

Title (en)

METHOD AND ARRANGEMENT FOR MEASURING THE CALORIFIC VALUE AND/OR THE WOBBE INDEX OF COMBUSTIBLE GAS, ESPECIALLY NATURAL GAS

Title (de)

VERFAHREN UND ANORDNUNG ZUR MESSUNG DES BRENNWERTES UND/ODER DES WOBBEINDEXES VON BRENNGAS, INSBESONDERE VON ERDGAS

Title (fr)

PROCEDE ET DISPOSITIF DE MESURE DE LA PUISSANCE CALORIFIQUE ET/OU DE L'INDICE DE WOBBE DE GAZ COMBUSTIBLE, EN PARTICULIER DE GAZ NATUREL

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Abstract (en)

[origin: WO0050874A1] The invention relates to a method and an arrangement for measuring the calorific value and/or the Wobbe index of combustible gas, especially natural gas. Said method comprises the following steps: a) the sonic speed or the density of the combustible gas is measured; b) the combustible gas is exposed to infrared radiation and the proportion of the infrared radiation that is absorbed by the combustible gas is measured by means of a sensor arrangement; c) and the calorific value and/or the Wobbe index is derived from the two measuring signals. In the inventive arrangement for measuring the calorific value, a partial flow of the combustible gas is supplied to a measuring arrangement (8). A measuring device for measuring the sonic speed and a sensor arrangement (3) are incorporated in said measuring arrangement (8), said sensor arrangement consisting essentially of a source of radiation for the infrared radiation and a radiation detector which is associated with said source of radiation. The signals of the measuring device (9) and the sensor arrangement (3) are conveyed to an evaluation unit (5) in which the calorific value and/or the Wobbe index is determined by means of a correlation.

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Citation (search report)

See references of WO 0050874A1

Citation (examination)

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