



Cationic Polymers in Waste Water Treatment

Location	USA	Hydra-Cell model	P200NPTSSA05C
Type of application	Slurry Pumping	Flow rate	Up to 355 l/hr (80 gph)
Liquid	Polymeric Slurry	Pressure	Up to 17 bar (250 psi)
Application details	An industrial water treatment plant in the US needed to pump a cationic polymer used as a coagulant promoting the settling out of solids in waste material. The polymer slurry has a viscosity greater than 1000 cPs. The pumping system must handle that requirement while also adjusting polymer flow in accordance with water flow and pressure. Precision Pumping Systems, a specialist system builder in the American north-west, designed and supplied a skid incorporating two Hydra-Cell P200 metering pumps. The unit monitors water flow rate, pressure and liquid turbidity, and varies polymer flow appropriately.		
	In selecting a Hydra-Cell P Series pump for this application the system designers took account of several factors – in addition to its ability to handle the viscous slurry. One advantage cited for the Hydra-Cell was its greater-than-usual turndown ratio when the pump is coupled to a VFD drive system acting through a gearbox. Also mentioned were its ability to operate with standard flowmeters and the ease with which the pump can be serviced.		
Advantages of Hydra-Cell pump on this application	Ability to pump viscous slurries. Gentle handling of polymers. Metering accuracy with wide turndown ratio. Simple compact build, easy maintenance.		

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