

Press Release

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Giant commitment on salmon smolt in Nordland



Aquaculture-director of process-supplier Krüger Kaldnes, mr Marius Haegh, is happy to land still another RAS contract.



Helgeland Smolt and Tor-Arne Gransjoen investing heavily in new hatcheries for fingerlings. The site is conveniently located in the seafront, next to a power station, with good access to both fresh water and sea water that can be recycled.



Senior researcher in NOFIMA, Bendik Fyhn Terjesen, shows satisfactory results so far when it comes to farming of larger fish in the future enclosed fingerling-hatcheries.

Helgeland Smolt, with Krüger Kaldnes as processing supplier, is now building what seems to be the world's biggest production site for salmon smolt, (which is a juvenile salmon ready to be released in sea cages) – at Reppen in Rødøy municipality, in the county of Nordland. The production site will contain seven departments from hatching till extended growth. The process can manage both salt- and freshwater. Total basin volume is 21.700 cubic meters. Optimal production will deliver 7 to 8 million juvenile fish with a biomass (weight of the fish) reaching 2000 metric tons. The hydraulic capacity in the recycling site for the process water totals 35.000 cubic meters per hour. Total building costs will amount to abt 300 million NOK.

- Our goal is a good site with an equally good technological solution, says Tor-Arne Gransjoen, general manager in Helgeland Smolt. He is a pioneer in the development of this kind of industry in his home county and he is also the driving force in the successful site of Sundsfjord Smolt. But despite an expansion the capacity again has reached its full peak. The choice has been between another expansion – or a new production site.

- We just had to adjust the capacity if we should keep up. Due to a risk assessment the choice fell on a new site. For us it will give better supply guarantee if one of our sites, against all odds, shall have to close down for a limited period of time, says Gransjoen, who can add that affected authorities, local as well as on county level, are very positive to the new project.

Better conditions

As mentioned earlier this is a production site with a unique size – with basins for fish up to 500 grams. We have interviewed Bendik Fyhn Terjesen, senior researcher at NOFIMA situated in Sunndalsoera. Here NOFIMA has made several tests with salmon smolt in recycled water. On a general basis, independent of supplier, mr Terjesen sums up their research so far, in view of both size of the fingerling and its welfare:

- Research this far shows that the fish, after being raised in enclosures both on land and sea, have a high rate of survival. With reduced salinity in the water in RAS, a better fish skin health is also obtained. Good fish skin health is very important at this stage of growth and reduces mortality when the fish is let go in new environments. At the same time the growth in the sea is equal to, if not better, than by traditional smolt production. Lately there has been an intensified debate concerning the aquaculture industry and the increasing occurrence of salmon lice.

- When the fish is in enclosures on land the said lice will be either reduced to zero or kept on a minimal level. Longer time in closed facilities will no doubt reduce the spreading of salmon lice, due to the fact that salmon are kept for a shorter time in sea-cages (merds). Therefore the use of enclosures on land will become a very important means of combating especially the salmon lice. Improved technology and thus water quality is a very hot topic in the aquaculture industry. Therefore, more research is now engaged in such work, he says. Current regulations allow for closed land produced smolts up to one kilogram. It would be useful if it could also include sea-based fish closed containment.

- Currently we have done experiments with fish up to one kilogram. It has gone well when adding some special care and a few adjustments during relocations. So it looks promising, concludes Terjesen.

Hands full

Aquaculture-director of process-supplier Krüger Kaldnes, mr Marius Haegh, has enough to keep him busy for the time being.

- We are experiencing a rapid development, with larger deliveries. The facility at Marine Harvest in Steinsvik on Sunnmoere is large. But Helgeland Smolt on Reppen will double this size. Our RAS is founded on the unique MBBR cleansing technology developed at NTNU in Trondheim, Norway. We supplied Sundsfjord. Now we are also selected as supplier for this great initiative. Internationally we are attracting new customers. We are proud, concludes mr Haegh.

Krüger Kaldnes is a part of Veolia Water Technologies (VWT), subsidiary of Veolia Water, is a leading design & build company and a specialized provider of technological solutions in water treatment. With over 10,805 employees in 57 countries, Veolia Water Solutions & Technologies recorded revenue of €2.4 billion Euros in 2012.

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(*) 2013 pro-forma unaudited figures, including Dalkia International (100%) and excluding Dalkia France. Excluding Transdev employees and revenue currently under divestment.

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