altronic

PPC Spark Plugs on Gas Compression

APPLICATION:

Gas Compression, Lease Fleet

ENGINE/COMPRESSOR:

Lean-burn Gas Engine, 170mm bore

ALTRONIC PRODUCTS:

PPC (Passive Prechamber) Spark Plugs (P1863IP-2)

OVERVIEW:

The Altronic passive prechamber (PPC) spark plug has been shown to reduce emissions, improve fuel consumption and extend spark plug life. These plugs have successfully met specific performance goals set by the customer for their lean-burn gas engines.



TEST RESULTS:

- NO_x emissions reduced from 1.5g/bhp-hr to 0.7g/bhp-hr
- Fuel consumption reduced by approximately 10%

MEASURED DURABILITY:

02-14-2012 - Initial installation

06-01-2012 – Removed from the engine (package sold)

02-06-2013 – Re-installed in a similar engine in Carlsbad, NM

08-30-2013 – Removed at the end of test

Total estimated running hours is more than 7,000.

ESTIMATED COST SAVINGS:

- Current spark plug change occurs every 1100 hours. Assumed spark plug unit cost is \$90. Estimated yearly cost is \$13,000/engine.
- Expected Altronic PPC plug change interval: 7,000 hours. Assumed PPC plug unit cost is \$225. Estimated PPC plug yearly cost is \$4,500/engine.
- Potential yearly savings = \$8,500/engine or \$850,000 for 100 engines.

