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LOW PRESSURE LNG TANK AND BUNKER STORAGE SOLUTIONS

PENDING PATENT APPLICATION



LOW PRESSURE LNG TANK AND BUNKER STORAGE SOLUTIONS

PENDING PATENT APPLICATION

- PRISMATIC LOW PRESSURE TANK- SOLUTION
- VACUUM INSULATED
- BOX IN BOX PRINCIPLE
- REDUCED THICKNESS OF OUTER AND INNER SHELL (abt. 1-2 mm)

- HIGH VARIANCE IN TANK SHAPE
- MAX. UTILISATION OF GIVEN SPACE FOR LNG STORAGE
- HIGH WEIGHT REDUCTION POTENTIAL



- INNER SHELL
 $T_{LNG} -163^{\circ} C$
- OUTER SHELL
 $T_{amb} +45^{\circ} C$



TANK-VOLUME (m ³)	INSULATION THICKNESS AT 0,5 % BOIL OFF RATE (mm)	WEIGHT (kg)	INSULATION THICKNESS AT 1,0 % BOIL OFF RATE (mm)	WEIGHT (kg)
10	250	2,500	110	1,300
20	185	2,700	90	1,600
50	130	3,600	60	2,200
100	95	4,300	50	3,000
200	75	5,800	35	4,000

- EVACUATED, RIGID POROUS INSULATION BOARDS
- INSULATION BOARDS MAINTAIN DISTANCE BETWEEN INNER AND OUTER SHELL
- STRUCTURAL CAPABILITIES INDUCED BY THE REQUIRED VACUUM LEVEL