APPLICATIONS

Wastewater
- Anaerobic digesters
- Sludge storage tanks
- Sludge blend / TWAS tanks
- Bio-solids blending tank
- FOG reception & blend tanks
- Acid phase digesters
- Egg shaped digesters
- Equalization basins
- Influent channels
- Pump stations
- Skimming & waste pits
- CSO tunnels
- Anoxic zones
- Thermohydrolysis tanks

Water
- Alum sludge
- Lime slurry storage
- Ground water storage

Industrial
- Pulp & paper black liquor
- Crude oil storage tanks
- Textile waste
- Mining fine solids suspension
- Bio-waste / renewable energy

ADVANTAGES OF HYDROMIX
- Hayward Gordon’s 50 plus years of experience in mixing and pumping sludge combined with nozzle mixing expertise from GE Water Technologies.
- Hayward Gordon’s proven Chopper pump technology ensures increased reliability.
- High efficiency CHOPX pumps help with lower operating costs.
- Customized Hydromix nozzles are based on application specifics including tank geometry and sludge rheology to provide optimum number of nozzles, locations and orientations.
- Complete CFD analysis to verify performance through propriety software.
- Field testing for validation.
- Superior customer service and technical support.
INTRODUCTION
GE and Hayward Gordon combine forces.
Hayward Gordon was founded in 1952 as a distributor of industrial process pumps. Since that time the company has evolved into an international manufacturer of pumps, mixers, and engineered systems. With over 60 years in the business of engineering, designing, manufacturing and distribution of pumps and mixers, we offer sound solutions backed by solid experience.

HydroMix was formed as a partnership with GE Water Technologies who are known for their knowledge of nozzle mixing and their understanding of sludge rheological properties. This expertise combined with Hayward Gordon’s extensive experience in mixing and pumping solutions, provides end users with an optimum nozzle mixing solution.

Hayward Gordon’s hard metal pump installations spans 35 years and this combined with GE Water Technologies 300+ nozzle mixing installations, means the HydroMix systems are designed to meet and exceed the most stringent expectations.

THE HYDROMIX SYSTEM
Hayward Gordon’s HydroMix is a highly effective hydraulic mixing system encompassing a precisely engineered design of horizontally positioned nozzles combined with strategically angled vertical nozzles to ensure not only circular velocity pattern, but more importantly, to ensure good top to bottom movement which is critical to optimum mixing.

Hayward Gordon’s in-house proprietary Computational Fluid Dynamics software in conjunction with GE Water Technologies extensive knowledge of wastewater treatment applications, allows us to customize each application to provide truly effective homogenous mixing. The HydroMix system ensures optimal mixing while helping to condition solid in sludge applications for optimum process performance.

FLOW PATTERNS
• Utilizes nozzles that are positioned both horizontally and vertically angled.
• Flow pattern consists of horizontal and vertical patterns within the tank, optimizing mixing.
• A rotating flow induces a helical pattern travelling to the surface of the liquid and then descending to effectively sweep the solids from the tank floor driving them up the walls of the tank.

HYDROMIX NOZZLES
• HydroMix Nozzles can be supplied in:
  - 316SS Plasma Nitride Coated (700 BHN)
  - Glass Lined Ductile Iron (700 BHN)
  - High Chrome Iron (450 BHN)
  - 316SS
• Standard nozzle size of 50mm, 65mm, 85mm and 100mm depending on application, tank size and shape.
• 10-year standard warranty for all nozzles.