



# B-LDS® LEAK DETECTION SYSTEM





## Leak Detection System

During the operation of a high-pressure fluid transport system, events such as blockages or leaks may occur. Being able to detect these events in a timely manner is crucial to minimize the environmental impact of a leak. To address this need, the BRASS Leak Detection System (B-LDS®), was developed.

B-LDS® is a graphical computational application developed through BRASS's proprietary software. This graphical computational application is accessible to authenticated users via access keys and is designed to alert Operations personnel of abnormal events, particularly fluid losses.





## Product description

B-LDS® is a Real Time Transient Model (RTTM) system that uses measurements of pressure, flow, density, and the states of valves, pumps, etc., to simulate the fluid transport system (FTS) in real-time and applies a deviation analysis between measured and calculated variables.

The system aims to quickly alert the control center about the occurrence of a leak, thereby mitigating environmental, financial, and organizational reputation impacts.

### DIRECT BENEFITS



Increased safety of industrial plants



Quick leak resolution



Operation support through hydraulic simulator



Socially and environmentally responsible company towards the community and the market

The leak detection system is designed to operate continuously and without interruption. The program communicates leak alarms to the control system (DCS) through an OPC server.

## TESTING RESPONSE TIME

PARAMETER	PRECISION	PERIOD
Pipelines up to $\approx 8$ km length	$<400$ meters	$\approx 5$ minutes
Pipeline $\approx 150$ km length	$<600$ meters	$\approx 5$ minutes

## LEAK DETECTION METHODS



## LEAK DETECTION SYSTEM PERFORMANCE



### Sensitivity

Detection time v/s detected flow



### Reliability

Number of false alarms expected



### Precision

Regarding the exact location of the leak

# WHAT DOES THE B-LDS® INCLUDE?







# BRASS



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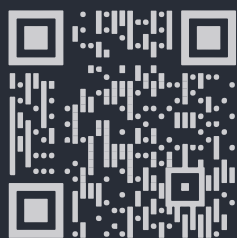
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9001:2015



14001:2015



45001:2018