

SOUTH EAST QLD CORRECTIONAL FACILITY (GATTON)

TECHNICAL DATA



Project Description		
Population	330	p/day
Daily Hydraulic Load	78,000	l/day
Site Description	Correctional Precinct	
Water Source	Black & Grey Water	
End Uses	Class A applications	

Plant Description		
Treatment Processes	Components	Suppliers
Plant Feed method	Gravity / Vacuum Sewer	Others
Screening	Coarse Screen	Spirac
	Fine Screen	Johnson Screens
Grit Removal	Votex Grit Removal System	Spirac
Grit Handling	Grit Classifier	Spirac
Flow Equalisation Tank	Emergency Storage	Humes
	Primary Balance Tank	Gebel
Biological Treatment (BNR)	MBR System	Gebel
Phosphorus Removal		Grundfos
Membrane Filtration		Siemens Water Technologies
Ultra- Violet Disinfection	Validated UV plant	Wedeco
Primary Chlorine Disinfection	Custom Design Contactor	WJP Solutions
Desalination - Secondary Membrane System	Reverse Osmosis Plant	Siemens Water Technologies
Secondary Chlorine Disinfection	Clear water storage	WJP Solutions
Sludge Management	Belt Filter Press	Dayco
Instruments	Pressure	Endress & Hauser
	Level	Endress & Hauser
	Flow	Endress & Hauser
	Dissolved Oxygen	Endress & Hauser
	pH	Endress & Hauser
	Chlorine	Endress & Hauser
	Turbidity	Hach
Controls	Electrical Conductivity	Georg Ficscher
	PLC	Allen Bradley
	HMI	Advantech
	SCADA	IFIX

Validation / Verification Description	
Validation Period (weeks)	13
Validation Process	As per project specifications
Virus in feedwater (10 ^x)	10 ⁵ to 10 ⁶
Protozoa in feedwater (10 ^x)	10 ⁵ to 10 ⁶
BOD Removal Efficiency	98.5%
Total Nitrogen	95.0%
Total Phosphorus	98%
Virus removal efficiency	100%
Protozoa removal Efficiency	100%