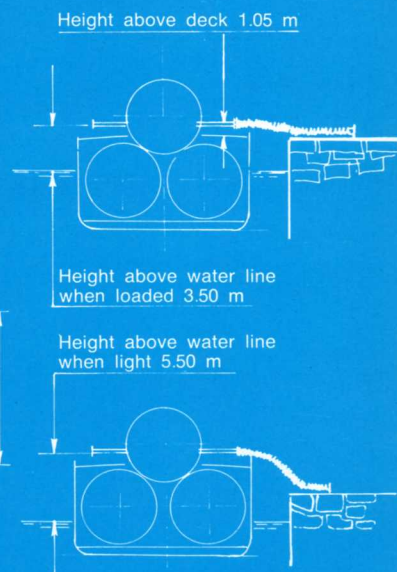
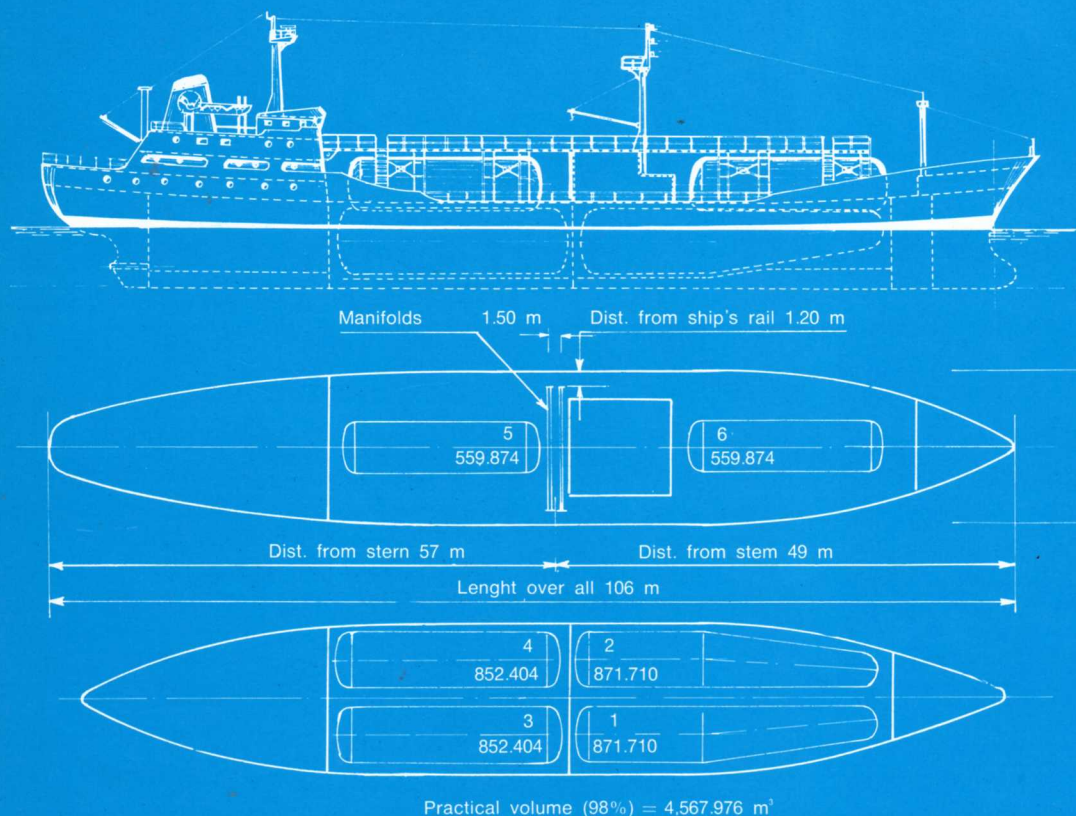




L.P.G. Tanker Luigi Galvani

Gastanker of 4,660 m³ 100% volume
Working press. 0.7 or 5 kg/cm² Min. temp. -48 °C

Cargo tanks and manifolds position



Liquid line 8" Flange size 8" ASA 300
Gas line 6" Flange size 6" ASA 300

Reducers, on board: 8"/6"-8"/4"-6"/4"

Derricks: 3 T. lifting capacity

general characteristics

Built 1971 by Cantieri Navali
M. B. Benetti - Viareggio (Italy)
Reg.ed owners: Carbocoke - Palermo
Flag: Italian
Port of Registry: Palermo

