

# Liquid Filtration Testing Basics

## Instructor: Mr. Nicolas Petillon

## Course: 8:00 am - 12:00 pm, .4 CEUs

The Liquid Filtration Testing Basics Short Course is an introductory course on liquid filtration testing, testing methods and the standard equipment and instruments used. The course will cover filter test techniques and standards for water, fuel, lube oil, hydraulic fluids, and other industrial liquids. In addition, particle characteristics and efficiency methods and ratings will be reviewed.

## **Learning Objective:**

Attendees will leave with a broad view and better understanding of the principles and methods available to pre-qualify and optimize liquid filtration selection.

- Understanding Filtration Efficiency Terms
- Filter Testing standards by industry
- ASTM/ISO/SAE/Filter Testing Standards
- Single Pass vs. Multi Pass Filter testing methods
- Cyclic Filter testing methods
- Advanced Particle counting methods
- Test dusts and contaminants
- Bubble point tests
- Determining Filter dirt holding capacity
- Bio-fuel filter testing

#### **Course Outline:**

The scope of the course is to study the test methods and test equipment used to evaluate the effective characteristics of filtering media and filters used to clarify liquids.

- Introduction to Liquid filter testing
- Standardization organizations and test standards
- Industries, National and International Quality assurance in testing laboratories
- Types and applications of liquid clarification filters
- Types: Depth, Precoat, Cartridges, Membranes, Design and operation parameters, Fields of Application
- Types and characteristics of filtering media
- Granular, woven, non-woven, membranes
- Characteristics of liquids and particles

#### Who should attend:

Filtration Design Engineers, Filtration Product Managers, Filtration Users, Liquid Process Managers, Solid Liquid Separation Researchers, New Product Development Managers, Filter Media Developers, Laboratory Researchers, Laboratory Managers.

**Nicolas Petillon** has worked for IFTS in filter testing center and measurement laboratory for more than 20 years. He is project leader in several ISO committees to develop oil and fuel filtration test standards and has given more than 50 lectures and conferences in filter testing by AFS, FILTECH WFC, IFC as well in China as in Europe or USA.