A New Method for Diesel Particulate Measurement of Raw Engine Emissions

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MPM-4M Diesel particulate analyser

- Utilises similar laser light scattering technology to existing analysers currently in use
- Developed by PM-Tech Australia in conjunction with MAHA Germany
- Testing configured to comply with MDG29 Guidelines for raw emission testing of diesel engines in NSW

MPM-4M diesel particulate analyser

- Remote operation
- Cable connection

MPM-4M Features and improvements over similar devices

- Heated sample line eliminating drying system
- Sample not diluted, single sample tube. Alternative systems utilise combination of 2-3 lines (i.e. water trap, diluted sample, undiluted sample lines)
- Single accessible water trap/filter system
- Internal program and display automatically prompts user for load/idle conditions during emission testing (timer displayed on screen)
- Auto zero feature
- Can be calibrated using a range of calibration 'plugs'
- Single operator possible using removable remote start cable
- Simple maintenance and reduction in internal components
- Compact enclosure
- Reliable operation

MPM-4M Calibration plug and filters

- Water trap and filter access

MPM-4M – Test sequence

- Warm up screen
Typical test sequence

1. Start Zero
2. Auto Zero (3 seconds)
3. Prepare to Test
4. Five Seconds Countdown
5. 20 sec Idle (Phase 1)
6. 20 sec Full Power (Phase 2)
7. 20 sec idle (Phase 3)
8. Test Over

MPM-4M Correlation data – Site ‘A’

MPM-4M Correlation data – Site ‘B’

Test equipment has noticeably downsized!