

Clean Air Filter // Quality Tested. Performance Proven.

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CAF PARTICULATE SYSTEM / FILTER TEST PROCEDURE Laboratory / Field / Mine / Factory / Office / Residential

An affordable methodology for quantifying filtration of airborne particulates on enclosed environments without an occupant.

Directions / Protocol, using Optical Particle Counters (OPC) to determine (cab) protections factors.

All OPC particulate testing is done at 0.3 micron (μ m). The range is 0.3 μ m to < 0.5 μ m.

All cabs (operator micro environment) and filters, together or separate, in cab or in filter chamber, are tested at $0.3\mu m$ at a range of $0.3\mu m$ to < $0.5\mu m$ for 30 minutes^{*a*b} using the inside/outside ratio of the average of minutes #9 through #29.

Cab leakage test minimum flow is 35.32 cfm (17.66 X 2) with a MPPS 99.95% filter or 99.98% @ 0.3µm filter.

First Test, as is, or / and

If more than one fan speed, test at High and Low Test flow rate and cab protection factors

If HVAC recirculation filter is used, test as is, or / and If more than one fan speed, test at High and Low Test flow rate and cab protection factors Test on both fresh and dirty recirculation filter (plugged is worst case scenario).

Record on OPC test report: Voltage Temperature Engine RPM Windspeed, direction and orientation of cab If cab pressure is under 0.05" H₂O pressure use multidirectional testing to determine worst case scenario.