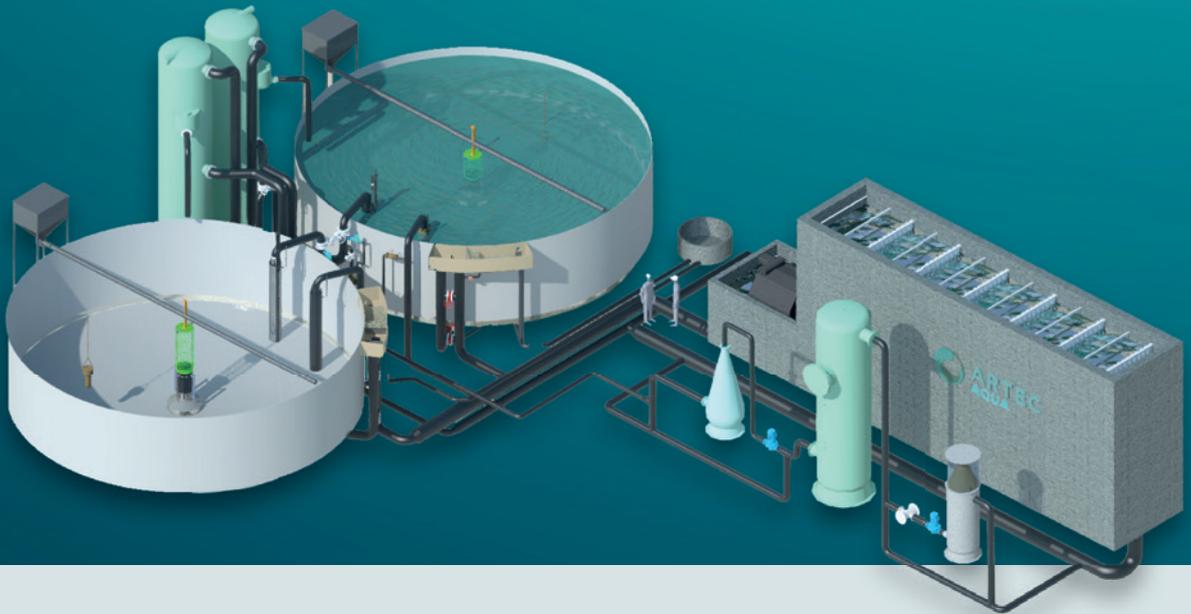


Recirculating – RAS systems

Recirculation concept – tested and well-documented



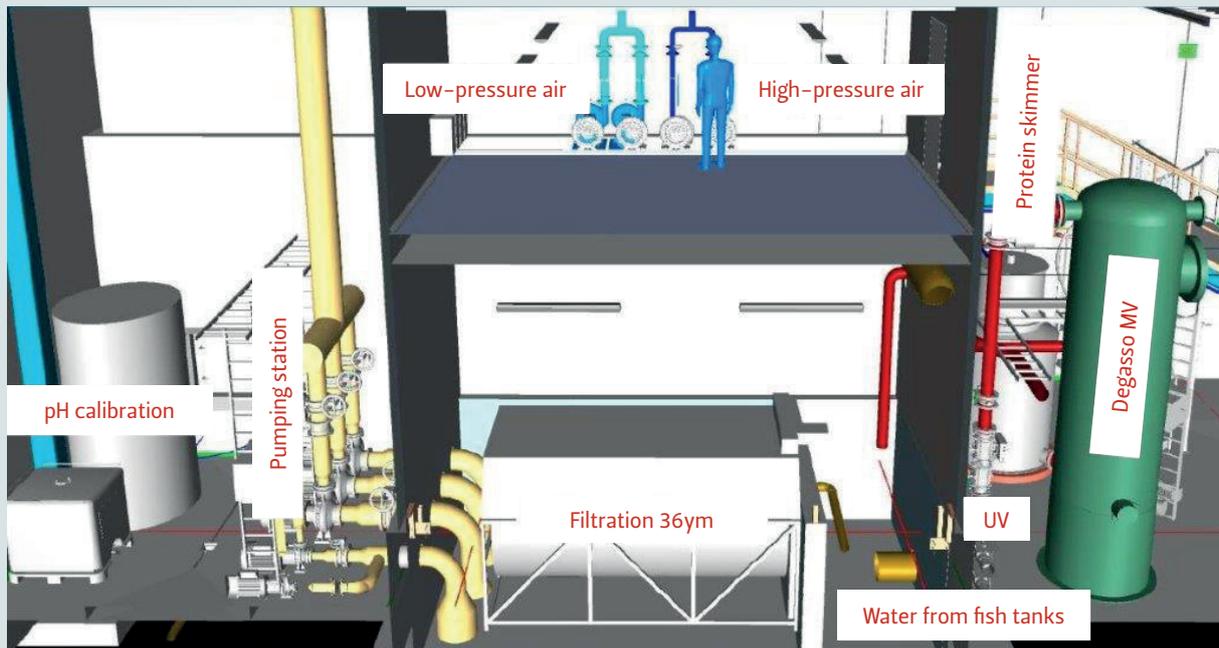
RECIRCULATION CONCEPT

Artec Aqua AS has developed a recirculation concept for the Norwegian market. The Norwegian Institute for Water Research (NIVA) has carried out tests of water quality and fish health, and the University of Nordland (UiN) has carried out stress measurements. The report from NIVA and UiN shows that the concept gives good water quality and recorded stress levels among the lowest measured in onshore fish farming.

BENEFITS:

- A breakthrough for well-functioning and documented recirculating systems
- Our water treatment solutions are mostly based on partial +stream technology
- No need to pump large volumes of water through the system
- Saves investment and operating costs compared with other recirculation concepts
- The biofilter, which is at the core of the recirculating system, is an Artec Aqua concept, primarily used in the Moving Bed Biofilm Reactor

Recirculating aquaculture systems (RAS)



R&D MANAGER VIKTOR FIVELAND:

"The report shows some fantastic results, almost better than expected. In this case, our concept has been proven. Products and processes can always be improved, however, and we will continue to focus on possible improvements and further development."

RESEARCHER OLE-KRISTIAN HESS-ERGA, the Norwegian Institute for Water Research (NIVA)

"Artec Aqua has done a thorough job of documenting its concept. The tests show good results, and the recirculation concept can be used in commercial smolt production under the same terms as a conventional flow-through system."

The conclusions of the ReCirk pilot project are presented on our website. Artec Aqua's recirculation system is compared with a conventional flow-through system. **You can read an excerpt from the report here:** <http://www.artec-aqua.com>

THE REPORT ADDRESSES THE FOLLOWING, among other things:

- ReCirk pilot project
- Water quality in general
- Microbial characterisation
- Particle characterisation
- Blood parameters
- Metals
- Stress mapping
- Production data