A SYSTEMATIC APPROACH TO FOOD SAFETY

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Abstract

To secure food safety there is a need for using a structured approach to validate CIP of the process equipment. It is important to consider the CIP operations as an integrated part of the production cycle. CIP validation is a tool for securing food safety.

The CIP validation tool offers a systematic way to control the CIP of the processing equipment. A prerequisite for managing CIP operations is the hygienic design. Badly designed equipment cannot be compensated for. The CIP validation tool also covers the entire process starting from design qualification through installation qualification and operational qualification to performance qualification. Monitoring and recording the critical CIP parameters such as cleaning time, pressure and temperature is a prerequisite for ensuring good hygienic processing.

There are two general types of sampling: indirect sampling with the use of rinse solutions and direct surface sampling with swab methods. A combination of the two methods may be used to confirm cleaning efficiency. Among the available techniques to verify the CIP there are microbiological as well as non-microbiological ones, e.g. visual surface inspection, UV light and ATP swabbing.

In order to reduce energy, water and chemicals it is important to clean according to need. When designing a CIP program it is important to consider type of product and production scenario. Following the CIP in real time makes it easier to design a CIP programme according to need and obtain a receipt on the status of the CIP.

***Key words**: CIP validation, ATP, CIP design*.