POWER GENERATION

Hydra-Cell.com

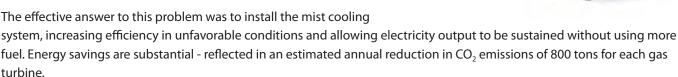
Location:	Japan
Application:	Atomizing misting application
Media:	De-ionized water
Model No.:	D10XKSTSNECB x 10
Flow Rate:	5 gpm (20 l/min)
Pressure:	1000 psi (69 bar)
Hydra-Cell Advantages:	• Low price
	• Low pulsation
	Ability to pump corrosive and non-lubricating liquids reliably



Cooling Gas Turbine Inlet

Hydra-Cell D10 pumps at a Japanese power station are feeding deionized water to an installation of several hundred spray nozzles to create a cooling mist of fine droplets at the air intake of a gas turbine.

This thermal power plant of advanced design is run by one of Japan's major power generation companies. It uses a high-efficiency combined-cycle system in which a second turbine is driven by steam - using residual heat from the exhaust gases of the gas turbine to boil water. Some efficiency is lost, however, if summertime conditions cause the temperature of the intake air to rise too high.



The task of delivering de-ionized water to the spray nozzles at 1000 psi (69 bar) pressure was entrusted to ten Hydra-Cell D10 seal-less pumps, installed in two batteries of five pumps to serve inlet filter nozzles on both sides of the air intake.

The Hydra-Cell pumps were preferred to the conventional alternative, piston plunger pumps, on grounds of life-cycle costs and because of their smooth low-pulsation flow, allowing consistent atomization of the liquid into the fine droplets necessary for efficient cooling.

Characteristics of Fluid Pumped:















