

Application Note

m+p international Improves Testing of Exhaust Systems for Leading Automotive Supplier

Faurecia is a global player in the automotive industry with nearly 240 production sites worldwide. Their business is focused on automotive seating, exterior systems including front ends and shock absorption systems, interior systems including instrument panels and center consoles, and emission control technologies.

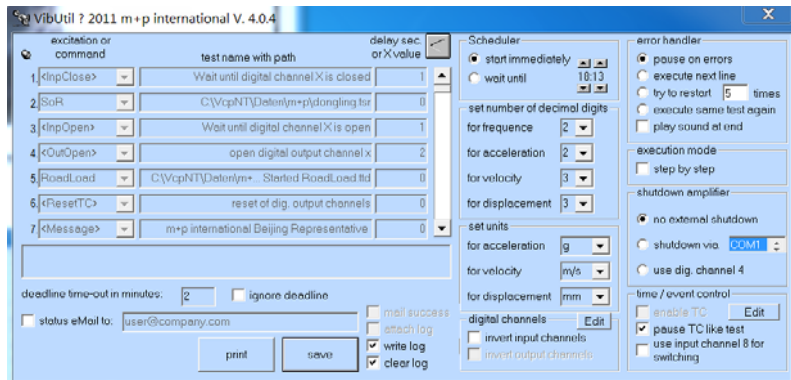


m+p international has updated and perfected the integrated exhaust systems testing rig used by Faurecia Honghu Exhaust System Co. Ltd in Shanghai.

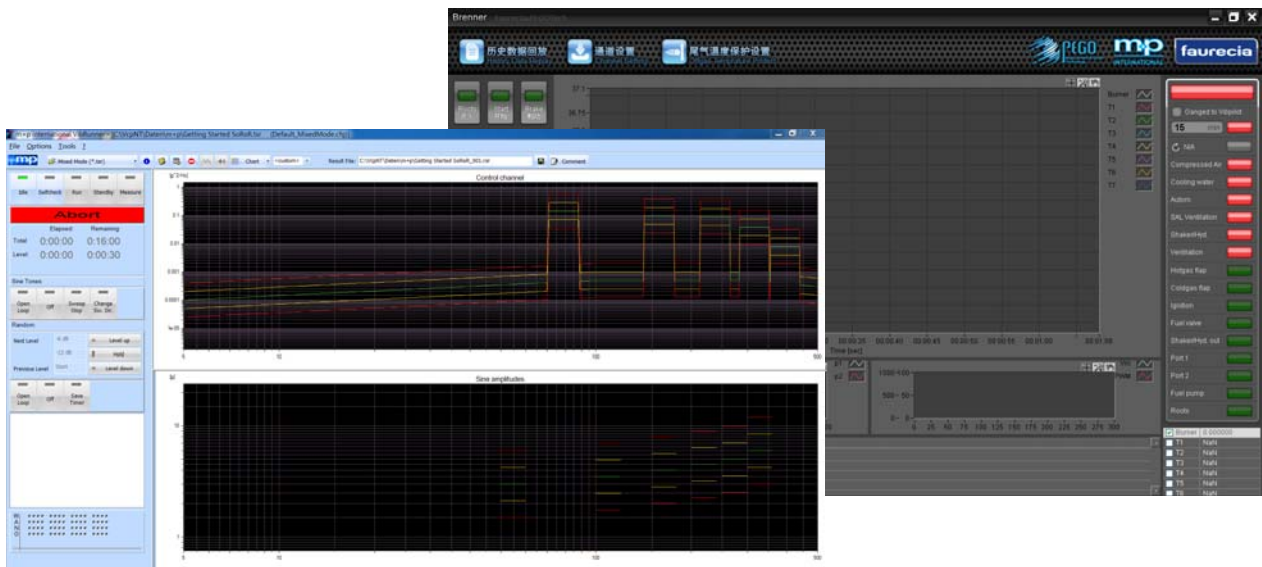
The new testing system consists mainly of an m+p 8-channel VibPilot vibration control system, a TIRA 3 ton shaker, a National Instruments cFP controller and the ignition system.



First of all m+p engineering replaced the existing vibration control hardware by an 8-channel VibPilot system. m+p's Advanced VibUtil software tool was added for test sequencing and communication with external equipment. Secondly, to realize the communication with the m+p vibration control system, m+p engineers modified Faurecia's existing ignition system control software which was achieved without the need for any additional new hardware. The ignition system user interface software was also converted into Chinese by m+p.



The updated system controls the synchronization of the ignition and vibration test cycles and also detects and safely handles fault conditions which avoids over-testing and reduces the number of tests required. Other high-performance applications include start/stop control of time/temperature programs, different ignition configurations under different vibration models, etc.



The system ensures consistency and synchronicity of the vibration ignition testing while accommodating the complicated testing standards and the harshness of long duration tests hence significantly improving the engineers' efficiency. With the creativity of m+p engineers, vibration testing has been combined with the customers' special requirements providing a much wider range of experimental testing methods as well as significant improvements in flexibility and efficiency.