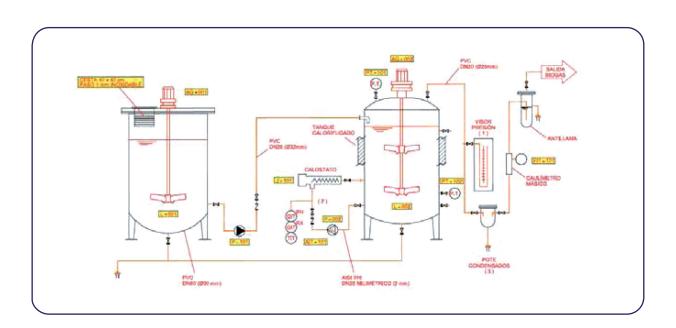


Low-energy ultrafiltration system with ceramic membranes

PROJECT

Ceramic membranes are usually used with a separate recirculation system from the bioreactor, entailing major energy consumption as regards polymers, which may be used in a submersion method without incurring the extra cost from recirculation. Therefore, new support/membrane designs will have the aim of achieving significant reductions in that energy consumption, such as submerged membranes. Applying submerged ceramic membranes requires new geometries. In this sense, the development of suitable membrane morphology, its engineering integration in a filtration system and appropriate operating, as well as its commercial-related design, are considered as important tasks in the project. The main aim of the development of this product is to achieve a patentable system that reduces energy consumption by over 50%, making the product more competitive in medium-high treatment flows, as well as in aerobic and/or anaerobic conditions.

Project



Location: Aqualia has a pilot installed in an industrial factory.

Duration: July 2010 – June 2014, spread over 4 annuities.

Current state: Finished

Total budget: 1,861,172.54 €

Aqualia: 408,000 €

PROJECT PARTICIPANTS:

Partners:

Leader: LIKUID NANOTEK S.L.

Others: aqualia gestión integral del agua y Universidad Complutense de Madrid







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GRANT:

INNPACTO PROGRAMME 2010

The National Public-Private cooperation Programme under the framework of the National Scientific Research, Development and Technological Innovation Plan, 2008-2011. Ministry of Science and Innovation. The fundamental aim of the INNPACTO subprogramme is to foster the creation of cooperation projects among research bodies and companies to jointly undertake R&D projects that help to drive innovative activity, mobilise private investment, generate employment and improve the country's technological balance.

MICINN IPT-420000-2010-13

Budget: 1,861,172 € Aqualia loan: 346,800 €



