

Ozone treatment provides healthy water for leading fish farm in Norway

The Sævareid Fiskeanlegg is located close to Bergen in a very scenic surrounding and is one of the oldest and biggest land-based smolt farms in Norway. The capacity is approx. 10 mill of Salmon smolts per year. This is some 1000-1200 tons of produced biomass yearly. The total water usage for the fish farm amounts to 21.000 m³/h.

Ozone treatment of water to hatchery and first feeding

The farm faced problems for several years with high mortality on salmon eggs and fingerlings. The reason for the mortality was not clearly identifiable, but the suspected bad water influent quality from the lake due to occasional algae, parasites appearances triggered the search for improved influent water treatment equipment.

Sterner Aquatech, a long time partner of Xylem and leading company in the field of fish farming equipment in Norway, had been a long time trusted partner for Sævareid Fiskeanlegg and did closely work with the operators to improve the treatment scheme to provide better feed water quality to the farm.

“Since the installation of the new inlet treatment scheme our past problems have been solved and our fish enjoy the better water quality”

The solution chosen to treat the 1,200 m³/h inlet flow to the egg and fingerlings hatchery consists of a filtration (18 µm open drum filter) system and a WEDECO EFFIZON SMO 500 ozonation system incl. venturi side stream injection, contacting tanks and degassing system. The skid mounted ozone generation system includes all needed process and safety analyzers and produces up to 3,6 kg O₃/h from LOX at > 10 wt%. The system can be stepless adjusted to the actual ozone dosing needs. At normal operation the ozone generation system consumes less than 12 kW. The improved and less fluctuating water quality reduced significantly the mortality rate of the salmon eggs and fingerlings resulting in an increased production.



Sævareid Fiskeanlegg



WEDECO SMO 500 Ozone generator (left) and filtration system

END USER:	Sævareid Fiskeanlegg, Norway
CLIENT:	Sterner Aquatech, Norway
TREATED FLOW:	1,200 m ³ /h
SCOPE:	Low head propeller pumps 18 µm drum filters WEDECO SMO 500 ozone generator Side stream injection + full stream contact tanks Degassing and residual ozone elimination

WATER TREATMENT AND BEYOND
WEDECO, Xylem's leading brand for oxidation and disinfection solutions ensures through its broad UV and Ozone portfolio, global service network and long-term experience healthy living conditions for livestock and aquaculture systems worldwide.

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