Serving Western Canadian Processors

November 2019

PROCESS WEST

Key Technologies Issue

Tomorrow's tech today

TURNING THINGS AROUND

How the oil and gas sector can solve the job loss trend

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CANADA'S PROCESS NETWORK

Gas and Hydrocarbon Condensate Quality using ABB Process Analytics

Gas and Hydrocarbon Condensate Quality using ABB Process Analytics

The quality of process fluids (e.g. natural gas or hydrocarbon condensates) can be measured using several different technologies. Process gas chromatography is the most powerful analytical method for many of these measurements. The key principles of this analytical method are Separation and Measurement. These two features greatly outweigh other process analytical techniques to guarantee the quality and accuracy of each measured component in the analysis. Separation followed by Measurement is the only way to guarantee there are no interferences with each process analytical measurement.

The ABB Process Gas Chromatograph (PGC) can be optimized for each application with a wide variety of hardware options, including columns, detectors, and valves, to provide the lowest detection limit and best repeatability possible for each measured component. An additional benefit of using ABB's PGC is the large number of components which can be measured simultaneously without interference. These features and benefits make the ABB PGC the most flexible and capable process analyzer available.

To begin the separation prior to measurement, the process fluid must pass through a column. Analytical columns vary based on the application and may include packed columns, capillary columns, or micro-packed columns. ABB has been producing columns for 50 years and has developed processes that ensure the highest performance and consistency of columns.

Once sampled components are separated, the PGC will analyze the components using detectors that provide the best measurement technique for the application. For example, the detector choice may determine whether parts per million (ppm) or parts per billion (ppb) levels are measured, with some detectors more applicable to specific compounds than others. These detectors might include Thermal Conductivity Detectors (TCD) for natural gas measurement, Flame Photometric Detectors (FPD) for Sulfur measurement, or Flame Ionization Detectors (FID) to provide extreme sensitivity for ppm/ppb hydrocarbon measurements.

Battery Energy Storage Systems

Battery Energy Storage Systems (BESS); Tundra's newest initiative.

Committed to innovation, Tundra has partnered with an expert in Battery Technology – Canadian Energy (CE) – to bring 100KW-100MW energy storage systems to Western Canada. Canadian Energy has had over 32 years of experience supplying, designing, and installing batteries and battery systems. CE is Canada's stored and renewable energy expert and Tundra has been building electrical systems for industry for 20 years. The combination of Canadian Energy Expertise and Tundra's integration capability adds significant value to Western Canadian Clients.

Battery Energy Storage Systems can add value in many ways; reducing reliance on grid power, isolating a facility from brownouts and blackouts, reducing peak power loads when large equipment is started, significantly reducing power costs or generation requirements, and allowing the ability to leverage multiple power sources.

Battery Energy Storage Systems can be integrated into commercial, agriculture and industrial oil markets to support a multitude of power and energy goals.

For more information, please contact:
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TUNDRA
Process Solutions Ltd.

To learn more about Toshiba Motors and Drives,
Visit: WWW.TUNDRASOLUTIONS.CA

WHY IS TOSHIBA

THE MOST COMMONLY INSTALLED MEDIUM VOLTAGE DRIVE

IN THE CANADIAN PIPELINE AND DISTRIBUTION NETWORK?

ADVANCED TECHNOLOGY

Smaller footprint, reduced component count, and the latest safety technology on the market.

SMALL FOOTPRINT - LARGE SAVINGS

Toshiba's innovative design allows the drive to be easily retrofit and paired with existing motors.

THREE CABLES IN, THREE CABLES OUT

Control and auxiliary power assemblies are not required for internal components (eg. cooling fans). With Toshiba drives, these requirements are integral to the design and installation is simple. 3 cables in, 3 cables out.

1-800-265-1166 (TOLL FREE)
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