

A strong field of contenders made selection of the 2015
Aquafeed Innovation Award a difficult task, but the judges
agreed that the iScan IM from Tovalia Intelscan of France,
was a worthy winner.

## The Aquafeed Innovation Award Winner 2015

Aquafeed.com presents the Aquafeed Innovation Award at the Victam shows in Europe and Asia to recognize the achievements and contribution of the allied industries to the advancement of aquafeed development. To enter for the Aquafeed Innovation Award a product must be new and create significant benefit to the manufacture of aquafeed in terms of innovation, efficiency, profitability, safety or sustainability; this year's winner does just that.



The iScan IM system: online image process analysis of pellets. Weighing, size and color measurement.



Olafur Jonsson, managing director of Tovalia, with the 2015 Aquafeed Innovation Award, presented by Aquafeed.com at Victam.

tional panel of expert judges selected for their practical, commercial feed production experience and expertise. The 2015 panel comprised:

- Dr. Dean M Akiyama, Aquaculture Consultant, Indonesia;
- Bernard Devresse, Director, Bern&Roc Aquaculture Itda., Natal, RN Brazil;
- Dr. Warren Dominy, Senior Technical Consultant, Aquafeed.com, Hawai'i;
- Yeo Keng Joon Chairman and Managing Director, Bharat Luxindo Agrifeeds Pvt Ltd, India;
- Dr. Richard Smullen, Technical Manager, Ridley AgriProducts Pty. Ltd., Australia.

The iScan IM is a tool for the operator to control his extruder to best efficiency. Buoyancy is very important for fish feed pellets as they need to sink at the correct speed, and as well as monitoring the exact pellet density, the iScan IM also monitors the exact pellet size. If the size of pellet starts to change it is usually a sign that the extruder needs to be cleaned or pressure in the extruder is insufficient.

The new system uses a digital line scanning camera and computer vision to process the images of pellets in real time. The digital image processing gives the size of the pellets as well as the color. The software counts a certain number of pellets that are weighed on a flow scale before continuing their process.

"...The iScan IM shows good potential to contribute greatly to quality aquafeed production".

The benefits of the new system are:

- online and continuous exact density measurement of individual pellets (not bulk density) - to determine sinking properties;
- online and continuous measurements of the pellet size to monitor the performance of the extruder. In case it needs more pressure, steam or cleaning;

 online and continuous shininess measurement to determine oil absorption of pellets.

The new system is based on a technology that is used in the fish farming industry to count fry or smolt of sizes down to 0.05g that are pumped from one tank to another.

Olafur Jonsson managing director of Tovalia received the Aquafeed Innovation Award from Aquafeed.com's publisher, Suzi Dominy at To-

valia's stand at Victam.

"This is a great honor for the company and acknowledgement for the work we are doing to improve production processes in the industry" Olafur said.

"Tovalia Intelscan is a worthy addition to our award winners,",Suzi Dominy said. "Previous winners are Wenger Manufacturing for its extrusion system for High Capacity Small Diameter Aquafeed Production and Norvidan Overseas A/S for its continuous on-line Density System (NODS). The iScan IM shows good potential to contribute greatly to quality aquafeed production".

A French company based in Lyon, Tovalia Intelscan is well known for its continuous moisture measurement system. This system has been installed at feedmills to measure moisture content of pellets instantly. This helps factories producing pellets at the correct quality to make savings in raw material.

Another notable development from the company is its cooler control system, iScan Cooler. This is a new product, which combines continuous measurement of moisture of pellets at exit of pellet cooler with regulation software to control parameters of the cooler such as the ventilation fan or the extraction time. The end result is pellets with optimum quality in terms of moisture and temperature.

