Why are CIP and SIP are necessary in an Industrial Setting?

Some Examples....

Bench top Fermentor

- Initially, the scale of equipment is small enough to clean and sanitize manually.
- Note the viewing port on the side.



Pilot Plant Scale Fermentor -round view port



Typical operations are hard-plumbed in place, like this tank in the center.



Tanks may be wheeled, but are hard-plumbed.



Note the entry port. Would you like to clean this tank by hand or spray-ball?



This chromatography column can be disassembled and wheeled elsewhere for easy cleaning and sanitizing.



This column must remain in place, bolted to floor.

