

Title (en)
MEASUREMENT OF MASS FLOW

Title (de)
MASSENFLUSSMESSUNG

Title (fr)
MESURE DE DÉBIT MASSIQUE

Publication
EP 2440890 A2 20120418 (EN)

Application
EP 10737611 A 20100611

Priority
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Abstract (en)
[origin: GB2470941A] A system and method for measuring mass flow of a non-gaseous phase 4 of material such as a solid particulate are described. The material flows through a conduit of which a section 14 is heated or cooled. The heated section is thermally separated from an unheated section 15, 16 by thermally insulated gaskets 19. One temperature sensor 6 is provided upstream of this section and at least another temperature sensor 7, 8 is provided downstream of it. These temperature sensors are adapted to measure the temperature of material in the non-gaseous phase directly. The section is heated or cooled for a first period of time and then neither heated nor cooled for a second period. A third temperature sensor 10 is provided in good thermal contact with the heated or cooled section and provides its output to a system controller 11. The temperature of the solid material 4 is captured using direct but non-invasive measurement, specifically IR detectors.

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