

PPC Spark Plugs on Gas Compressor Driver

APPLICATION:

Natural Gas Compression

ENGINE:

Waukesha L7044GSI

ALTRONIC PRODUCTS:

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

OVERVIEW:

This engine has experienced high exhaust temperatures since it was started up in 2006. Fuel gas quality is good, but the engine is heavily loaded. Prior to this test the customer had removed much of the load and leaned out the engine to the point of miss-fire in order to lower head temperatures to about 670°C.

A set of P1863IP-2 PPC plugs was installed and the engine was started per Altronic instructions. Once up to temperature, the engine timing could be changed to increase HP with no major change in exhaust temperatures.

- Waukesha factory fuel setting is .3% O₂. The tech was able to maintain a reading of 6.2% O₂ while maintaining a 95% load requirement
- No audible detonation, and the Waukesha ESM system managed the timing at 22.5° BTDC
- The factory air/fuel ratio controller was disabled and the catalytic element removed due to low temperatures and high oxygen content

This engine was converted to PPC's one year ago with no miss-fires being reported as yet. Intermittent load changes don't seem to bother the engine at these leaner settings.

