



WPSD IU

Wastewater disposer: SYMBIO-unit for the treatment of contaminated rinsing water for discharging into a public sewage network.

For the modular integration in **kolb** AQUBE® cleaning systems with integrated ClosedLoop technology.

Additional depth or width (AQUBE®-9 systems) of the cleaning system: ca. 400 - 700 or 550 mm

Part number: 0905_ _ _ _ _WPSDIU



Certifications:

This system in its basic version was certified for its energy and water saving processing, for easy operability and for the standard integration of comprehensive safety features.

- SYMBIO-integration as a framework module at the system back or side
- Fully enclosed solidly integrated unit
- Process tank with content of approx. 140 litres
- Fully automated process
- Process and service intervals PLC controlled, monitored and displayed
- 5 filter stages
- Automatic dosing of regulators for pH value reduction (optional)
- Integrated pumping system to sewage network
- Easy maintenance access through rear door / rear covering
- Also ideally suited for retrofitting **kolb** PSB two-tank systems (from year of construction 2016)

Key applications



AQUBE® X three-tank systems



AQUBE® L two-tank systems



AQUBE® M two-tank systems

A closed rinsing circuit is integrated into all **kolb** cleaning systems. Usually these are systems for product (PCBs, DCBs, HDIs, etc.) or for tool cleaning (screens, stencils, solder frames / carriers, condensate filters, etc.). The rinsing water is repeatedly used in the ClosedLoop process (depending on the cycle number and the task options) until its dirt entry respectively its μS conductance is so high that it is no longer usable and has to be disposed. The cheapest disposal is the indirect introduction into the public sewage network. This may only be done with regard to the legal limit values! The operator is responsible for compliance with the local regulations, possible authorizations by the authorities and proper operation.

The WPSD IU SYMBIO module utilizes the patented HME process developed by **kolb** for metal precipitation from alkaline rinsing waters with high dissolved or undissolved heavy metal contents of lead, tin, silver and copper. The flushing water is thus treated in such a way that it can be indirectly introduced into a public sewage network.

The installation of the fully enclosed compact WPSD IU SYMBIO-module is on the rear side of the cleaning system and increases its depth by only about 400 - 700 respectively its width (AQUBE®-9 systems) by only about 550 millimeters.



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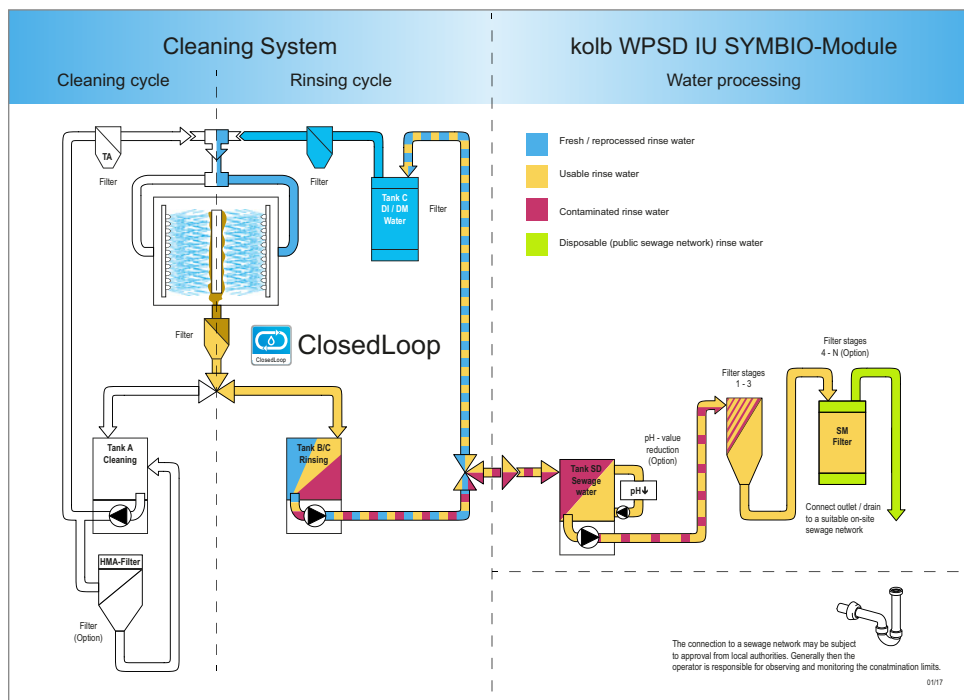
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Function

In a cleaning system, the rinse water usually shows three different process states:

1. Polluted water, which is no longer suitable for rinsing and has to be either treated for reuse or has to be discharged into the local sewage network.
2. Water that has been used for rinsing, but still is usable for this process because it is filtered in a closed loop inside the cleaning system and thus can be reused several times.
3. Fresh water or fresh recycled water which the system collects during the rinsing water exchange process either from the local water connection or from a reprocessing plant.

With the WPSD IU, contaminated rinse water with a too high heavy metal load of lead, tin, silver and copper can be treated including (optional) pH-value regulation, to match local authority's regulations for indirect introduction of waste water into the public sewage system. (Other load materials do not belong to the basic services, but can be treated separately if required.)



The filter stages of the WPSD SYMBIO-module are adapted to the rinse water to be treated and adjusted to the process. No more usable rinsing water from the upstream cleaning system is pumped into the module and collected there in the process tank (tank SD).

The pH value of the process water can be measured there (optional) and can be adjusted by automatic dosing of regulators. The sewage is then further processed via several SPS-monitored filter stages and, optionally, additionally via absorber cartridges, and adjusted to the legal values, so that it can safely be introduced indirectly.

Integrated sampling spots allow a water sample to be taken during the process to analyze its quality externally.