

## Neutralization System Aquaclean

**TC 2000**

### Description of function



**External dimension:**      **W = 1500 mm**  
    **D = 860 mm**  
    **H = 1830 mm**

**Capacity:**                      **600 - 1800 l / h**

The chemically contaminated wastewater flows freely into the wastewater storage tank and is fed into the neutralisation system by a centrifugal pump and solenoid valve.

Level sensors control and monitor the filling level in the wastewater storage tank and in the neutralisation tank and also prevent the pump from running dry.

When the maximum filling level in the neutralisation tank is reached, the inlet valve is closed. At the same time, the mixing channel pump of the neutralisation system is switched on. Circulation now takes place in the neutralisation tank in order to determine an exact measured pH

value (variably adjustable). After the specified time has elapsed and the set pH value has been reached, the water is pumped into the canal.

A pH electrode in the intake pipe of the special pump continuously determines the pH value. This is visibly displayed digitally on the switchboard.

If the neutral pH value is not reached after the circulation time, lye or acid is dosed by electromagnetic diaphragm dosing pumps. The acid and lye tanks are monitored by level switches. When the minimum filling level is reached, there is an optical and acoustic signal. The dosing process is interrupted.

By permanently measuring the pH value and adding lye or acid at intervals, the feared overturning is avoided.

A pH combination electrode in the suction line of the mixing channel pump constantly determines the pH value. This is visibly displayed digitally on the control cabinet. Once the neutral pH value is reached, a variably adjustable remixing time takes place. After this, the neutralised waste water is pumped into the discharge pipe.

The pump switches off after reaching the minimum filling level.

The entire operating process repeats itself **independently and fully automatically**, depending on the inflow quantity. If the setpoint is undercut or exceeded during pumping into the discharge pipe, the neutralisation process takes place again as described.

If the setpoint cannot be reached within an adjustable dosing time, an optical and acoustic alarm message is given and the process is interrupted.

**This plant can be extended according to customer specifications.**  
 (for example with sludge trap, heavy metal precipitation, filter press etc.)

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## process flow diagram

