

How to Use the Puroxi Water Turnover Calculator

Purpose. This calculator estimates how long it takes the operating system to move a volume of water equal to the total volume of your pond, tank, reservoir or lagoon. You only need two numbers.

What to enter

Calculator field	What to enter	Where to find the number
Water volume (m³)	The total amount of water in the waterbody.	Use known tank specifications, site drawings or measurements. If needed, calculate the volume from length, width and average depth using the Puroxi Water Volume Calculator.
Actual system flow (m³/h)	The total measured water flow through all nozzles operating at the same time.	Use a flowmeter when available. Otherwise, use the verified operating flow from the pump curve or the approved flow for the selected nozzle as a preliminary estimate. Do not use the pump's maximum zero-head flow.

How to calculate

1. Enter the total water volume in cubic metres.
2. Enter the actual combined system flow in cubic metres per hour.
3. Press Calculate turnover.
4. Read the ideal mathematical turnover time shown in hours.

Example

Water volume: 525 m³

Actual system flow: 100 m³/h

Calculation: $525 \div 100 = 5.25$ hours

Result: The ideal turnover time is 5.25 hours, or 5 hours and 15 minutes.

What the result means

A result of 5.25 hours means the system can theoretically move a volume of water equal to the entire waterbody once every 5 hours and 15 minutes. It does not mean that every part of the waterbody is fully mixed or treated in exactly that time.

Important operating note

This is an ideal mathematical turnover time. Actual circulation and treatment performance may vary because of waterbody shape, depth, dead zones, pipe losses, nozzle placement, pump condition and operating conditions. Use the result as a planning value, not as a guarantee of treatment performance.