

ELIQUO | HYDROK

SnailScreen™

Wastewater screening and vortex separation



SnailScreen

SEWAGE SNAILS ARE BECOMING A MAJOR NUISANCE IN THE WASTEWATER TREATMENT PROCESS CREATING SERIOUS OPERATIONAL PROBLEMS DOWNSTREAM WITHIN AERATION BASINS AND SECONDARY CLARIFIERS. THE CONTINUED IMPROVEMENTS TO PROCESS TREATMENT TECHNOLOGIES ARE CREATING AN IDEAL HABITAT FOR THESE PESTS, WHOSE SHELLS CAN CAUSE MAJOR MAINTENANCE PROBLEMS AS THEY BREAKDOWN TO FORM AN ABRASIVE GRIT LEADING TO PUMP AND EQUIPMENT DAMAGE. SHELLS ARE ALSO PASSED ONTO DOWNSTREAM PROCESSES SETTLING OUT AND ADDING TO SEDIMENTATION PROBLEMS. IN ADDITION TO THIS, THE DISCHARGE OF THE SNAILS INTO THE RECEIVING WATER COURSE CAN ALSO CAUSE PROBLEMS WITH THE WORKS DISCHARGE CONSENT ISSUED BY THE ENVIRONMENT AGENCY. THE REMOVAL OF THE SHELLS FROM THE TREATMENT PROCESS CAN BE A COSTLY AND LABOUR INTENSIVE EXERCISE, WHERE TEMPORARY OPERATIONAL SHUT DOWN IS REQUIRED IN MANY CASES.

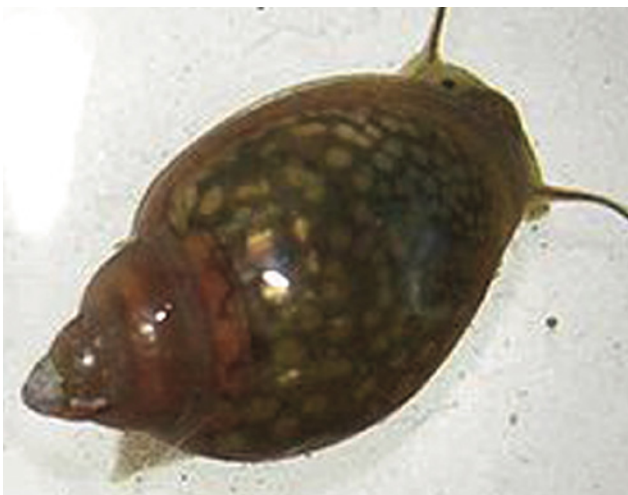


HOW IT WORKS

The ELIQUO HYDROK Snail Separator Screen utilises a specifically designed adaption of our wedge wire technology in a 3 mm version and utilised to create screening drums set within stainless steel 'vortex' chamber. The chambers are then used to separate the snails and their shells out of the flows collected within a 'snail screen sump'. This may be periodically emptied via suction Vactor or a screw conveyor system could be added to create a fully automated process to deposit crushed snails and shells into a skip for disposal. The required design flow to treatment will be passed through the 'snail screen' chambers without the requirement of power.

OPERATING PRINCIPLE

Water and pollutants enter the system and are introduced tangentially inside the vortex separation chamber forming a circular flow motion. Floatables and suspended solids are diverted to the slow moving centre of the flow. Negatively buoyant solids settle out to an undisturbed sump chamber below. The water flow passes concurrently through the separation screen mounted above the vortex chamber. Floatables remain within the central 'scum board' at the water surface and are retained within the screen.



ADVANTAGES AND BENEFITS

Effectively captures more than 95% of solid pollutants

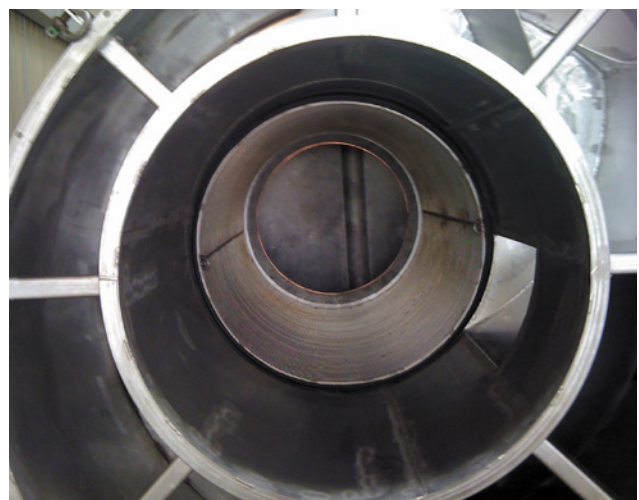
Rapid Installation: Comes in self contained chamber. Just connect inlet and outlet


The unique non-blocking design takes advantage of indirect filtration and properly proportioned hydraulic forces making the unit virtually unblockable

The unit has no moving parts and is fabricated in Stainless Steel, therefore has very low maintenance costs

The technology remains highly effective across a broad spectrum of flow ranges

All materials captured are retained during high flow conditions. Neutrally buoyant particles are captured





An effective self contained chamber for rapid installation, just connect inlet and outlet.

Version 001

ELIQUO HYDROK LTD

Indian Queens Ind Estate, St. Columb | Cornwall, England | TR9 6TL

T +44 1726 861 900

sales@eliquohydrok.co.uk | www.eliquohydrok.co.uk

MEMBER OF **ELIQUO WATER GROUP**