



MUNICIPAL INSTALLATION | Primary Treatment

Geiranger Wastewater Treatment Plant Stranda, Norway

The Geiranger Wastewater Treatment Plant (WWTP) is located in Norway's Stranda municipality, which for many years has been a popular tourist destination. Geiranger is visited by 160 cruise ships every summer making it the second largest cruise ship port in Norway.

The Challenge

On a typical day, the WWTP treats the wastewater for 300 permanent residents. However, in the summer months, treatment capacity must increase substantially to account for a large influx of over 7000 tourists per day.

Treated wastewater is discharged to the Fjord of Geiranger, which is a UNESCO world heritage site. This requires them to meet removal rates of at least 50% TSS and 20% BOD stipulated by the European wastewater directive for less sensitive recipients.

The Solution

The Geiranger WWTP installed two SF2000 Salsnes Filters that remove 55-70% TSS from the wastewater. Each filter has a 350 micron filtermesh and integrated sludge dewatering. The way in which the Salsnes Filter system is designed allows it to handle the significant variations in incoming flow that the Plant experiences.

A Control Power Panel that houses a Programmable Logic Controller (PLC) automates system operation. A sensor tells the unit when, and at what speed, to start rotating the filtermesh based on the amount of incoming wastewater. The PLC will then simultaneously start the Air Knife filtermesh cleaning system and the sludge dewatering unit.



System Parameters

Salsnes Filter: SF2000
Type of Treatment: Primary Treatment

P.E.: 2000
Influent TSS: 100 - 400 mg/L
Effluent TSS: 45 - 120 mg/L
Particle Size: 0 - 100 mm
Max. Flow Rate: 40 L/s (0.9 MGD)
Dewatered Sludge: 25% Total Solids

