

## An LDI Training Course

# **OIL & GAS FLOW MEASUREMENT**

## by Ir. In Jumanda Kasdadi, MT.

## **Description:**

"Outstanding review of fluid properties and impact on meter performance. Great survey of meter technologies." ~Terry Terezakis, Performance Engineer

This course presents the principles, design and application of flow measurement systems. Fluid flow fundamentals are emphasized before discussing the principle of operation, accuracy, performance, specification, installation and maintenance of the different flow meter technologies.

#### **Course Content**

- Introduction to Course
- Flow Measurement Engineering Concept & Elements (mas flow, volumetric flow, linier velocity, sensor, transmitter, transducer, manipulated elements, etc).
- Liquid vs. Gas Flow Measurement Engineering (measurement for standard & flowing condition, MMSCFD vs. MMCFD, AGA calculation for gas flow, etc).
- Measurement Engineering Characteristics (static & dynamic characteristics, accuracy, drift, readability, etc).
- **Differential Pressure (DP) Flow Measurement Engineering** (orifice meter, venturi meter, flow nozzle, pitot tube, annubar, etc).
- Flow Measurement Engineering with Orifice Meter (principe, calculation, installation, selection, etc).
- Positive Displacement (PD) Flow Measurement Engineering (impeller, propeller, nutating disc, oval gear, rotating vane, etc)
- Flow Measurement Engineering with Turbine Meter (Principe, G-size, installation, selection, AGA recommendation, etc).
- Mass Flow Measurement Engineering (Coriolis, Thermal, Vortex Flow measurement)



- **Ultrasonic Flow Measurement Engineering** (beam drift, Doppler, vortex shedding, contra propagating, cross correlation method).
- Flowmeter Selection for Flow Measurement Engineering.
- Discussion, Case Study and Film

#### Who Should Attend

This course should prove beneficial to individuals who desire to become more productive through improvement of their flow measurement skills. Persons such as technicians, engineers, managers, sales persons, marketing persons, purchasing agents, accountants, lawyers, and others involved with flow measurement and its associated equipment.

#### **About The Instructor**

Ir. In Jumanda Kasdadi is an experienced instructor and he has been conducting training for oil and gas companies since 1997. He has BS and MS in chemical engineering degrees from the Institute Technology Bandung.

Companies that have received Mr. Kasdadi's in-house training include Chevron, Pertamina Hulu Energi–ONWJ, ConocoPhillips, Total, Medco, Petrochina, Pertamina, Star Energy, and many others.

Ir. In Jumanda Kasdadi was involved in several Front-End Engineering Design (FEED) and Risk-Based Inspection projects.

IJK has also taken courses for 9 topics in The Oil & Gas fields at PETEX (Petroleum Extension), University of Texas at Austin, in Houston, Texas, USA (2018).

### **Training Confirmation**

LDI Training will provide a Confirmation Letter after we receive registration according to the required quota.

For more information about the course please visit Iditraining.com or contact us at Iditrain@indo.net.id