L.C. ENGINEERING & CONSULTING SRL

About Us

L.C. ENGINEERING & CONSULTING SRL is an Italian Company, founded in 2014 by **Letizia Conter**, who has decades of experience in Software Development and Oil & Gas Industry.

Research & Development - is the basis of the Company, to achieve innovation in technology, design, products and style in order to be a step ahead of the competition.

Software Development - is the core for the manufacturing of most of the products and services provided by the Company. The skills extend from the development of User base to Advanced applications.

Automation Systems - support for detailed engineering and design of Control Systems, SCADA & Telecommunication Systems, Distributed Control Systems.

Project Management - planning, organizing, and controlling resources, procedures and protocols to achieve specific Projects.

Technical Support - pre and post-sales support and Customer Care for every product and service provided.

SPECIALTY

Through years of experience, **L.C. E&C** has gained an extensive understanding of the challenges in pipelines and leak detection, and the Company has developed its own application for environmental monitoring (**EPS - Environmental Protection System).**

L.C. ENGINEERING & CONSULTING SRL

Viale J.F. Kennedy, 23

61032 Fano (Pesaro-Urbino), ITALY

Management: +39 0721 1707697

Technical Dpt: +39 0721 1540279

Fax: +39 0721 1835030

E-mail: info@lc-engineering.it

Web: www.lc-engineering.it

LC.Engineering.Consulting

LinkedIn l-c-engineering-&-consulting-srl

L.C. ENGINEERING & CONSULTING SRL

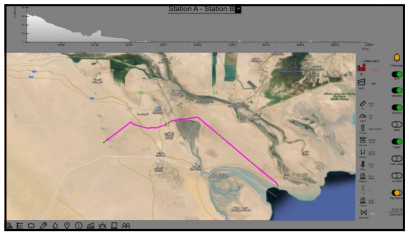
High Technology Solutions

EPS

ENVIRONMENTAL PROTECTION SYSTEM

Environmental Protection System

Why EPS



The system is based on multi-method leak detection. This feature allows to combine the individual capabilities of ecah method to overcome their own individual limitations. So th ecombination of Flow Deviation, Mass Balance and Negative Pressure Waves techiques achieve the highest sensitivity and Location accuracy reducing the response time and false alarms.

Pipeline Monitoring Solution

EPS provides a platform for

- Flow Deviation and Standard Volume Balance
- Negative Pressure Waves
- Leak Detection and Location
- Batch Scheduling and Tracking
- DRA (Drag Reducing Agents) Management
- Pig Tracking
- Instrument Check and Monitoring

Applications

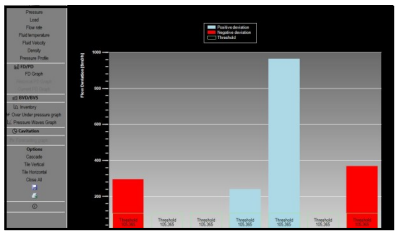
- Liquid, LPC and Gas
- Cavitation phenomena
- Single-batch and multi-products batches
- Mono and bi-directional flows
- Steady and Dynamic States

Features

Complies to API 1130 Standard.

Full integration with any third-party SCADA/DCS System and other applications through **Standard OPC** Interface.

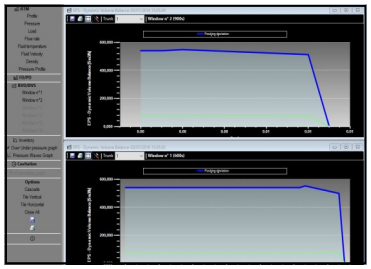
An eye on the Pipeline



The system has a simply and intuitive GUI Interface for a full management and interaction with the monitored pipelines.

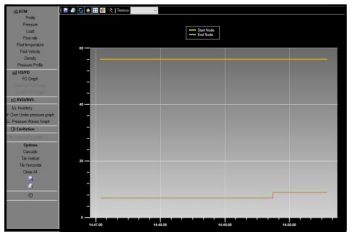
With Real-Time Graphs the Operator will always have taccess to the process data (e.g. Tempreture, Pressure, Flow).

Mass Balance and Flow Deviation



Mass, Volume or Flow Balance are standard methods used in the Industry (BVD, FD). In addition, the EPS systems has the capability to apply self-tuning correction factors in order to compensate instrumentations errors.

Negative Pressure Waves

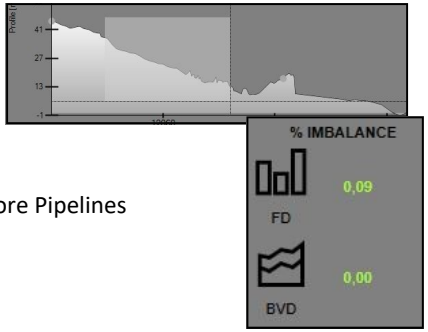


Negative Pressure Waves are generate in case of Leak: these waves propagate through the fluid and they could be sensed by high performances pressure meters that shall be installed upstream and downstream.

The magnitude of the pressure drop and the time elapsed to reach the meters, with an appopriate verification of correlation, will determine the leak size and location.

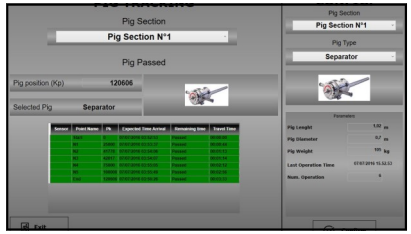
Application Systems

- Airport Networks
- Gas Distribution Networks
- Multi-product Pipelines
- Onshore and Offshore Pipelines
- Sub-sea Pipelines



Instrumentation

- Pressure Meters
- Flow Meters
- Temperature Meters
- Density Meters
- Valves
- Flow Computers



Pipeline Operational Conditions

- Multi-Phase Flows
- Pigging
- Vriable Densities
- Variable Temperature
- Reverse Flow