

Title (en)

METERING SYSTEM, DENSE PHASE CONVEYING SYSTEM AND METHOD FOR SUPPLYING BULK MATERIAL IN POWDER FORM

Title (de)

DOSIERVORRICHTUNG, DICHSTROMFÖRDERANLAGE UND VERFAHREN ZUM ZUFÜHREN VON STAUBFÖRMIGEM SCHÜTTGUT

Title (fr)

DISPOSITIF DE DOSAGE, INSTALLATION DE TRANSPORT À ÉCOULEMENT DENSE ET PROCÉDÉ D'ALIMENTATION EN MATÉRIAU PULVÉRULENT EN VRAC

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Application

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Abstract (en)

[origin: CA2776548A1] The invention relates to a metering system and a dense phase conveying system for the metered supply of a light-weight bulk material from a supply device (B, SG) via conveying tubes (FR1,FR2,FR3) to a consumer. A sluice (S) comprises a discharge device (AE/S) having a powder flow control device (FI4) which leads to a metering container (DB) the discharge device (AE/DB) of which comprises a plurality of powder flow control devices (FI1,FI2,FI3) that lead to respective conveying tubes (FR1,FR2,FR3). A pressure control device of the metering device is coupled to pressure measuring devices (PIS1, PI2) of the sluice (S) and of the metering container (DB) for the purpose of differential pressure controls (PDC1-2, PDC3-R) and to pressure measuring devices (PIR, PI3) of the metering container discharge device (AE/DB) and the consumer to control the metering container pressure (PI2) depending on the second differential pressure control (PDC3-R). The pressure control device is coupled to a pressure measuring device (PISA4) of the supply device (SG,B) for the purpose of a differential pressure control (PISA4-1) between the supply device (B, SG) and the sluice (S). The pressure control device controls the sluice pressure (PIS1) depending on a sluice fill level (LIS/S) and the differential pressure control (PISA4-1) by activating at least one suction device (V) that can be connected to the sluice (S). The invention further relates to a method using the dense phase conveying system having the metering device.

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