

ASL

AQFlow

inc.

NEWSLETTER

Vol. 1 No. 1

Innovative solutions to your flow measurement challenges

May 2001

Home of the Acoustic Scintillation Flow Meter



Hydro Plant Optimization

Chelan PUD No.1 has undertaken a plant optimization program for its Rocky Reach and Rock Island hydro projects on the Columbia River. Part of this program included a series of index tests combined with absolute flow measurements at selected units. Because the low-head plants have short converging intakes, the ASFM was selected as the most appropriate method. The measurements were successful. The flow results yielded efficiencies between model predictions and a previous current meter test. The ASFM results exhibited less variability in efficiencies than the current meter results.

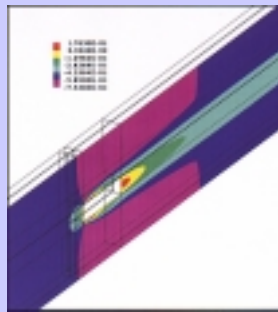


Ultimate Performance

As part of our quality and performance improvement program associated with the introduction of our **ASFM Advantage**, we are currently undertaking a number of initiatives in order to provide flow rate measurement results within the total uncertainty limits required by our customers and/or specified by future test standards and codes for **short converging intakes of low-head plants**.

In the absence of any existing standard or code for these difficult hydraulic conditions, we are aiming at total uncertainties of the flow rate measurement of not more than $\pm 1.5\%$, and smaller where more favorable measurement conditions exist.

These initiatives include:



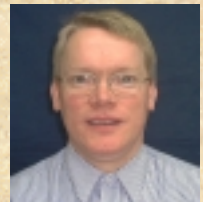
- A review of our measurement techniques and equipment using our in-house testing facilities.
- A review of state-of-the-art literature on trashrack drag/turbulence analyses and model testing.
- ◀ A computational fluid dynamics modeling of trashracks/intakes with the University of Victoria's Department of Mechanical Engineering on the Minerva supercomputer.

Nova Scotia Power

The **ASFM Advantage**, AQFlow's newest product, has been ordered by Nova Scotia Power. The 5-path, 1 bay configured ASFM will be used at plants in Nova Scotia, Canada on the Mersey River, for testing turbine units.

Staff Announcement

AQFlow welcomes Jan Buermans as Sales Manager. He has worked in technical sales for 14 years, the last 3 selling municipal sewage treatment plants. He is an accredited professional engineer in both B.C. and Quebec. Jan may be contacted at (250)656-5529 ext:125 or at jbuermans@aqflow.com.



Other Hydro Solutions

Our parent company, [ASL Environmental Sciences](http://www.asl.com), offers a range of related services and products for other hydro applications, such as flow surveys and numerical simulations in forebays and tailraces.

Meet Us At Events

ASL AQFlow will be attending the following trade shows & conferences. We would like to have a chance to talk to you.

WaterPower XII	July 9 – 11	Salt Lake City
Hydro 2001	September 27 – 29	Riva del Garda
IGHEM 2002		Toronto
Hydrovision 2002	July 28 - August 2	Portland