

New innovative, sustainable & cost effective CIP-Cleaning methodology

EFTCO MEETING

30 May 2024, Brussels



Agenda

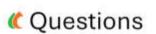
(Introduction CTW Cleaning Systems

(New innovative, sustainable & cost effective CIP-Cleaning methodology

Cleaning program in 5 steps

(Advantages

Cases/projects

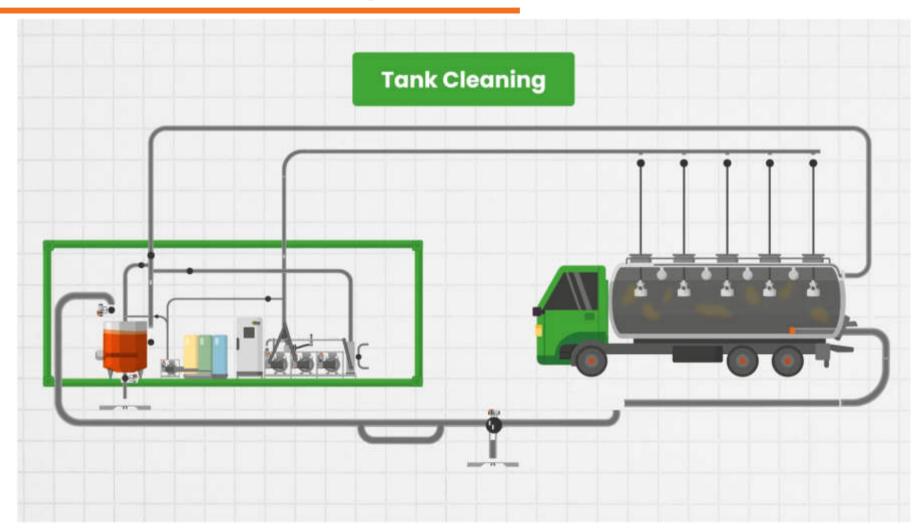








Introduction CTW Cleaning Systems



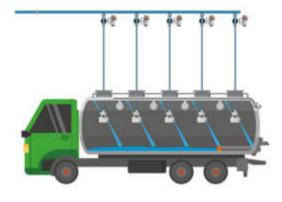


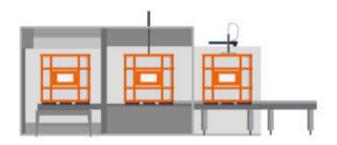
Introduction CTW Cleaning Systems

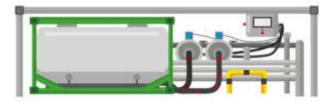
CTW Cleaning Systems is a first and second generation family business, located in Turnhout, Belgium. With over 40 years of experience, CTW Cleaning systems was established more than 10 years ago, separating from DIBO, specialized in design, supply, installation and renovation of complete cleaning systems.

The activities of CTW Cleaning Systems are classified as follows:

- 🕊 Tank Cleaning
- **(** IBC Cleaning
- **(** ISO-tank Heating
- Ҝ Self Carwash
- C Renewing PLC of outdated installations









New innovative, sustainable & cost effective CIP-cleaning methodology

Traditional way of CIP-Cleaning and Tank Cleaning has its advantages and its disadvantages:

- C The major advantage of CIP cleaning is the reuse of water and thus saving on water, energy and cleaning agents
- C The main disadvantage of CIP cleaning is that the pre-cleaning, rinsing and disinfection is done with a high flow of up to 600 liters per minute
- Che disadvantage of traditional tank cleaning installation is that in long cleaning procedures, a lot of hot water and detergent is washed away
- C That is why we have developed this system, which combines the best of both worlds, always choosing the most effective and economical option for all cleaning steps





