CLAIMS:

1. A ventilation system, comprising:

an input side with a blower;

an output side;

a filter configured to be positioned between the input side and the output side;

a control system configured to be linked to the blower for controlling the output of the blower, the control system also including a static pressure adjustment system, the static pressure adjustment system including:

an input static pressure sensor configured to be located adjacent the filter on the input side and an output static pressure sensor configured to be located adjacent the filter on the output side;

a microprocessor configured to be linked to the input static pressure sensor and the output static pressure sensor, the microprocessor configured to receive signals indicating the static pressure on the input side of the filter and the static pressure on the output side of the filter, and based upon a measurement of the static pressure on the input side of the filter and the static pressure on the output side of the filter, the static pressure adjustment system is configured to determine a measured differential pressure and the static pressure adjustment system being configured to then continuously send a signal to increase, the output of the blower as the measured pressure differential increases, whereas the static pressure adjustment system is configured, as the measured differential pressure across the filter increases above a clean measured differential pressure for a clean filter, for a measured static pressure measurement across the filter then to be established and continuously updated and for the measured static

pressure measurement across the filter to be correlated with a requirement for an increased air flow from the blower to ensure continued proper air flow through the ventilation system, and for the blower of the ventilation system to increase its output in a predetermined manner in conjunction with calculated increases in the measured static pressure measurement across the filter, wherein the static pressure adjustment system is configured for the blower speed to increase in relation to a square root of the increase of the measured static pressure across the filter, and when the measured static pressure measurement across the filter reaches a specific level the filter must be removed, when this specific level is reached, for an alarm to be triggered and for the alarm to act a signal that the filter must be replaced with a clean filter.

2. The ventilation system according to claim 1, wherein the control system includes a graphical user interface.

3. The ventilation system according to claim 2, wherein the graphical user interface includes an input for an offset in the measured differential pressure.

4. The ventilation system according to claim 2, wherein the graphical user interface includes an input for a measured differential pressure of a clean filter.

5. The ventilation system according to claim 2, wherein the graphical user interface includes an input for turning the static pressure adjustment system on or off.

6. The ventilation system according to claim 1, wherein the static pressure adjustment system includes an alarm.

7. A method for adjusting air flow from a blower in a ventilation system as claimed in claim 1 to compensate for changes in static pressure across a filter, comprising the steps of:

determining the measured differential pressure between the input side of the ventilation system and the output side of the ventilation system;

continually measuring the measured differential pressure as the filter fills with contaminants; and

continuously increasing output of the blower as the measured differential pressure increases.

8. The method according to claim 7, wherein the step of determining the measured differential pressure includes determining a measured differential pressure between the input side and the output side with a clean filter therebetween.

9. The method according to claim 7, further including, prior to the step of continually measuring the differential pressure, measuring a pressure difference across the filter when the blower is off and no air flow is passing through the ventilation system.