

Particulate Emissions Weighing and Filter Management with CyFlex-PM

Benefits:

1. Certification level environmental control, monitoring, and record retention
2. Increased productivity
3. Improved correlation of filter results to dyno and CVS test data, extraction results, and reference filters

Integration Highlights:

1. CyFlex-PM integrates with environmental sensors, scales, bar-coded filter holders and test cell data.
2. CyFlex-PM can integrate information flow with customer business systems.

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An Application

Extension of CyFlex

CyFlex-PM supports the particulate matter filter weighing process for emissions testing of diesel engines. The system supports tracking reference & test filter weights and environmental conditions of the weighing area. The system can accept information provided from a testbed to correlate filter data with other test data and to produce brake-specific particulate measurement results.



Particulate measurement is accomplished by diluting engine exhaust with conditioned air and drawing a dilute exhaust sample through a filter while measuring flow and controlling or monitoring certain sample conditions. CyFlex-PM captures, stores and reports information about the filters used in this process. Since the particulates accumulated on the filter are a small fraction of the total particulates, the weighing of the filters to determine the particulate weight is a critical measurement.



Particulate Filter Weighing with CyFlex

*CyberMetrix specializes in test cell, test stand and portable test solutions that empower the user with choices of features, functionality and pricing. At the core is **CyFlex**, a powerful, efficient and deterministic application suite with a wide range of capabilities.*

Many Applications: One Application Suite: *emissions cart sampling & gaseous analyzer control, engine steady state and transient performance, engine calibration, engine transient emissions, turbo endurance, crank-angle resolved data collection & analysis, mini-dilution tunnel control & sampling, particulate emissions weighing & filter management, injector shot-to-shot variability, chassis dyno vehicle testing, control algorithm prototyping, turbo mapping & endurance, on-vehicle data logging.*