Cleaning program in 5 steps

(Preparing the CIP Installation

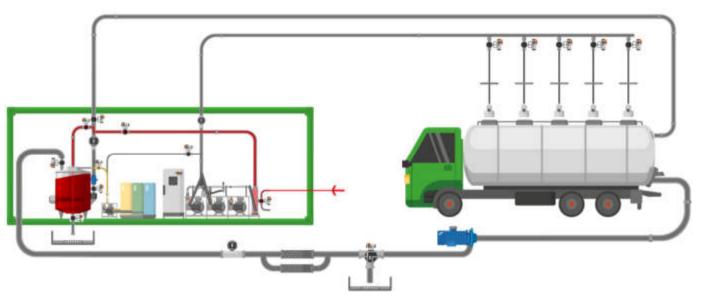
(Step 1 Pre-Cleaning

« Step 2 CIP-Cleaning

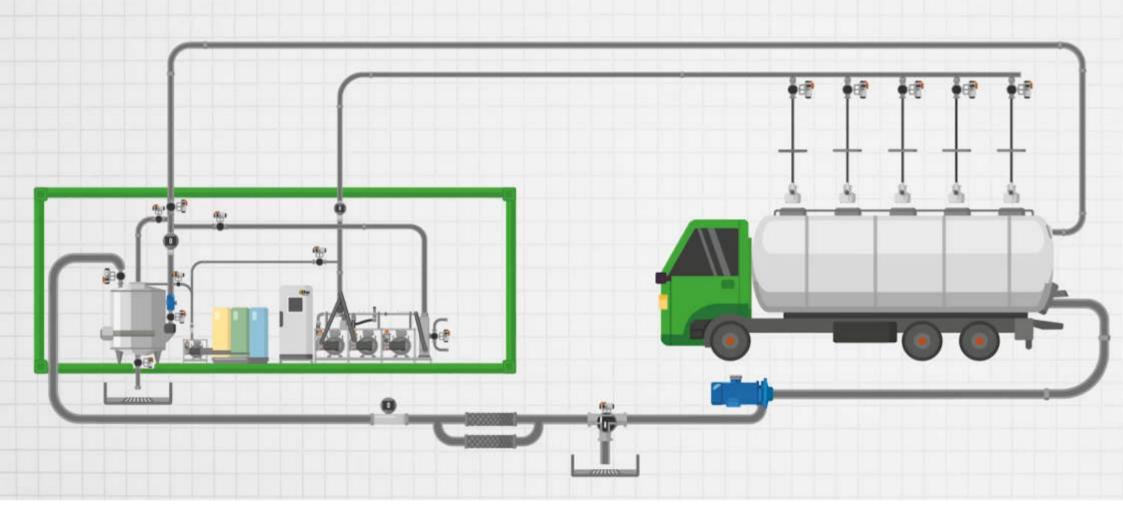
(Step 3 Rinsing

