

■ What is COP (Clean Out of Place)?

COP is a method of cleaning wherein the machinery installed in the production equipment are removed, disassembled and cleaned. It is used for cleaning machinery and parts with complex structures and components. Machinery that is simple to disassemble and reassemble, and easily cleaned is highly demanded in regards to cleanliness.

■ What is CIP (Clean in Place)?

CIP is a system wherein the production equipment are efficiently and safely automatically cleaned without being disassembled. The machinery isn't simply washed; it's a method of cleaning that also involves the controlling and inhibiting microorganisms.

■ What is SIP (Sterilization in Place)?

SIP is a system wherein the production equipment are sterilized (bacteria are automatically eradicated) without being disassembled. Below are some examples of sterilization methods:

- Physical sterilization through heat (pasteurization)
- Filtration through a filter or membrane
- Irradiation through radiation or ultraviolet rays
- Chemical sterilization through the use of pharmaceuticals

