



LANDING AQUACULTURE

Addressing the need for sincere engineering services.

The European aquaculture sector wants more. Despite statistics showing a stagnant sector since the production peak in 1999 (APROMAR 2013), the discussions to boost European aquaculture are, today, more alive than ever. The reasons behind lack of sector growth are well known, and both entrepreneurs and experienced industrialists are constantly looking for ways to expand into this industry, despite its challenges. On top of that, there is more political will at an EU and national level now than ever before.

Those challenges are the reason why recirculating aquaculture systems (RAS) are increasingly gaining interest. With RAS, no access to sea site licenses is required, environmental impacts can be controlled, foreign species can be farmed and -if done correctly- proper biosecurity can be achieved. Despite these clear advantages, RAS has not been proven to be entirely successful. A survey performed by Badiola, Mendiola and Bostock (Badiola et al. 2012) showed that the RAS facilities had to be rebuilt or re-designed due to failure for 50% of the surveyed companies. The authors also found it difficult to compile design data among RAS technology suppliers. The data from this paper shows a harsh, but a clear reality: RAS does have the potential to be technically successful, but



Founder Rob van de Ven.

design and engineering underestimations are partly responsible for the history of failures with this type of production technology. LandIng Aquaculture is founded from the need for affordable, transparent and responsible aquaculture engineering services that 1) educate the client on both the risks and advantages of design decisions 2) provide the client with a comprehensive, scientifically-backed explanation for every design assumption and 3) give the client the opportunity to conduct careful and prudent procurement of RAS technology. The company has been founded by Rob van de Ven, an aquaculture engineer from Wageningen University, who has previously worked for a well-known RAS technology supplier.



Render image as an example of early visualisations

LandIng Aquaculture offers its clients a suite of engineering packages for hatcheries, grow-out farms, ornamental holding systems and scientific research systems. These packages span from conceptual designs and early visualisations to detailed production planning and engineering of life support systems, holding tanks, hydraulic works, HVAC, civil works and more. As the company places heavy emphasis on careful procurement to reduce capital costs and to prevent future system failures, no exclusive affiliations exist with technology suppliers: careful technical and economic analysis will dictate the right tools for the job.

Despite being specialised in RAS, LandIng Aquaculture also aims to provide a wider range of aquaculture consultancy services, backed by a network of aquaculture professionals from the sector. The description of both the engineering and consultancy services can be found on the company's website, www.landingaquaculture.com.

References

- APROMAR (2013) La Acuicultura en España 2013. 3.
- Badiola M, Mendiola D, Bostock J (2012) Recirculating Aquaculture Systems (RAS) analysis: Main issues on management and future challenges. *Aquac Eng* 51:26–35. doi: 10.1016/j.aquaeng.2012.07.004