

Title (en)

COMPACT TANK FARM AND A METHOD FOR MOUNTING SAME

Title (de)

KOMPAKT-TANKANLAGE UND VERFAHREN ZU IHRER ERRICHTUNG

Title (fr)

STATION ESSENCE COMPACTE ET PROCEDE D'INSTALLATION

Publication

EP 1117613 B1 20051109 (DE)

Application

EP 00962198 A 20000801

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Abstract (en)

[origin: WO0114246A1] The invention relates to a compact tank farm and a method for mounting the same. The compact tank farm, especially a petrol station for the delivery of fuel, comprises one or several fuel tanks which are stored underground, at least one dome shaft which is arranged on the tank, a filling shaft and a petrol pump shaft, at least one wall that encompasses the shafts, a roof that is supported by roof supports, connecting pipelines and pumps and petrol pumps, whereby the fuel tank and the shafts, the roof supports and the roof, the connecting pipelines, the pumps and the petrol pumps are configured as compact, prefabricated subassembly respectively. The aim of the invention is to improve the aforementioned tank farm in such a way that the buoyancy control of the subassemblies or -units which have no common foundation and are placed underground is still securely guaranteed while less concrete is used and all subassemblies are entirely sealed against liquids. To this end, each fuel tank (6) is encompassed by at least two yoke-like buoyancy control devices (4) which are oriented towards the container axis (c-c) and are connected to each other by means of horizontal forcing levers (23). Said control devices form a support frame (21) respectively which is composed of an upper and a lower component (14, 3) that are connected to each other involving shearing strength. The upper component (14) leaves open a chamber (22) for receiving the shafts (8-20). Distance or protection tubes (28) for receiving connecting pipelines are provided at said chamber. Said tubes are arranged vertically in relation to the container axis. A pipeline route (27) which is situated in the alignment of the container axis and connects the shafts to each other is provided at said chamber. Said street forms a closed pipeline circle (29) that extends over all the shafts and serves for forced ventilation. The tanks (6) can be fixed to the lower component (3) by means of anchor bands (12).

[origin: WO0114246A1] The invention is characterised in that each fuel tank (6) is encompassed by at least two yoke-like buoyancy control devices (4) which are oriented towards the container axis (c-c) and are connected to each other by means of horizontal forcing levers (23). Said control devices form a support frame (21) respectively which is composed of an upper and a lower component (14, 3) that are connected to each other involving shearing strength. The upper component (14) leaves open a chamber (22) for receiving the shafts (8-20). Distance or protection tubes (28) for receiving connecting pipelines are provided at said chamber. Said tubes are arranged vertically in relation to the container axis. A pipeline route (27) which is situated in the alignment of the container axis and connects the shafts to each other is provided at said chamber. Said street forms a closed pipeline circle (29) that extends over all the shafts and serves for forced ventilation. The tanks (6) can be fixed to the lower component (3) by means of anchor bands (12).

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