C Step 4 Disinfection tank

(Step 5 Rinsing tank

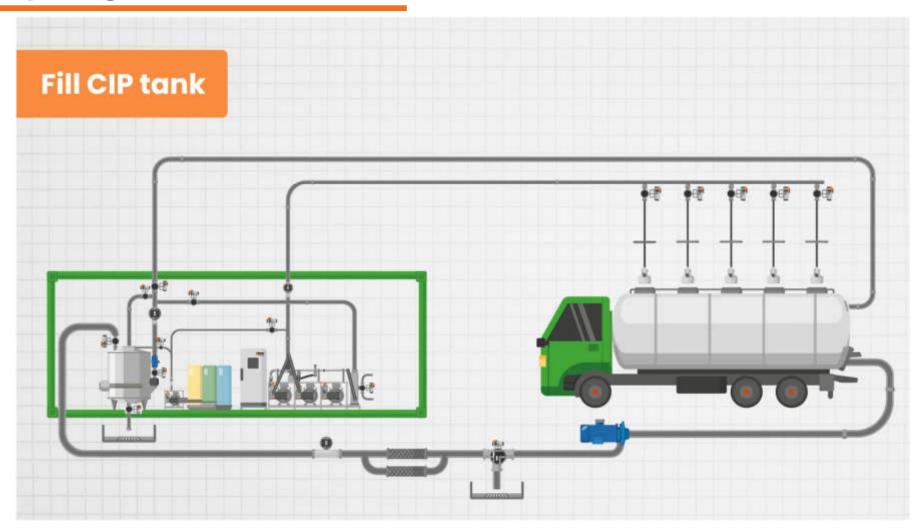


Fill CIP tank



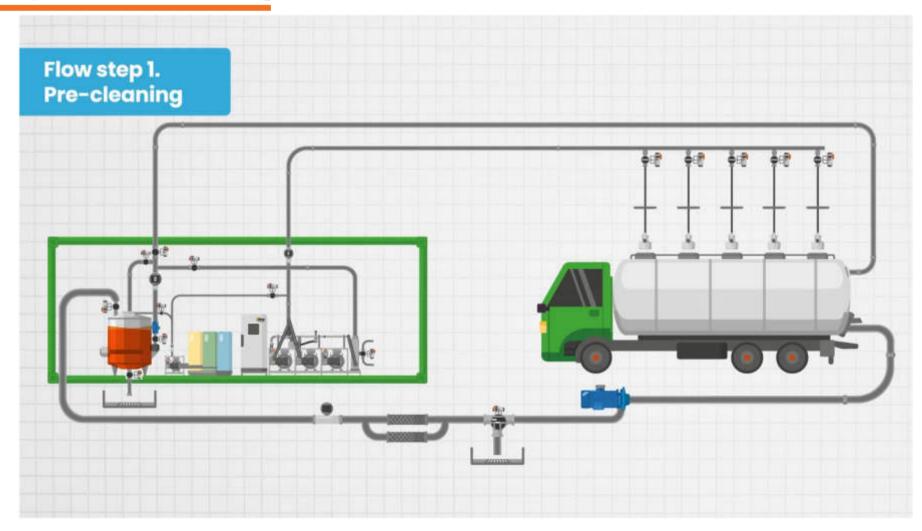


Preparing the CIP Installation



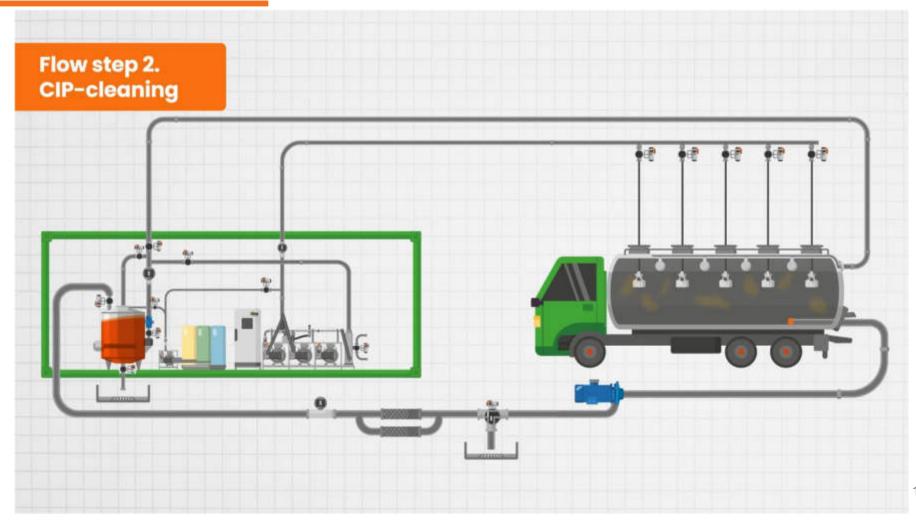


