

TELEDYNE HASTINGS INSTRUMENTS

APPLICATION NOTES

Goal: Engine Testing using Consolidated Natural Gas (CNG)

Solution: The Hastings HFC-307 Mass Flow Controller



The renowned mechanical engineering department of a Major Midwestern University was searching for a primary mass flow controller for Consolidated Natural Gas (CNG) as part of its alternative energy research. It found the component it needed in the Hastings HFC-307.

By interfacing a valve signal with a software-based feedback control system, the HFC-307 serves as the main mass flow controller for the department's engine testing of vehicles that operate on CNG. As a result of the test, transit buses, cars, pickup trucks, and vans may have an alternative fuel source.

The HFC-307 was chosen for its large flow capacity, fast response and zero shut off capabilities. Its repeatability - 0.07% of full scale - has insured reliable data over an extended period of time. The HFC-307 is accurate to better than $\pm 1.0\%$ of full scale to 2500 slm.