Class: R.I.N.A. I A Q L 100 A 1 . 1
Approved by U.S. Coast Guard
Gr. Int. 3909.40 - Nrt. 2127.51
Panama 4041.07 - Nrt. 2430.38
Suez 4036.85 - Nrt. 2675.11

Hull

Length over all m 106.00
Length between P.P. m 95.50
Breadth moulded m 15.80
Draft: Tropical m 7.31 DWT T. 5865
Draft: Summer m 7.16 DWT T. 5665
Draft: Winter m 7.01 DWT T. 5465
Steel - Single screw
Diesel liquefied gas carrier
Six longitudinal cargo tanks
Machinery aft

Communication equipment

Call letters: I C D J
Radio station normally watched:
Roma and Genoa
Wireless - Radiotelephony
VHF: Redifon Gr. 470

Machinery

Main engine: two Fiat B. 308 SS.
BHP. 2 x 2000 - RPM. 500
Average speed: 13.5 K.
Fuel used: IFO 500
Auxiliary engines: two altern.
KVA. 2 x 875 - 420/220 V.
coupled to main engines.
— one diesel alternator
KVA 186 (emerg.)
Consumption per 24/h:
mt. 12 at sea - mt. 1.5 at port
Bunker capacity:
mt. 300 fuel oil - mt. 50 gasoil

cargo equipment information

Transportable products

Respective quantities in mt.

Corresponding draft (immersion: mt. 13 per cm.)

(theoretical data)

Tank no.	Total volume 100‰ m ³	Practical volume 98‰ m ³	Butane sp. grav. 0.601 T. -0.5 °C	Propane sp. grav. 0.582 T. -42 °C	Butadiene sp. grav. 0.650 T. -4 °C	Propylene sp. grav. 0.613 T. -48 °C	Ammonia sp. grav. 0.682 T. -33 °C	V.C.M. sp. grav. 0.972 T. -14 °C
1	889.500	871.710	523.897	507.335	566.611	534.358	594.506	847.302
2	889.500	871.710	523.897	507.335	566.611	534.358	594.506	847.302
3	869.800	852.404	512.294	496.099	554.062	522.523	581.339	828.536
4	869.800	852.404	512.294	496.099	554.062	522.523	581.339	828.536
5	571.300	559.874	336.484	325.846	363.918	343.202	381.834	544.197
6	571.300	559.874	336.484	325.846	363.918	343.202	381.834	544.197
Total	4,661.200	4,567.976	2,745.350	2,658.560	2,969.182	2,800.166	3,115.358	4,440.070
Draft in meters FWD/AFT - F. bunker			6.00/6.20	6.00/6.10	6.10/6.30	6.05/6.25	6.21/6.50	6.70/6.80

Other transportable products: acetaldehyde.

Cargo tanks characteristics

Valves setting: 0.7 and 5 kg/cm²

Minimum temperature: -48 °C

Maximum specific gravity: 0.972

Where situated:

under deck,

fore n. 1 starb/n. 2 port

aft n. 3 starb/n. 4 port

on deck, n. 5 aft/n. 6 fore

Loading rate mt. hour

		30 °C	20 °C	10 °C	0 °C
400	butane	250	300	400	400
350	propane	50	70	100	150
350	ammonia	70	100	140	170
ex atmospheric storage		ex pressurized storage			

Refrigerating system

It is not independent

Power:

224,000 frig/h with propane -42 °C

1,500,000 frig/h with propane -5 °C

Time required at sea to lower by 1 °C the full cargo:

butane	propane	ammonia
5 h	7 h	7 h

Cooling down before loading

Cargo needed in mt: butane 30, propane 40, ammonia 40

Time required in hours: butane 5, propane 48, ammonia 48.

Cargo reheater

Heating source: sea water

Discharging rate in mt/h for bringing product from atmosph. press. to -5 °C:

butane	propane	ammonia
80	100	65

Cargo pumps

Six electrical deep-well pumps « Carter » each of 90 m³/h at 120 m head, one speed

Two electrical booster pumps

« Guinard » each of 240 m³/h at 180 m head, variable speed

Max back press.: in series 18 kg/cm² in parallel 10 kg/cm².

Cargo compressors

Two compressors « Loire » 8FA 160 M of 810 m³/h.

One compressor « Loire » 6FA 160 M of 600 m³/h.

Gas freeing - Changing grade

Method used: stripping, vacuums/ventilation by air and/or purging by nitrogen ex shore.

Nitrogen needed: 20,000 m³ about.

Time required: 48 hours about.