

OVERVIEW

The best method for cleaning industrial equipment is the method that provides the desired results at the lowest total cost. Chemical Cleaning is becoming the preferred cleaning method due to its ability to achieve 100% removal of deposits with minimal preparation by the client. If requested, chemical cleaning can be designed to not only remove the deposit layers, but also clean and passivate the metal surfaces to reduce and/or prevent future corrosion from occurring.

The benefits of BSEn Chemical Cleaning include:

- A reduction in unit disassembly and cleaning time, thus reducing the labor requirements and overall system unit downtime.
- Vastly improves system cleanliness: deposits are often totally removed, thereby increasing efficiency of flow and heat transfer.
- Complete deposit removal prevents “seeding” of new deposits and extends equipment/unit run time.
- Typically faster than most mechanical cleaning methods, especially on complex systems.
- Reduces safety risks by eliminating the need for confined space entry as it allows for cleaning to take place in otherwise inaccessible areas.
- Online cleaning can be performed without removing the unit /equipment from operation.
- Offers a vast array of equipment and hoses including chemical blending and circulating units, filtration units, heat exchangers, chemical rated and stainless steel hoses.
- BSEn Technical Services Center offers clients a testing place to perform solubility and analysis on a variety of process foulants to determine the most cost effective means of treating or removing the foulant.
- All cleaning is done in accordance with all OSHA, ASTM, ASME and related standards.
- BSEn offers in-house HAZWoper and other related OSHA training courses as well as Basic Refinery and Chemical Cleaning specific training to all field personnel.

Methods

- Inorganic acids
- Organic acids
- Oxidation chemicals
- Passivation
- Chelant
- Solvents
- Emulsions
- Surfactants

Applications

- Chemical circulation
- Fill and soak
- Online process cleaning
- Vapor or steam phase
- Foam cleaning
- Surface applications
- Rotating nozzle spray
- Lube oil “Flush & filter”
- Pre-Operational

Process Equipment

- Boilers
- Distillation Towers
- Heat Exchangers
- Fin Fans
- Reactors
- Process Pipelines
- Tanks
- Sour Water systems
- Cooling Water Systems
- Digesters

Process Control

- Solubility testing & analysis
- Engineering study
- Procedure development
- Mobile laboratory (2 units)
- Field lab analysis
- In-house HazWoper Training
- In-house Chemical Training
- Robotic technology

