7. The apparatus of claim 6 wherein said vacuum pump, receiver and pipe provide a closed air-tight system coupling the cyclone outlet to said negative pressure source.

8. The apparatus of claim 1 comprising a blower coupled to said exhaust to draw said powder entrained air into said cyclone at said cyclone inlet, said blower comprising a filter that separates powder from exhaust air.

9. The apparatus of claim 1 wherein said cyclone operates at a static pressure of at least 7 inches water column and said negative pressure source produces an induced air volume of at least 95 cfm.

10. A method for influencing efficiency of a cyclonic separator of the type having an inlet that receives powder coating particles entrained in an air flow, an outlet for recovering powder separated from the air flow, and an exhaust coupled to a blower that produces the powder entrained air flow into the cyclone at the cyclone inlet; the method comprising:

applying negative pressure at the cyclone outlet to convey powder particles from the cyclone outlet through a conduit under negative pressure to a container, said negative pressure being sufficient to yield powder particles in said container that would otherwise pass through the cyclone exhaust in the absence of said negative pressure.

11. The method of claim 10 wherein said negative pressure produces an induced air volume sufficient to entrain powder particles at the cyclone outlet and transfer said entrained particles to said container.

12. The method of claim 10 wherein the cyclone operates at a static pressure defined between an inlet region and exhaust region thereof said induced air flow having a predetermined relationship with respect to said static pressure to recover powder from the cyclone outlet and convey said powder to said container.

13. The method of claim 10 wherein said negative pressure is provided by a vacuum pump that is coupled to the conveyor outlet via a closed air-tight system.

14. The method of claim 13 wherein said vacuum pump produces an induced air volume of at least 90 cfm.

15. The method of claim 14 wherein the cyclone is operated at a static pressure of at least 6 inches water colunm.

16. Apparatus for increasing efficiency of a cyclone separator used to recover powder from a powder coating system, comprising:

a cyclone having an inlet thereto that is adapted to receive powder entrained air wherein said cyclone operates to separate powder from the air; said cyclone having an outlet for recovering said separated powder and an exhaust for air; and

a negative pressure source coupled to said cyclone outlet;

said negative pressure source producing an induced air volume that causes a substantial flow of powder from said cyclone outlet through a conduit under negative pressure to a container to reduce powder lost through said cyclone exhaust.

17. The apparatus of claim 16 wherein said cyclone operates at a static pressure and said negative pressure source produces an induced air volume that is sufficient to draw powder from said cyclone outlet to optimize powder recovery.

18. The apparatus of claim 16 wherein said negative pressure source comprises a vacuum pump.

19. The apparatus of claim 18 wherein said vacuum pump is coupled to said container; said container being coupled to said cyclone outlet.

20. The apparatus of claim 19 wherein said container comprises a receiver having a filter that separates powder from said induced air flow.

21. The apparatus of claim 20 wherein said receiver is coupled to said cyclone outlet by a pipe.

22. The apparatus of claim 21 wherein said vacuum pump, receiver and pipe provide a closed air-tight system coupling said cyclone outlet to said negative pressure source.

23. The apparatus of claim 16 wherein said cyclone operates at a static pressure of at least 7 inches water column and said negative pressure source produces an induced air volume of at least 95 cfm.

24. The apparatus of claim 16 wherein said negative pressure source produces an induced air flow based on the static pressure of said cyclone.

25. The apparatus of claim 24 wherein said negative pressure source is selected to produce an increased induced air flow in relation to an increase in said static pressure.

26. Apparatus for increasing efficiency of a cyclone separator used to recover powder from a powder coating system, comprising:

a cyclone having an inlet thereto that is adapted to receive powder entrained air wherein said cyclone operates to separate powder from the air; said cyclone having an outlet area for recovering said separated powder and an exhaust for air; said cyclone having a static pressure value associated therewith;

a conduit with first and second ends that connect the cyclone outlet to a container; and

a negative pressure source coupled to said cyclone outlet area by said conduit;

said negative pressure source producing a negative pressure within said conduit from said first end to said second end thereof with an induced air volume that causes a flow of powder from said cyclone outlet area under negative pressure to said container to reduce powder lost through said cyclone exhaust;

said induced air flow having a predetermined relationship with respect to said static pressure.

27. A method for increasing efficiency of a cyclonic separator of the type having an inlet that receives powder coating particles entrained in an air volume, an outlet area for recovering powder separated from the cyclone air, and an exhaust; the method comprising:

applying negative pressure at the cyclone outlet area to recover powder particles from the cyclone outlet area and to convey the recovered powder particles through a conduit under negative pressure to a container, said negative pressure producing an induced air volume having a predetermined relationship with respect to a static pressure characteristic of the cyclone to yield powder particles that would otherwise pass through the cyclone exhaust in the absence of said negative pressure.

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