Step 1 Pre-Cleaning





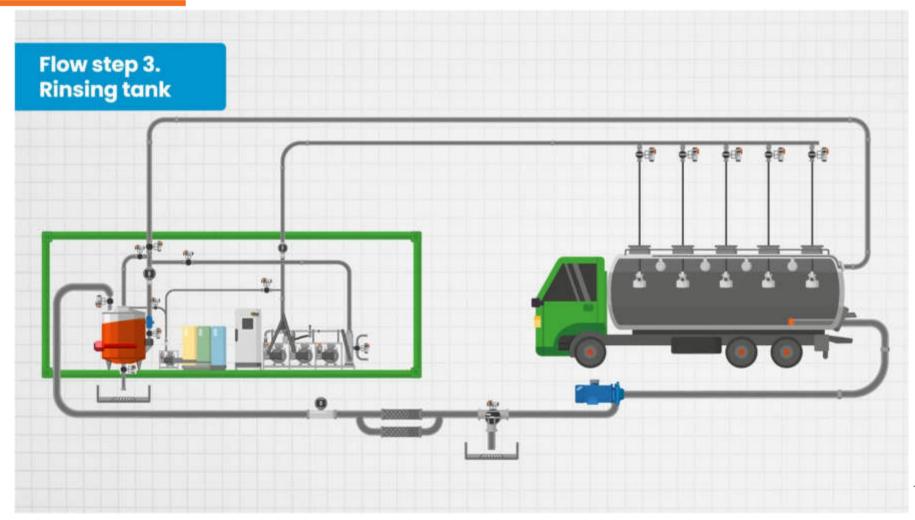
Step 2 CIP-Cleaning



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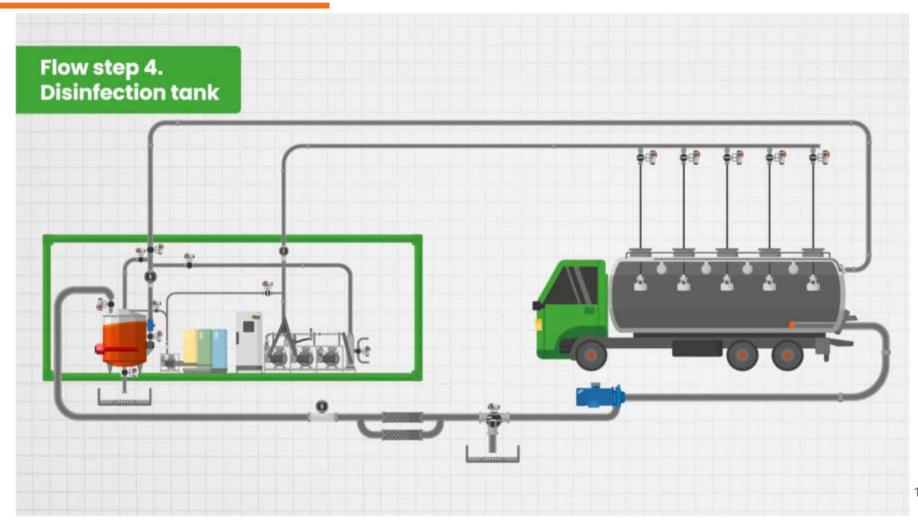
Step 3 Rinsing



