



F&B CIPTEC



The majority of CIP systems are over-cleaning by

**60%\***

## Challenge

Your Cleaning in Place (CIP) system plays an essential role in ensuring the cleanliness of your processing equipment. But how do you know if you are cleaning enough or even too much? Traditional CIP metrics measure the flow, conductivity and temperature, which can indicate that the cleaning cycle has met the predefined parameters, but cannot indicate the level of clean.

CIP cycle times are based on empirical averages, generally resulting in cleaning cycles that are too long but in some cases they can also fall short, impacting the safety of your product or the efficiency of your operation. The reality is that the majority of CIP systems are over-cleaning by up to 60%\*

Although there is a lot data parameters available, it is typically scattered in multiple systems and is hard interpret. Especially as it lacks of real-time monitoring of cleanliness.

## Solution

Diversey CIPTEC harnesses the power of light to monitor your CIP system in real time. The unique Diversey CIPTEC Spectrophotometer measures light traveling through the liquids inside your CIP system; Measuring the volume of soil in and the cleaning chemical level in your final rinse stage to accurately determine the effectivity of CIP stages and the removal of soils.

Utilising this data along with the conductivity, flow and temperature during the wash, our statistical data analysis methods calculate the optimal regime to eliminate over-washing, while maintaining a safety margin at 6 sigma level.

## VALUE

With Diversey CIPTEC you can:



OPERATIONAL EFFICIENCY

- Optimise the cleaning cycle, reducing the water, energy and chemical used unnecessarily
- Improve the recovery of product by measuring more accurately the soil and chemical level
- Return valuable processing time to production by shortening the overall CIP time
- Reduce the waste water generation, CO<sub>2</sub> emissions and COD loading



FOOD SAFETY

- Ensure the correct level of hygiene is achieved during your CIP process without under or over-cleaning
- Improve quality control monitoring of the CIP system, in real time



## Statistical safety trough continuous remote monitoring

With Diversey CIPTEC your complete CIP system is analysed continuously and statistical algorithm used to refine the cleaning cycle to the optimum level.

Diversey CIPTEC system gathers data from the entire process, including the spectrophotometers as well conductivity, flow and temperature during the washes. This data enables analysis of different phenomena of the wash and the discovery of anomalies that can cause variance to results.

**Diversey CIPTEC follows a 5 step process;**

**Scan** - Identifies opportunities within your CIP process for base line improvement

**Pre-Study** - A study is carried out to enable the results of the analysis stage to be guaranteed

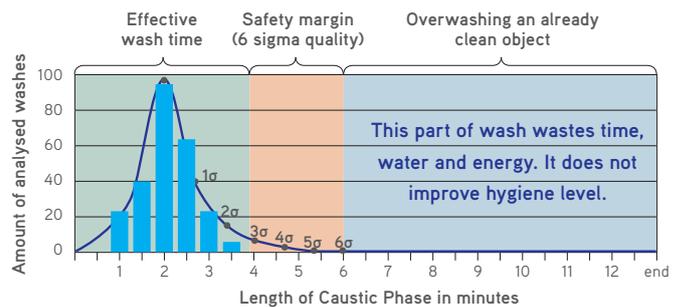
**Probe** - Installation of data monitoring equipment

**Analysis** - working with the data to derive the optimum solution for your CIP system and the product you manufacture

**Solve, monitor and improve** - The continuous measurement and monitoring of the CIP system.



**Example:** Analyses of the efficient length of all CIP washes in a product tank in a year.



## Diversey Services

CIPTEC is one solution within the Diversey portfolio of **Knowledge based Services**. These services are designed to help you address food safety and operational efficiency challenges while reducing total costs. Our application specialists carry out a systematic **CHECK**, so you will have confidence that the service will deliver real value to your operations. Then, our monitoring services will collect the data for you to benefit from a detailed initial and on-going **ANALYSIS** of your performance against historic and industry benchmark data. Because the result is a tailored action plan which can then be implemented with help from the Diversey team, you'll be able to **SOLVE** critical challenges that will help you make the biggest impact on improvements.

## CASE STUDY



**Location:**  
Dairy plant producing 200 million litres annually

**Challenge:**  
Optimising the CIP process to unlock additional capacity.

**Solution:**  
6,600 CIP hours returned to production time.



TIME

**6,600**

hours reduction in CIP time



WATER

**33k m<sup>3</sup>**

water & effluent saving



PRODUCTIVITY

**38k l**

product recovery saving



ENERGY

**1,900**

MWh energy & electric saving



COST

**€560k**

total saving

When you initiate Diversey CIPTEC, our sector specialists won't be satisfied with just providing a report – they will help you maximise ROI and optimise your savings and efficiency best by working with you as a partner to define, implement and manage projects. Contact us today to get started: [www.diversey.com/food-care/diversey-knowledge-based-services](http://www.diversey.com/food-care/diversey-knowledge-based-services)

\*Data from over 200 sites globally show that majority of washes can be cut to half of the original times.