KRÜGER VEOLIA

# Sashimi Royal

## – The largest landbased Kingfish facility in the world

Aquaculture | Case Study

### Client:

Sashimi Royal

### Facts

Location: Hanstholm, Denmark

Maximum daily feeding 4,000 kg

Building footprint 2,800 $m^2$

Maximum standing stock 400 tons

Water consumption
350 l/kg feed/day

Species: Kingfish (*Seriola lalandi*)

Project completed in September 2017

## The client's needs and wishes

The Danish aquaculture company Sashimi Royal, has started production in their new landbased kingfish facility, with focus on high environmental standards in order to achieve a sustainable production of this valuable species. Kingfish is a popular high priced favorite among chefs, sushi markets and consumers across Europe and the rest of the World. It is sold under various names including Hiramasa, Hamachi, and yellowtail.

The project was granted support from the Danish Programme for Eco-innovation (MUDP) of EURO 2.6 mill. and has been developed in close partnership between Sashimi Royal, the construction company Gråkjær A/S and Krüger A/S.

Sashimi Royal has its own hatchery called "Maximus" to ensure a steady supply of juvenile Kingfish which is often a bottleneck in the production.

The new facility is located on the Northern coastline in Denmark, and the heart of the facility is based on Krüger's unique grow-out solution RAS2020™.

The facility has been designed for a maximum biological load of 4,000 kg feed per day at a water temperature of 23 C°. Sashimi Royal is the current record-holder for the size of a land-based facility for kingfish in the world.

An annual production exceeding 1,000 tons of Kingfish would be possible depending on production logistic and supply of juveniles.

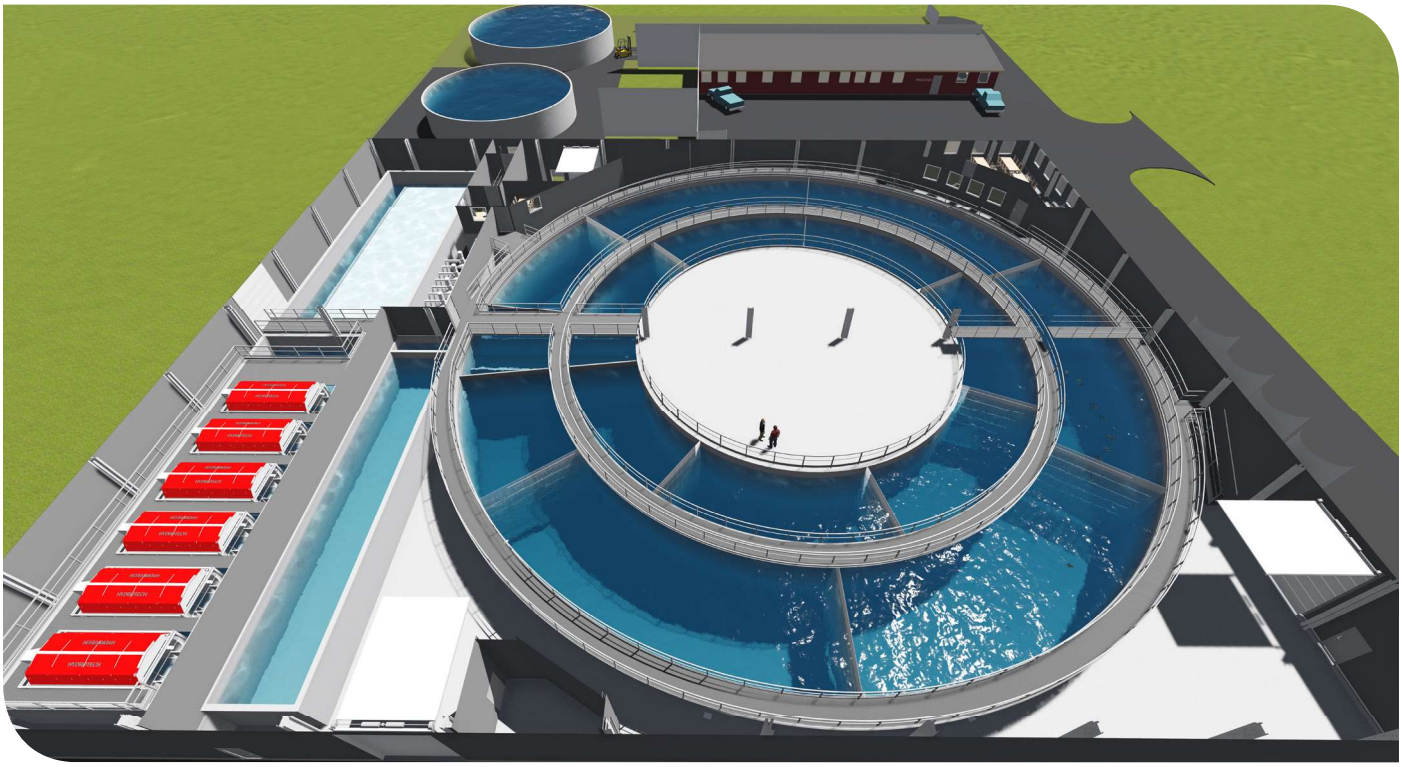

*Illustration: Conceptual drawing of RAS2020™*

## Our solution

The compactness of the RAS2020™ design means that the same volume of fish can be produced in half the area taken up by a conventional system.

The RAS2020™ has no underground piping reducing the risks associated with pipes embedded in concrete and reducing the construction costs.

The circular design in which water circulates with adjustable speed ensures the optimal velocity in relation to fish size. The tanks are separated by moveable grids through which the water flows. In this way we are able to obtain the optimal stocking density by adjusting tank section size which enhances the production capacity and flexibility of the system.

A central platform in the circular system from which the fish are handled ensures a short distance to the seven tank sections in the inner circle of the plant as well as the seven tank sections in the outer circle. New fish are added to the inner circle every other month where they are graded by size as they grow. When the fish reach a certain size, they are moved to the outer circle where they stay until harvest size. Prior to harvest, the fish will be moved to an external purge tank with its own independent water system for depuration to obtain a high quality product.

Here, the fish live in completely clean water until they are led directly to the abattoir.

**For further information please contact**

**Thomas Hofmann**
Sales & Business Development

Mobile: +41793079788
Email: thomas.hofmann@veolia.com