# TECHNICAL INFORMATION


# WPSD IU 5/6/7

Disposer for the treatment of contaminated rinsing water for discharging into a public sewage network

# WPSD IU5/7


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 of the cleaning system: ca. 400 - 700 mm

Part numbers: 0905AQ6-50WPSDIU (XH6, LH6, MH6)
0905AQ7-50WPSDIU (XH7, LH7, MH7), 0905AQ5-50WPSDIU (LH5)

SafeDrain

ENERSAVE WATERSAVE EASOTECH SAFEGAR

**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

## Applications


AQUBE® XH6, XH7 3-tank-systems


AQUBE® LH5, LH6, LH7 2-tank-syst.


AQUBE® MH6, MH7 2-tank systems

A closed rinsing circuit (ClosedLoop) is integrated into all **kolb** cleaning systems. Usually these are systems for product (PCBAs, 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 SafeDrain 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 fully encased compact SYMBIO module is installed at the rear or side of the cleaning system and only increases its depth or width by approx. 500 millimeters.

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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.

The WPSD IU with **kolb** SafeDrain technology can be used to treat contaminated rinse water with too high heavy metal loads of lead, tin, silver and copper - including (optional) pH value regulation - in order to comply with municipal regulations on the indirect discharge of wastewater into the public sewer system. (Other pollutants are not included in the basic scope of services, but can be treated separately if required).
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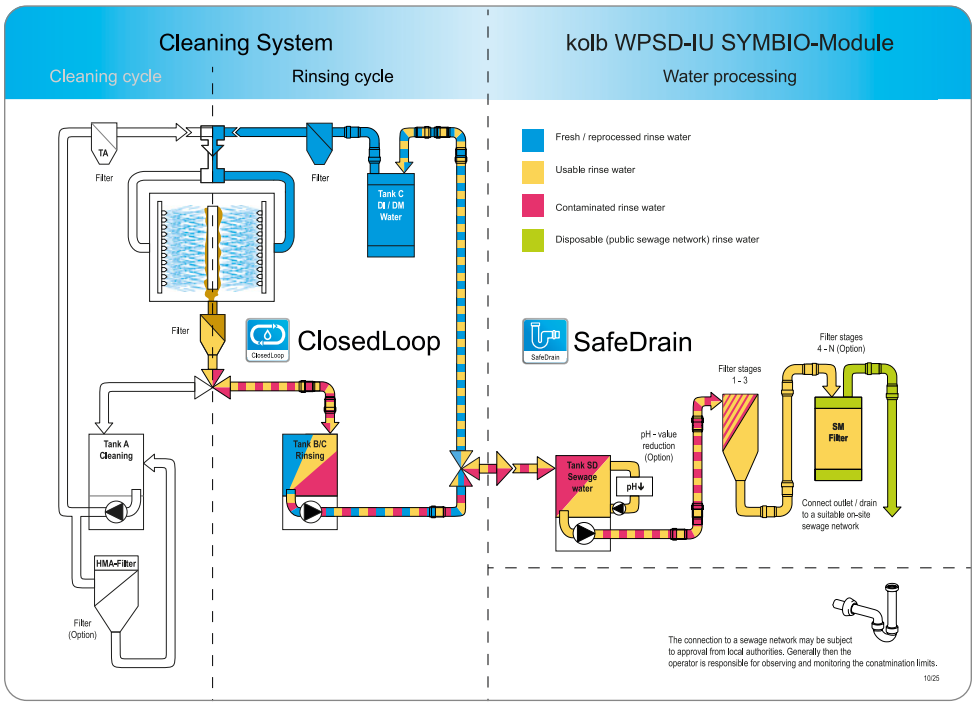


The filter stages of the WPSD SYMBIO-module are adapted to the rinse water to be treated and adjusted to the process. No more usable rinsing water from the upstream cleaning system is pumped into the module and collected there in the process tank (tank SD).

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.