

KRAKEN Instrumentation and Control

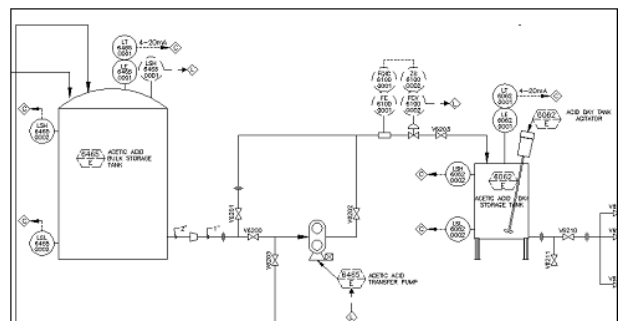
Kraken Automation has a broad knowledgebase in the selection and use of instrumentation for any process monitoring and control.

In every process system, some type of instrument is used to measure one or more key process variables. Moreover, coupled with an automated control system, information from these instruments can be analyzed and control schemes can be applied to the process, using control actuators, to maintain one, or a number of, specific operating modes. Kraken Automation Inc. has provided, and can provide a resource in the selection, application and setup of a wide range of instruments. <Click for more detailed information>

More specifically, some of the resources that KAI can provide related to instrumentation systems are:

- Site assessment of processes to which instrumentation is to be specified and selected. This positively identifies operating environments and hazard classifications;
- Provision of P&I (Process and Instrumentation) drawings, labeled to ISA standards, clearly highlighting process materials/fluids, operating rates, and specific instrument utilities required (e.g. instrument air, etc.);
- Specification of instruments and/or actuators to ISA S-20, with related peripherals, to fulfill the intended application;
- In house and/or site calibration, setup and training;
- Integration of instrumentation and/or actuators into pre-fabricated process 'skids'; and
- Wide knowledgebase on instruments, including pressure, temperature, flow (gas/liquid), static/dynamic weighing, specialized analytical process instruments, and pneumatic/electric actuation devices.

Kraken Automation specified instruments and control actuators could be supplied separately, or as part of an integrated system, either in a <limited control package>, or on the other extreme, a <plant SCADA system>. In these arrangements, KAI can offer specialized communication connectivity from basic current loop with HART communications, to more comprehensive systems utilizing Modbus™, DeviceNet™, Profibus™, Ethernet or any other customer specific topology. For a more detailed list of KAI's instrument knowledgebase, refer to the back of this detail sheet.



Engineering Services Innovative Packaging Solutions and Factory Automation Specialists

Flow:

Vortex meters, fixed vane or insertion
Magnetic flowmeters
Impellor flowmeters
Thermal differential gas flowmeters



Temperature:

J, K thermocouples, RTDs;
Non-contact infrared process meters



Level:

Discrete vibratory, capacitance, r.f. level probes;
Analog r.f. level probes;
Head pressure liquid level measurement;
Ultrasonic (single or multi-tank) level measurement;



Pressure:

Absolute, with diaphragm interface;
Differential pressure, with diaphragm, bypass manifold interface;



Weight (Static/Dynamic):

LVDT, Strain gauge, or vibrating wire weight measuring instruments;
Loss-in-weight differential solid/liquid rate control;
Gravimetric belt/screw solids weight control;
Add-weight/loss-in-weight liquid/solid batch dispensing;
Liquid mass flow (coriolis meters)



Analytical Instruments:

pH/ORP;
Residual, total chlorine measurement;
Turbidity, ratiometric or scatter methods;
Metal ion concentrations (copper, silver, gold);
Non-contact moisture;
Liquid density.



Specialized Analytical Instruments:

pH/ORP;
Residual, total chlorine measurement;
Turbidity, ratiometric or scatter methods;
Metal ion concentrations (copper, silver, gold);
Sludge blanket/layer measurement;
Dissolved oxygen concentration.

[Contact us today for more information on how Kraken Automation Inc. can assist you with your Instrumentation and Control requirements.](#)

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