

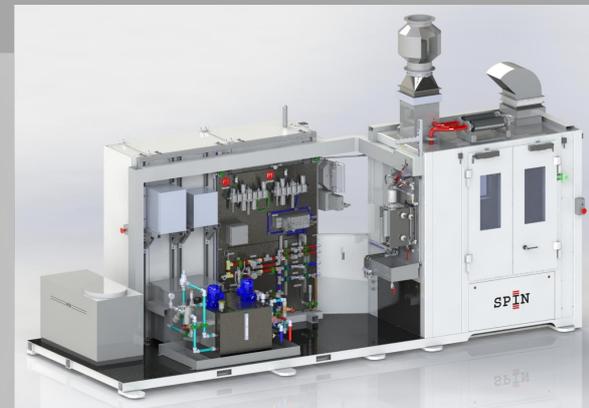
Bring the Test to You



- ◆ With a small foot print, the **Engine Hot Test POD** can easily be located within existing facilities with no requirement for expensive building extensions.
- ◆ Our unique design allows the complete **Engine Hot Test POD** to fit within a standard 40ft container.
- ◆ The test facility can be shipped anywhere in the world utilising standard logistic carriers.
- ◆ Minimal external services required for installation.
- ◆ Manufactured in the UK at our Worcester facility.

Safety

- ◆ Operator removed from test area.
- ◆ Access doors to test cells are fully interlocked to prevent operators from entering during tests.
- ◆ Acoustic and fire rated enclosure.
- ◆ Engine is interlocked in the rigged position, to prevent a connected / pressurised engine from being removed from the **Engine Hot Test POD**.
- ◆ Gas detection systems constantly monitor the **Engine Hot Test POD** environment. Should levels of Hydrocarbon or Carbon Monoxide reach an unacceptable level, the **Engine Hot Test POD** will display warnings and alarms and react accordingly to protect the operator and the facility.
- ◆ Onboard Fire detection system continually monitors the **Engine Hot Test POD**. Should a thermal event occur the **Engine Hot Test POD** will react, sealing the POD and initiating the CO2 Fire suppression system.
- ◆ The **Engine Hot Test POD** is fitted with audible and visual alarms to provide a clear status of the system during operation.
- ◆ Building management alarms for can be configured, notifying security of significant events for example: Inactive detection systems, gas and fire events



Awards



Ford Powertrain Manufacturing Excellence Achievement in Safety 2018

SPIN UK Ltd's ground breaking design resulted in being awarded the FPMEA Global Award for the **Achievement in Safety**.

References

Currently we have **Engine Hot Test POD's** installed for Ford at their Bridgend and Port Elizabeth Engine Plant facilities.

Process Efficiency

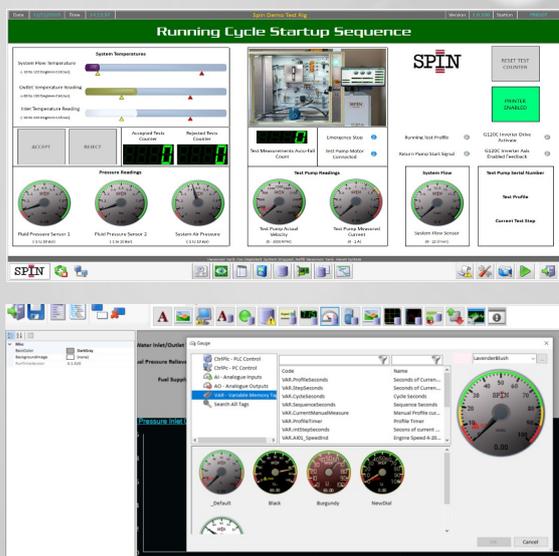
- ◆ Pre-rigged engine trolleys, enable full access to the engine during the rigging process.
- ◆ Test trolleys cater for engine variations, including physical construction and coolant connections.
- ◆ Connections from test trolley / engine to the **Engine Hot Test POD** are minimised reducing TAKT time.
- ◆ Quick connect features included for:
 - ◇ Engine Electrical Harnesses
 - ◇ Slave engine starter units
 - ◇ Engine exhaust manifold and turbo clamps.
 - ◇ Fluid connections
 - ◇ Charge Air pipework (if required)
 - ◇ Induction system protection (if required)



Ergonomic Design

- ◆ HMI mounted to a suspended fully adjustable bracket to allow the operator to position it to suit their preferred position.
- ◆ Clear access to all services for easy and efficient maintenance.
- ◆ Optimised hose and connector positions for efficient rigging and de-rigging the engines, reducing overall test time.
- ◆ Quick connect engine exhaust and turbo clamps.
- ◆ Product flexibility - The concept of the **Engine Hot Test POD** delivers a solution that is easily adaptable to allow the testing of a diverse range of engine product.
- ◆ Fully tested and commissioned prior to dispatch, customer witness tests can be accommodated providing confidence in the facility before delivery.

Data



Our **SpinTest LITE Software** is fully customisable to suit your specific test data requirements.

The user-friendly interface allows maintenance and production engineers (with suitable password levels) to have the ability to modify the test programmes to suit specific requirements thus future proofing the **Engine Hot Test POD** for any future upgrades without the requirement for expensive software development engineers.