COOLING TOWER KIDNEY SYSTEM

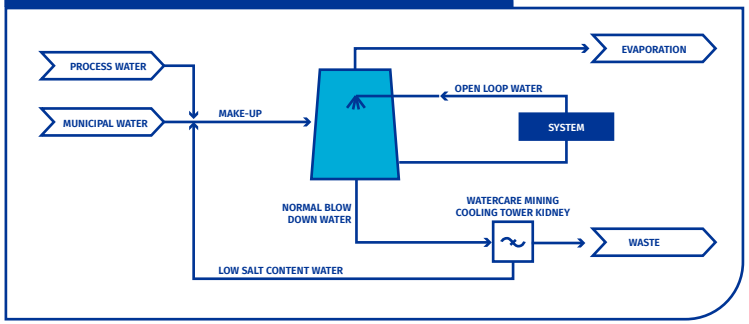
Watercare Innovations' Cooling Tower Bleed-Off Management System demonstrates innovation in water saving across open evaporative cooling towers.

Steady increases in water pricing over the past years due to increasing demand and the fact that water quality has deteriorated and requires additional processing before it is of adequate quality to provide to consumers is a global trend. The increasing water price trend has resulted in businesses identifying initiatives to reduce water consumption, as well as water discharge volumes to reduce operational costs. Industrial cooling systems are a large consumer of water. The make-up water consumption is determined by the make-up and recirculating cooling water quality and the operating conditions of the cooling system. Watercare Innovations' Cooling Tower Bleed-Off Management (Kidney) System demonstrates innovation in water saving across open evaporative cooling towers.

Cooling Tower Bleed-Off Management (Kidney) System is installed in the cooling system's blowdown line. The total dissolved solids of the blowdown water is reduced up to 80% making the treated water safe to return to the makeup water for reuse in the cooling system. Reusing the treated blowdown reduces the volume of water discharged to wastewater, as well as the volume of makeup water required to optimally manage the cooling system.

FEATURES	ADVANTAGES	BENEFITS
Compact and simple point-of-use system	Easily installed within existing cooling tower infrastructure	Minimal installation costs
Robust	Durable	Low operational maintenance requirement
Removes Dissolved Solids	Treated water is safely returned to the makeup water inlet	Reduced water consumption
	Limits the scale forming potential of the makeup water	Less water is required to maintain the optimum cycles of concentration in the system
Versatile	Treats varying raw water quality to a consistent feedwater quality	Improved control of cooling water management

PROCESS DESCRIPTION



SPECIFICATIONS

Maximum Operating Pressure	41 Bar (600 psi) (86 400 lb / ft2)
Maximum Operating Temperature	45°C (113°F)
Optimum Operating pH Range	2 – 11
Maximum Chlorine Concentration	0.1 ppm

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