LIMIT MONITORING FUNDAMENTALS

Programmed tests may provide a false sense of comfort.

The operator is not directly in control of the test and therefore may tend to pay less attention to the test.

- An engine, particularly a high-performance engine, can always develop a problem with possible disastrous effects on the engine and/or test system
- During automated tests, the operator should continuously monitor all operating parameters and be ready to intervene in case of trouble
- Always pay attention to the test because some error conditions are not measurable by the system:
 - A small leak in a high-pressure fuel line will cause a fine fuel spray that is not detectable by the test system but may quickly result in a catastrophic fire







SuperFlow systems include special safety-limit programs that can take over most of the monitoring tasks.



ENVIRONMENTAL MONITORING BASICS

Test results are only valid and repeatable if the test is performed in controlled operating conditions.

It is important for the operator to make sure the test is initiated at the same operating conditions from test to test.

These parameters should be monitored for repeatable test data:

- Oil and coolant temperatures
- · Air inlet temperature
- Fuel supply pressure and fuel temperature
- Battery voltage
- Exhaust back pressure and exhaust gas concentration in the test room
- Aftercooler temperature (on turbocharged engines)









