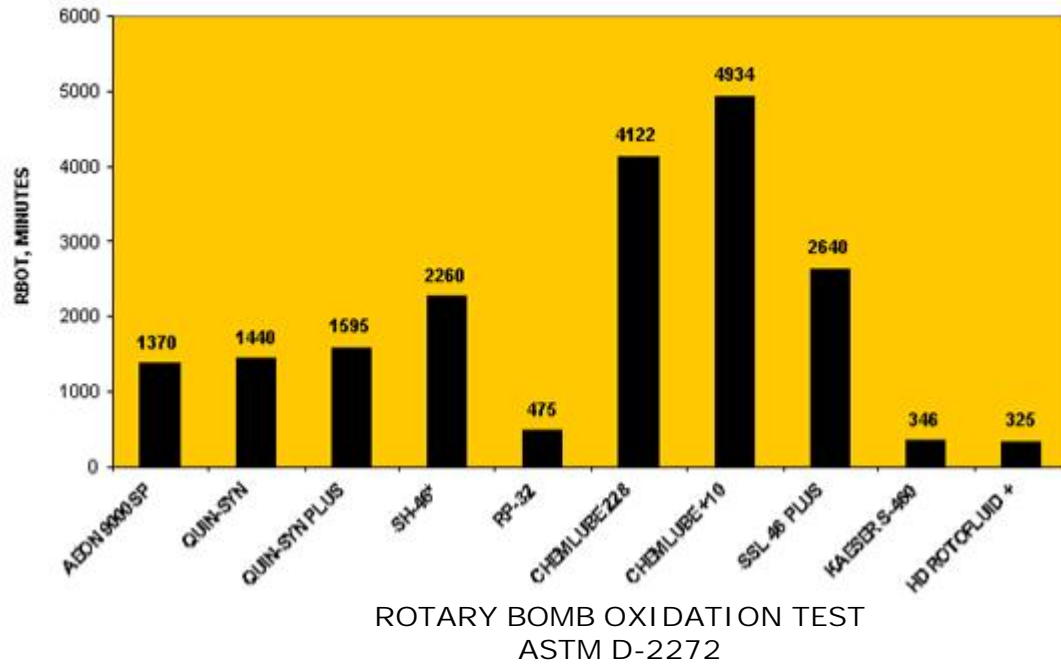


ROTARY SCREW LUBRICANTS
ROTARY BOMB OXIDATION COMPARISON
ASTM-2272



1. Scope

1.1 This test method utilizes an oxygen-pressured bomb to evaluate the oxidation stability of new and in service turbine oils having the same composition (base stock and additives) in the presence of water and a copper catalyst coil at 150°C.

3. Summary of Method

3.1 The test oil, water and a copper catalyst coil, contained in a covered glass container, are placed in a bomb equipped with pressure gage. The bomb is charged with oxygen to a pressure of 620 kpa (90 psi, 6.2 bar), placed in a constant-temperature bath set at 150°C, and rotated axially at 100 rpm at an angle of 30° from the horizontal. The number of minutes required to reach a specific drop in gage pressure is the oxidation stability of the test sample.

4. Significance and Use

4.1 The estimate of oxidation stability is useful in controlling the continuity of this property for batch acceptance of production lots having the same composition. It is not intended that this test method be a substitute for test method D 943 or to be used to compare the service lives of new oils of different compositions.

4.2 This test method is also used to assess the remaining oxidation test life of in-service oils.

* Summit RBOT Data from Summit Literature. Other RBOT data from Independent Lab Analysis