

PPC Spark Plugs on Gas Compressor Driver

APPLICATION:

Natural Gas Compression

ENGINE:

Caterpillar 3512TAA

ALTRONIC PRODUCTS:

PPC (Passive Prechamber) Spark Plugs (P1863IP-1)

OVERVIEW:

Before PPC installation, this engine would not pull a full load. The fuel gas to this engine only allowed for 14 degrees timing BTDC, with a relatively rich setting. Exhaust temperatures were also high.

After installing a set of P1863IP-1 sparkplugs the results were as follows:

- The rich fuel mixture was leaned slightly as it was flooding the engine with the PPC
- Once started and warmed up, engine timing was adjusted back to original settings and fuel was adjusted for desired exhaust temperatures
- Under load, the customer realized that the engine had more power, so they took timing from 14° up to 33° BTDC with no detonation whatsoever. They experimented up to 36° and temperatures continued to drop with no decrease in power. Unit was left at 31° BTDC for safety.
- Exhaust temperatures were in the mid-500°C range
- Plugs have been in this engine for approximately 6 months

