Power Ignition and Controls
a division of Spartan Controls

Concerned about Engine Exhaust Emissions?

Oil and Gas Producers are investigating methods to reduce harmful exhaust emissions produced by Gas Driven engines. Power Ignition Controls utilizes its 35 years of engine experience to provide economical and effective solutions.

Engineering Support

All of your questions are answered by our trained and experienced staff. We look at the complete picture from installation to post-startup maintenance. Various alternatives are presented to allow you to make an informed decision for each individual application. Product consistency is an added benefit, as PIC can recommend product based on existing site equipment, due to our familiarization of customer site equipment from previous site visits.

Sales Support

Formalized quotations are generated for each application. Individual products are summarized generating a complete overview of what the project requires.

Carbureted Engines

The typical method for emission reduction requires a Catalytic converter (similar to your vehicle converter), air fuel ratio controller, and an overtemperature protection device.

Catalytic Converter - Silencer/converter combinations are available eliminating the additional cost of a silencer as with previous models. Stand-alone units are available for field retrofits. Easy element access and long element life expectancy are primary features of the converter design.

Air/Fuel Ratio Controller - PIC has Air/Fuel ratio control solutions to suit your budget and technical needs.

Overtemperature Device - The overtemperature device protects your investment from excessive exhaust temperatures. Customer designed catalyst thermocouples are installed to accurately monitor exhaust temperatures.

Startup Support

Our trained technicians perform on-site converter startups on new or existing field engines. New catalyst startups are typically performed after 500 hours of initial engine run time. A PIC technician also provides the benefit of ignition, control panel, starter, and basic instrumentation assistance due to our complete product line expertise and support.

www.powerignition.com

"Engine and Compressor Control Specialists"

Calgary 403-207-0700 ▪ 305 - 27 St SE
Edmonton 780-468-5463 ▪ 8403 - 51 Av
Fort McMurray 780-790-0440 ▪ 300B MacKenzie Blvd
Grande Prairie 780-539-1161 ▪ 11419 - 98 Av
Regina 306-721-6925 ▪ 475 Maxwell Cres
Saskatoon 306-934-3484 ▪ 206B-2750 Faithful Av
Fort St John 250-785-0285 ▪ 9603 -112 St
Surrey 604-539-7250 ▪ 104-19329 Enterprise Way

Post Startup Support

Our trained technicians perform on-site converter startups on new or existing field engines. New catalyst startups are typically performed after 500 hours of initial engine run time. A PIC technician also provides the benefit of ignition, control panel, starter, and basic instrumentation assistance due to our complete product line expertise and support.

Why?

Catalytic Converter's are used to reduce amounts of NOx, CO, and HC in the engine exhaust stream. Typical reduction amounts of up to 90 % NOx, 80% CO, and 50% HC can be achieved under the proper conditions. Air Fuel Ratio control is utilized to ensure these conditions are continually met.

Regulations?

Generally one of two conditions require the use of emission reduction equipment:

- Engine HP larger then 800HP (non-lean burn type engine)
- Specific Site Emission Control - EUB License

Catalyst Sizing?

- Exhaust Flow Rate - engine specific
- Amount of Conversion Required
- Operating Life
- Engine Backpressure
- Amount of Catalyst Contaminants

Overtemperature Protection

Overtemperature Protection is required to prevent damage to the precious metals and catalyst material. The material begins to degrade at temperatures higher than 1350 F.

Reporting?

Service technicians provide testing data that is converted into customer reports. Information includes conversion efficiency and engine data.

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