

Title (en)

Device and method for filling gases into high-pressure gas cylinders having different filling terminals

Title (de)

Vorrichtung und Verfahren zum Füllen von Gasen in Hochdruckgaszylinder mit unterschiedlichen Füllendgeräten

Title (fr)

Dispositif et procédé de remplissage de gaz dans des cylindres de gaz haute pression ayant différentes bornes de remplissage

Publication

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Application

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Priority

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Abstract (en)

The present invention relates to a device and method for filling at least one gas cylinder (1) out of a group of gas cylinders which have different filling terminals (3) with gas at a high pressure, in particular of 20 to 500 bar, a fixed reservoir system (20) being connectable to the filling terminal (3) of the gas cylinder (1) by way of a flexible line (4) and the flexible line (4) comprising a line terminal (5) which is adapted to the filling terminal (3) of the gas cylinder. According to the invention, the line terminal (5) comprises a filling head (6) comprising a receiver (7) for an intermediate piece (8) and at least one changeable intermediate piece (8) which is adapted to the filling terminal (3) of the gas cylinder (1), the filling head (6) comprising a pin (15) which can be moved parallel to the longitudinal axis (12) into at least two different positions. A specific intermediate piece (8) having a corresponding marking (11) is inserted into the receiver (7) for each type of filling terminal (3) and/or for each different gas or gas mixture, and the gas supply is only released when the marking (11) of the intermediate piece (8) has been recognised by a safety means (32) as suitable for the provided filling process. The invention makes economical industrial-scale use of filling stations for gas cylinders possible, it being possible to change between different gases to be filled rapidly and safely at least for the same pressure level.

IPC 8 full level

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Citation (applicant)

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