

# PPC Spark Plugs on Low-Emission Gas Compression

**APPLICATION:**

Gas Compression, Lease Fleet

**ENGINE/COMPRESSOR:**

Low-emission, ultra-lean-burn, gas engine, 170mm bore

**ALTRONIC PRODUCTS:**

PPC (Passive Prechamber) Spark Plugs (P1863DP-1)

**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 low-emission, ultra-lean-burn engines.



**TEST RESULTS:**

- NO<sub>x</sub> emissions reduced from .5g/bhp-hr to 0.3g/bhp-hr
- Fuel consumption reduced by approximately 10%

**MEASURED DURABILITY:**

02-14-2012 – Initial installation  
09-16-2013 – Still operating in engine with no performance issue  
Total estimated running hours is more than 10,000.

**ESTIMATED COST SAVINGS:**

- Current spark plug change occurs every 1100 hours @ \$90 per spark plug. Estimated spark plug yearly cost is \$13,000/engine.
- Expected Altronic PPC plug change interval: 10,000 hours. Assuming a \$185 per spark plug cost, estimated yearly cost is less than \$3,000/engine.
- Potential yearly savings equals \$10,000/engine or \$1,000,000 for 100 engines.