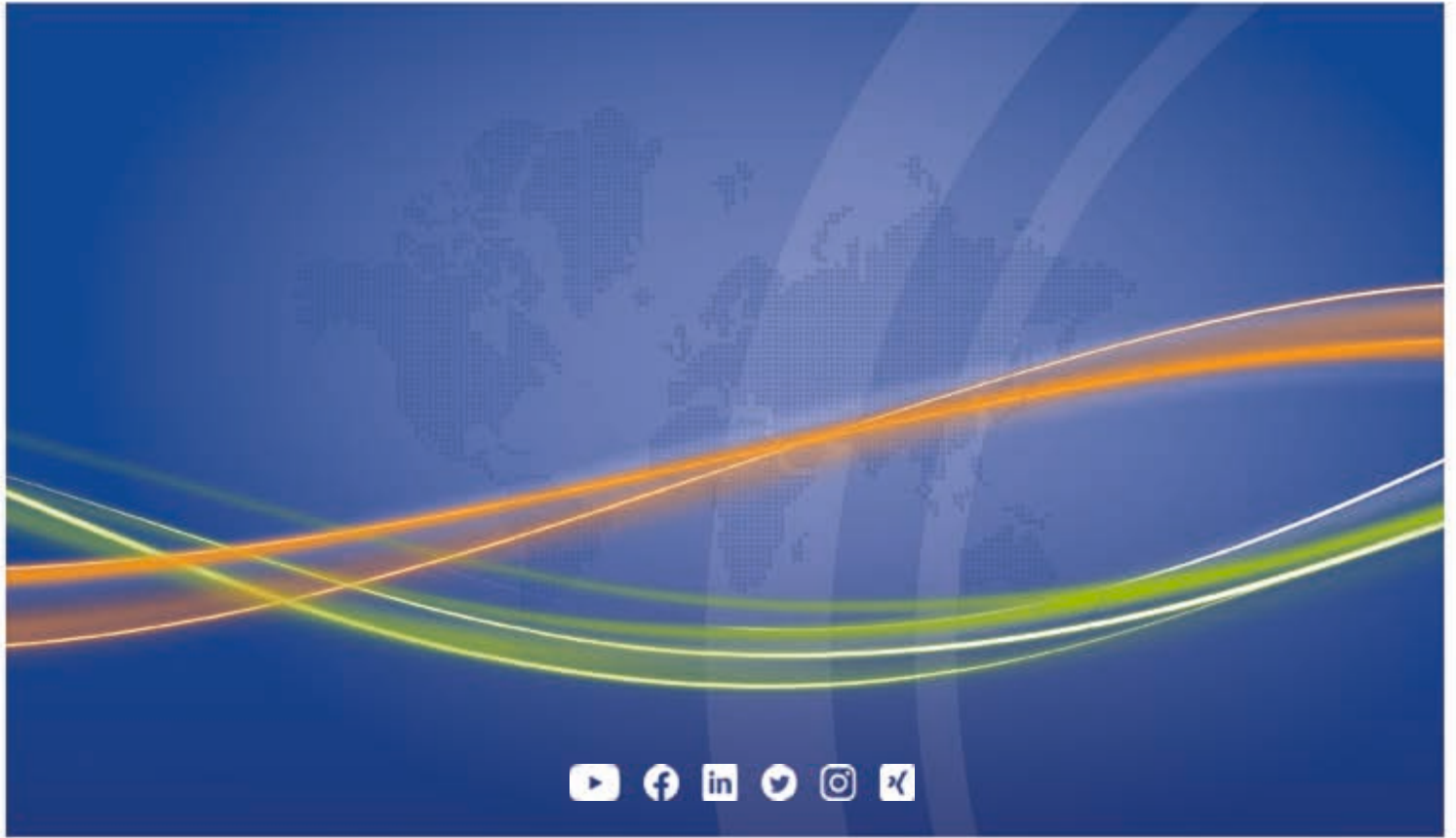
To achieve more viable, flexible, and optimal CIP cleaning, reliable and precise measuring devices are required. The robust, reliable, and easy to operate JUMO flowTRANS MAG H allows you to save time and money throughout the entire product lifecycle. Intelligent design, the latest technology, and extended functionalities ensure optimal operation at minimum costs.



## JUMO AQUIS touch S and P – modular multichannel measuring devices for liquid analysis with integrated controller and paperless recorder

Measuring – displaying – controlling – recording: these 4 functions are brought together in one unique and innovative device. JUMO AQUIS touch S and P provide a central platform for displaying and processing the corresponding sensor signals. Up to 4 analysis parameters can be connected directly and others via standard signals. The device can measure and manage up to 10 parameters simultaneously. Frequency inputs (counters) can be used to measure flow measurements.





[www.jumo.net](http://www.jumo.net)