

## PERFORMANCE TESTS

# BRT (ASTM D 6557)

### SCOPE

The BRT (Ball Rust Test) is an 18-hour bench test procedure in which a hydraulic lifter ball in test oil is subjected to acids and air. The ball is rated automatically for reflectance intensity as a measure of surface area corrosion. The test performance parameter is gray value rating.

The BRT is designed to evaluate an oil's ability to inhibit rust of internal engine parts in cyclic cold and hot operation where significant water and acid buildup can occur.

### TEST CONDITIONS

Equipment	Hydraulic lifter ball in 20 cc syringe with 10 cc of test oil on shaker table
Acid Solution	Acetic acid/HBr/HCl/deionized water
Acid Addition	0.19 ml/hr.
Air Flow	40 cc/minute
Temperature	48°C
Shaker Speed	300 RPM
Test Length	18 hours