

## UV Water Treatment Hydro-Optic™ Technology

### Atlantium's Patented Medium-Pressure UV Dose for IPN Inactivation

Infectious pancreatic necrosis (IPN) is considered one of the most lethal and wide-spread viral diseases responsible for mortality in salmon production around the world. What makes IPN especially challenging is that the virus is known to be very resistant to UV light, requiring a low-pressure UV dose for inactivation ranging between 150-250 mJ/cm<sup>2</sup>.

Atlantium patented the first system and method of using optimized medium-pressure UV lamps and UV dose for the inactivation of IPN in the market.

As a proven UV solutions provider to the Aquaculture industry for the past 15 years, Atlantium is dedicated to ongoing research of proper UV dose for log inactivation of various industry-related pathogens.

Through this commitment to research and development and by conducting a series of tests, both in-lab and in various production sites, Atlantium found that using its optimized lamps, the medium-pressure UV dose required for a 4 log inactivation of IPN is significantly lower than the one required by low pressure. In fact, medium-pressure UV lamps require only about a fifth of low-pressure UV dose for inactivation of IPN.

Atlantium's revolutionary finding is in line with many other recent tests comparing the effectiveness of medium-pressure vs. low-pressure UV lamps and the required reduction equivalent UV dose for a variety of microorganism. In addition, the wide germicidal wave-length of medium-pressure lamps has been discovered to be significantly more effective for inactivation of microorganisms in aquaculture production especially due to the need to provide reliable water biosecurity against the wide variety of industry-related pathogens.

To learn more about Atlantium's medium pressure Hydro-Optic™ (HOD) UV technology and its unique ability to deliver a consistent and accurate UV dose to provide reliable and sustainable water biosecurity to Aquaculture facilities, visit [atlantium.com](http://atlantium.com).



**Atlantium's RZ300 systems for IPN protection have been effectively applied in Norway, Scotland, Canada and Chile. The advantage of the wide germicidal wavelength of the Atlantium medium-pressure lamps enables compact and effective installations for water biosecurity.**