

LABORATORY CATALYST TESTING SERVICES

Micro- and Bench-Scale Catalyst Testing

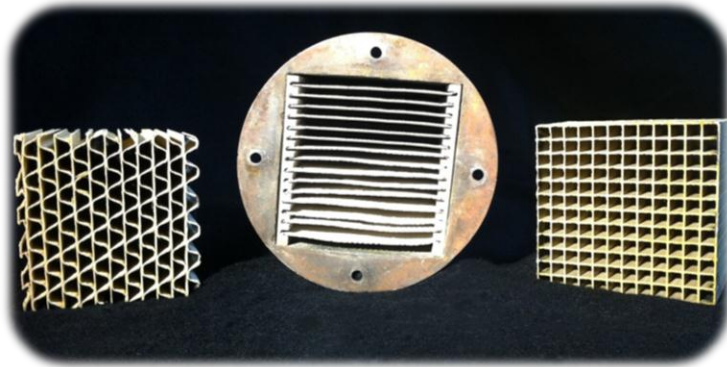
FERCo is a trusted third-party source for SCR testing and consulting services. To compliment our in-situ catalyst testing capabilities (CatalysTraK®), we are pleased to offer laboratory catalyst testing services. We operate a Micro-Scale Catalyst Activity Test Facility for gas turbine catalyst (SCR and CO) and a Bench-Scale Catalyst Activity Test Facility for testing coal SCR catalyst samples.

Micro-Scale Facility

FERCo's micro-scale facility is used to evaluate the activity of small catalyst samples. The test facility currently evaluates catalyst samples 1" diameter x 6" long, and is most useful for the tracking of gas turbine SCR and CO catalyst activity.

Catalyst activity is determined by measuring NO_x reduction at a NH₃/NO_x ratio of typically 1.2 to 1.5. Catalyst temperatures approaching 1000 °F can be tested in this micro reactor.

The micro-scale reactor has tested activity in over 100 samples, comprising both SCR and CO catalysts



Bench Scale Facility

FERCo's bench-scale facility is used to evaluate the activity of traditional catalyst samples per either the VGB or EPRI catalyst testing guidelines.

In addition to NO_x activity, SO₂ to SO₃ oxidation can also be measured.

*Traditional activity testing of catalyst samples is useful as a means of assessing catalyst life. However, as samples are typically only obtained during annual outages, using laboratory tests to determine catalyst replacement strategies may not be the best solution. Limited activity data will limit the ability to make good decisions. As a solution to this, FERCo has developed the **CatalysTraK® - Activity In Situ Catalyst Activity Test System**, in which the Reactor Potential of the SCR can be accurately measured at any time, on-demand, without waiting for an outage to collect a sample.*