

# **PDSC Test Description**

## **Oxidation Induction Time of Lubricating Oils by Pressure Differential Scanning Calorimetry (PDSC)**

ASTM D6186

A small sample of oil is weighed into a sample pan and placed in a test cell. The cell is heated to a specified temperature and then pressurized with oxygen. The cell is held at a regulated temperature until an exothermic reaction (giving off heat) occurs, which is also the onset of rapid oxidation/degradation of the oil. The measured time in minutes is a yardstick for comparing oil types for oxidation stability or useful life under the test conditions.

Basically, the higher the result number, the greater the oxidation stability of the fluid.