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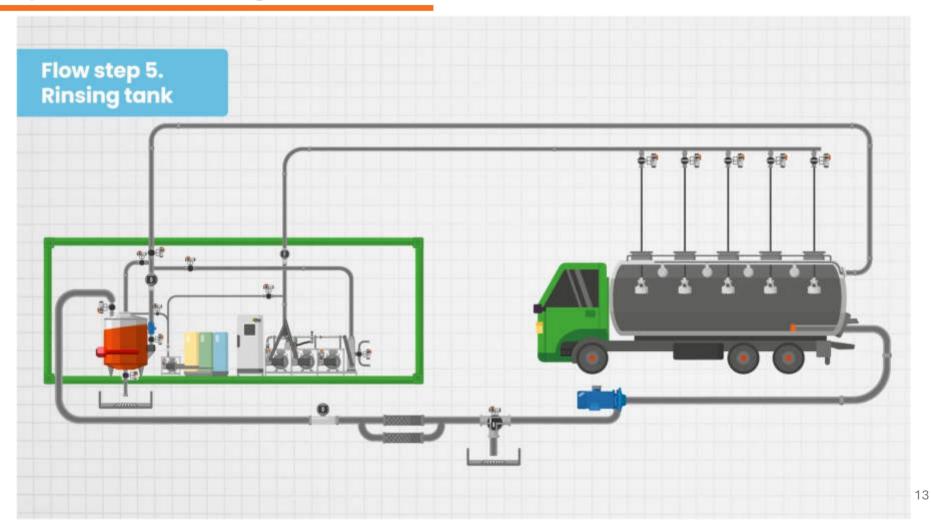
Step 4 Disinfection tank



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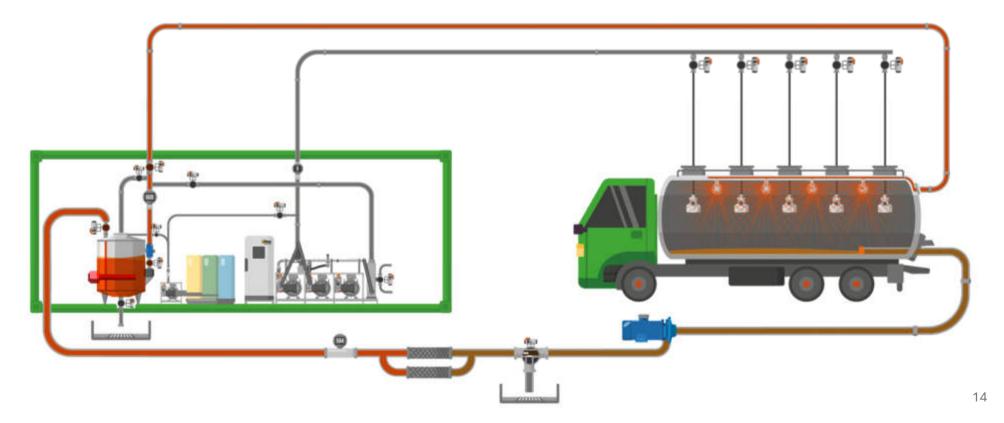
Step 5 Final Rinsing of the tank





Advantages / benefits

(Same (or better) cleaning results compared to traditional CIP-cleaning





Advantages / benefits

- *C* More sustainable due to savings in consumption of:
 - Gas Energy
- (saving of 30,69 m3 per cleaning)

Water

- (saving 3.825 liter per cleaning)
- Detergent
- (saving 5,1 liter per cleaning)
- C Therefore also more cost efficient:
 - 59% saving per cleaning on energy, water and detergents
- *C* "Plug-and-Play" containerized installation possibilities in existing facilities

Investment' (ROI) levels high compared to old situation, allowing a better position in RFQ projects



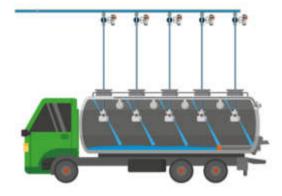
Summery

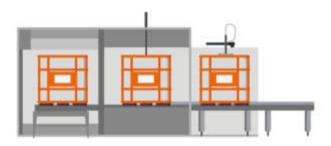
The core activities of CTW Cleaning Systems:

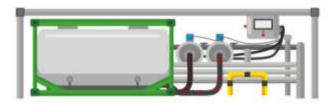
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Ongoing projects:

- CIP/Tank Cleaning Crossland Tankers UK
- Cank Cleaning XPO Germany
- Cank Cleaning Resoclean France
- Cank Heating Alochem Belgium
- Cank Heating TSA Port / GCA Belgium









Thanks for your attention!

"Cleaning is not for the faint of heart; it's for the determined and the dedicated."

