

Title (en)

METHOD FOR ESTIMATING THE CHARACTERISTIC PARAMETERS OF A CRYOGENIC TANK, IN PARTICULAR THE GEOMETRIC PARAMETERS OF THE TANK

Title (de)

VERFAHREN ZUR SCHÄTZUNG DER KENNZEICHNENDEN PARAMETER EINES KRYOGENEN TANKS, INSBESONDERE DER GEOMETRISCHEN PARAMETER DES TANKS

Title (fr)

PROCEDE D'ESTIMATION DE PARAMETRES CARACTERISTIQUES D'UN RESERVOIR CRYOGENIQUE ET NOTAMMENT DE PARAMETRES GEOMETRIQUES DU RESERVOIR

Publication

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Application

EP 08841654 A 20081016

Priority

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Abstract (en)

[origin: WO2009053647A1] The invention relates to a method for estimating the characteristic parameters of a cryogenic tank (1), in particular geometric parameters, including: a step comprising the measurement of the pressure differential between the upper and lower parts of the tank prior to filling DP mes_before ; a step comprising the measurement of the pressure differential between the upper and lower parts of the tank after filling DP mes_after; a step comprising the determination of the mass of liquid delivered (m delivered) during filling; and a step comprising the calculation of a first geometric parameter (R) of the tank, namely the radius (R) which is calculated from equation (I), wherein g is the Earth's gravitational acceleration and MAVO is a density coefficient that is a function of the density of the liquid and the gas in the tank and optionally in the pressure measuring pipes (11) when the pressure differential is measured by at least one remote pressure sensor connected to the upper and lower parts of the tank via respective measuring tubes (11).

IPC 8 full level

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Citation (search report)

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