

FOCAS is a computer controlled gasoline-fuelled burner system, designed to simulate the aging conditions of an engine. The rig was designed to accommodate full sized catalyst systems and allows the user to design program application specific aging cycles.

FOCAS 为计算机控制的汽油燃烧器系统，可模拟各种发动机老化条件。该系统适用于各种体积的催化器，用户可编写程序来实现具体的老化循环。

FOCAS provides:

- **Temperature Control (400 to 1100°C catalyst inlet)**
- **Flow Control (50-300 gram/sec)**
- **Wide-range, closed-loop Lambda Control ($0.7 < \lambda < 1.3$)**
- **Capable of continuous operation at stoichiometric**
- **Programmable Secondary Air Injection Control**
- **Flexible Liquid Fuel**
- **Full FMEA designed safety monitoring and response**
- **Ability to add oil component to aging**
- **Optional Add-On Features**
- **Oil Poisoning**
- **HGTR – High Flow, diesel conversion**
- **NOx Concentration Control**
- **Fuel Doping**

其性能包括：

- **温度控制 (催化器入口温度 400 至 1100°C)**
- **流量控制 (50-300 克/秒)**

- λ 闭环控制，且控制范围广($0.7 < \lambda < 1.3$)
- 可在理论空燃比的条件下连续运行
- 可控二次空气喷射
- 可灵活选用多种液体燃料
- FMEA 失效分析模式能对系统安全进行实时监测并迅速作出反应
- 能在老化过程中喷射机油
- 可选扩展特性
- 可用来进行机油对催化剂中毒测试
- HGTR 高流量柴油燃烧器
- NO_x 浓度控制
- 燃油中可掺和添加剂等其他物质