

Title (en)  
METERING SYSTEM, DENSE PHASE CONVEYING SYSTEM AND METHOD FOR SUPPLYING BULK MATERIAL IN POWDER FORM

Title (de)  
DOSIERANLAGE, DICHTSTROMFÖRDERANLAGE UND VERFAHREN ZUM ZUFÜHREN VON STAUBFÖRMIGEM SCHÜTTGUT

Title (fr)  
INSTALLATION DE DOSAGE, INSTALLATION DE TRANSPORT À ÉCOULEMENT DENSE ET PROCÉDÉ D'ALIMENTATION EN MATÉRIAU PULVÉRULENT EN VRAC

Publication  
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Application  
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Priority

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Abstract (en)  
[origin: CA2776633A1] The invention relates to a metering system for the steady, continuous, metered supply of a bulk material in powder form of light-weight, polydisperse particles from a supply device (B, SG) to a plurality of conveying tubes (FR1,FR2,FR3) to a downstream consumer. The metering system comprises at least two metering containers (DB1,DB2,DB3) with respective discharge devices (AE2/1,AE2/2,AE2/3), the discharge device (AE2/1,AE2/2,AE2/3) comprising for every conveying tube (FR1,FR2,FR3) a powder flow control device (FI1/1,FI2/1,FI3/2) associated therewith and leading to said tube. A mass flow measuring probe (FIC1,FIC2,FIC3) is arranged on every conveying tube (FR1,FR2,FR3) and is coupled to the powder flow control device (FI1/1 to FI3/2) which leads to the corresponding conveying tube (FR1,FR2,FR3). The metering system further comprises a pressure control device which is coupled to pressure measuring devices (PI1/1,PI1/2,PI1/3) arranged on the discharge devices (AE2/1,AE2/2,AE2/3) and which controls a metering container pressure (PIS2/1,PIS2/2,PIS2/3) at least depending on a metering container fill level (LIS1,LIS2,LIS3). A pump device (V) can be coupled to every metering container (DB1,DB2,DB3) and provides a pressure (PIS2/1,PIS2/2,PIS2/3) in the metering container (DB1,DB2,DB3) which is lower than the pressure in the supply device (B, SG). The invention further relates to a dense phase conveying system which comprises the metering system and to a method for the steady, continuous, metered supply of a bulk material in powder form of light-weight, polydisperse particles.

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