

Hidromix Pump Mixing Systems

The Alternative to Conventional Submersible & Gas Mixing

The key objective with any form of sludge storage is to avoid the build up and settlement of wastewater solids within the tank. Hidrostal's Hidromix pump mixing system is one of the simplest and most reliable proven design to achieve this.



The Hidrostal screw centrifugal pump draws sludge from the source and returns it through a nozzle to provide optimum mixing energy and circulation of the tank contents.

Suction points are positioned to draw sludge from dead areas. Discharge points are positioned to promote the most effective circulation.



The high-volume low-pressure efficiency factor achieves a uniform recirculation mix without the need to run constantly, saving both power and running costs.

Unlike other mixing systems the Hidromix system does not require structural steel work within the tank.

The system is mounted at ground level and fixed to the outside of the tank. Large diameter nozzles are installed externally through the tank walls. The systems have simple pipework designs with short pipe run resulting in minimum friction losses and the maximum energy imparted to the fluid.

Hidrostal supply the total system including pipework as an offsite manufactured package. Installation is also available if required. The Hidrostal pump mixing solution is based upon the company's well-proven screw centrifugal impeller pump.

Advantages

- ightarrow No moving parts are required in the tank
- → Easy access for inspection and maintenance
- → Can be fitted to new and existing tanks
- → Improved Health & Safety environment
- ightarrow Large diameter pipework and nozzles for effective solids handling
- \rightarrow Nozzles externally removable without any need for tank entry
- → Tank turnover and nozzle energy can be selected to suit sludge characteristics and tank shape ______
- ightarrow IP55 motors are cheaper and easier to repair than submersible motors
- ightarrow IP55 TEFC motors are always to latest highest efficiency class IE3/IE4



System Design

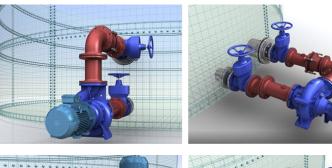
Each pump mixing solution is a bespoke design to take into account the sludge characteristics and the geometry of the tank.

CFD analysis is available for optimum performance and mix efficiency

The Hidromix system is easily adapted to fit just about any installation.









- → Externally mounted system ensures no tank access is required
- → Easily accessible for inspection and maintenance
- → Wall mounted pump inlet and outlet pipes eliminate ragging problems
- → Offsite manufactured packaged is delivered pre-assembled to save time and cut costs
- \rightarrow Optimum performance can be maintained year after year by on-site adjustment of the impeller clearance to restore efficiency



- → Balancing tanks
- → Sludge storage tanks
- \rightarrow Mixing & tanker loading
- → Mixing & sludge transfer





Hidrostal Pumps

Make a quick and accurate pump selection: www.hidrostal.com/pumpselector.php



Due to their outstanding characteristics, Hidrostal pumps are used in numerous municipal and industrial sectors all around the world. Our pumps are custom-made and are specially tailored to the needs of each location. Our specialists select the suitable material combinations and individually adapt every pump to the local conditions. We ensure with this process that Hidrostal pumps are successful in difficult applications and achieve the best results with respect to performance, energy efficiency and low life-cycle costs.

- \rightarrow clog-free pumping
- \rightarrow high suction capacity
- ightarrow gentle delivery due to low shear forces
- ightarrow high efficiency
- ightarrow stable, steep pump curve
- \rightarrow long service life
- \rightarrow low pulsation
- \rightarrow $\;$ continous flow proportional to the speed
- \rightarrow $\;$ high pressure stability across a wide speed range





Hidrostal Ltd Altofts Lane Castleford West Yorkshire WF10 5PZ Tel: 01635 550440 www.hidrostal.co.uk

