



## ENGINE TEST STANDS

### PRODUCT: Model 204D & 239

#### APPLICATION DETAILS:

The customer is one of the worldwide leaders in agriculture and construction equipment and vehicles. They hold extremely high quality standards and test every system prior to shipment. They perform their tests through in-house engineering of complex test stands measuring multiple performance criteria (exhaust pressure, manifold pressure, flow, and many more) to maintain high performance.

#### CUSTOMER PROBLEM:

##### *Tier IV compliance mandated for construction vehicles*

A complex test stand houses several sensors which measure numerous physical variables. The customer needed a pressure sensor that could measure these physical variables in a wide selection of ranges, with high accuracy, to ensure proper performance testing, while complying with the stringent Tier IV guidelines. Tougher guidelines require more measurement points with high accuracy demands and a complete overhaul of their entire line of test stands at their facility.

#### SETRA SOLUTION:

Setra was able to provide the customer with the Model 204 which is used for measuring gauge/absolute/vacuum pressure for engine oil, a vacuum sensor for measuring manifold vacuum pressure, and a differential pressure sensor for measuring intake airflow, engine coolant flow, and dry airflow. Setra also supplied the customer with the Model 239 for the low differential pressure measurements required for measuring exhaust pressure within the engine.

#### SETRA STRENGTHS

- Fast warm-up
- Low output noise
- Excellent thermal effects
- 0-5 VCD or 4-20 mA output
- High accuracy

#### WHY SETRA WON:

##### *Provided higher performance solution with quick deliveries*

The customer selected Setra because of high performance in a variety of test stand applications with industry leading deliveries. The Model 239 meets the customer's need for a sensor that can measure low range differential pressure (0.25"WC to +/- 2.5 PSID) and the Model 204 meets their higher vacuum pressure range needs (-14.7 to 5,000 PSIG). Setra provides high accuracy and rugged pressure sensors for all of these test stand applications. The range of products have made it easy for the customer to qualify just one supplier for all of their pressure transducer requirements.



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