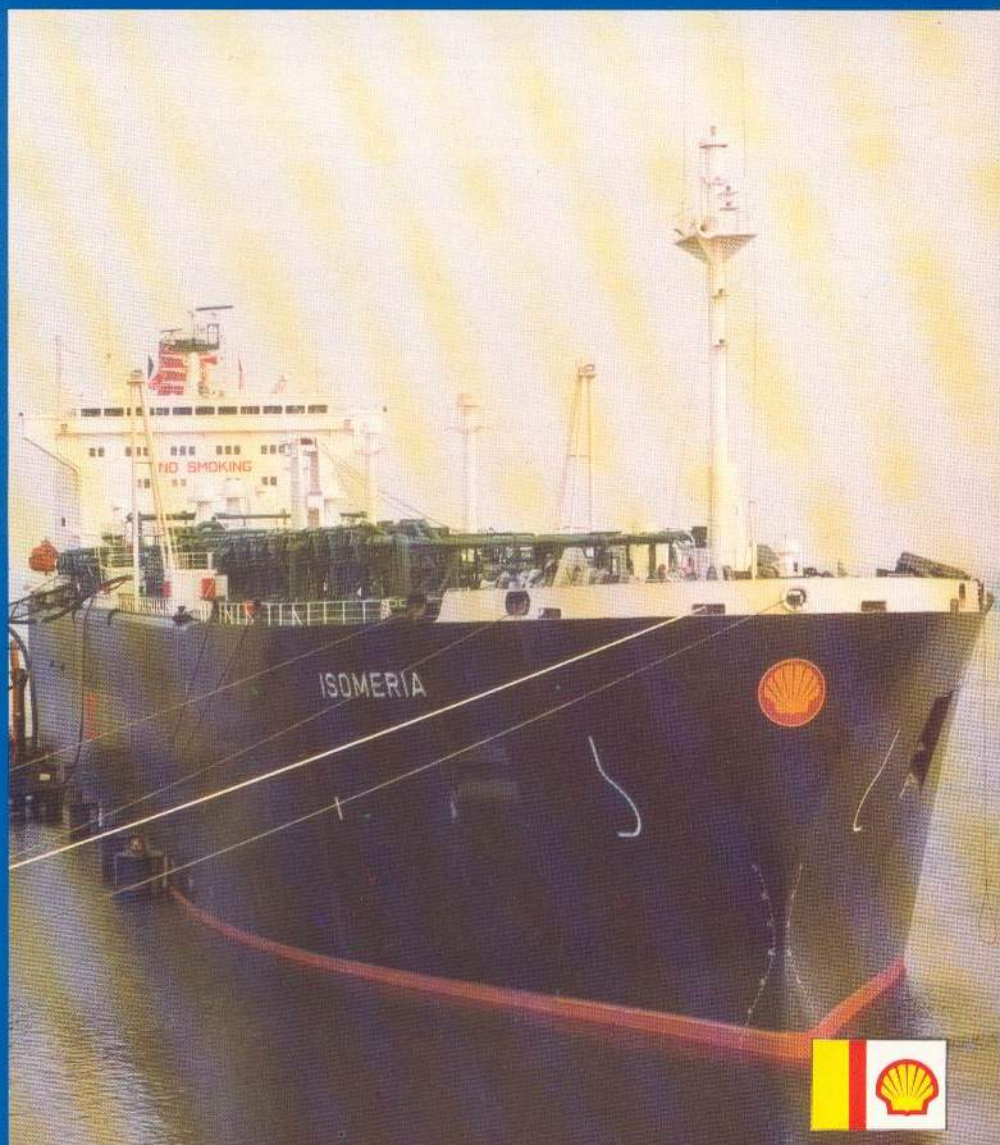


Liquefied petroleum gas carriers

m.t. **Isocardia**

m.t. **Isomeria**



These tankers have five independent self supporting cargo tanks capable of carrying 2 fully refrigerated grades at the same time. The vessels are able to accept a full range of segregations, from five tanks filled with propane through to five tanks filled with butane with all intermediate stages. Partially filled cargo tanks may be allowable, depending on stability conditions. Two grades may be loaded and discharged simultaneously. Ballast is carried in combined saddle and bottom tanks, separated by a centreline bulkhead.

### Principal Particulars

Service dwt:	39014 tonnes
Service draft:	11.01 metres (36ft. 1in.)
Length overall:	209.98 metres (688ft. 11in.)
Beam (extreme):	31.40 metres (103ft. 0in.)
Depth (moulded):	21.45 metres (70ft. 5in.)
Height (overall):	48 metres (157ft. 6in.) Keel to highest fixed point

### Year Built & Classification

Year:	1982
Classification:	Lloyds +100 A1 liquid gas tanker + LMC UMS

### Tonnages

Gross Registered Tonnes:	42070
Net Registered Tonnes:	22912
Suez Net Tonnes:	37433
Panama Net Tonnes:	31065
Lightship:	18766 Tonnes

### Cargo Carriage Features

Total Capacity 98%:	All cargo tanks.58530 cubic metres.
Number of Grades:	2
Reliquefaction Plant:	4 Kvaerner Kulde/Howedens units (3 working + 1 standby) each using two oil injected screw compressors. Capacity of each unit 160,000 k.cal/hr. (propane at -20 degrees centigrad and 1 bar).
Cargo Reheating:	1 deck mounted reheater, capacity 60 tonnes/hr (propane from -42 to 0 degrees centigrade)
Cargo Pumps:	5 fixed and 5 removable submerged pumps,one per tank, each 450 m <sup>3</sup> /hr. 2 deck mounted booster pumps, each 160 m <sup>3</sup> /hr.
Cargo Handling Rates:	

## Loading

a) With shore vapour return:	1,500 m <sup>3</sup> /hr per tank 3,000 m <sup>3</sup> /hr per crossover 6,000 m <sup>3</sup> /hr max.					
b) No shore vapour return:	15/5 degree C		45/32 degree C			
air/sea temperature						
relieffaction plants on	2	3	4	2	3	4
max bulk loading in m <sup>3</sup> /hr						
propane	950	1500	2150	700	1300	1800
butane	1500	2300	3100	1300	2000	2800

## Discharging

- a) Fully refrigerated product: 900 m<sup>3</sup>/hr per tank 3,000 m<sup>3</sup>/hr per crossover 4,500 m<sup>3</sup>/hr bulk (5 tanks)
- b) Pressurised product (approximate figure) 320 m<sup>3</sup>/hr 15 bar.

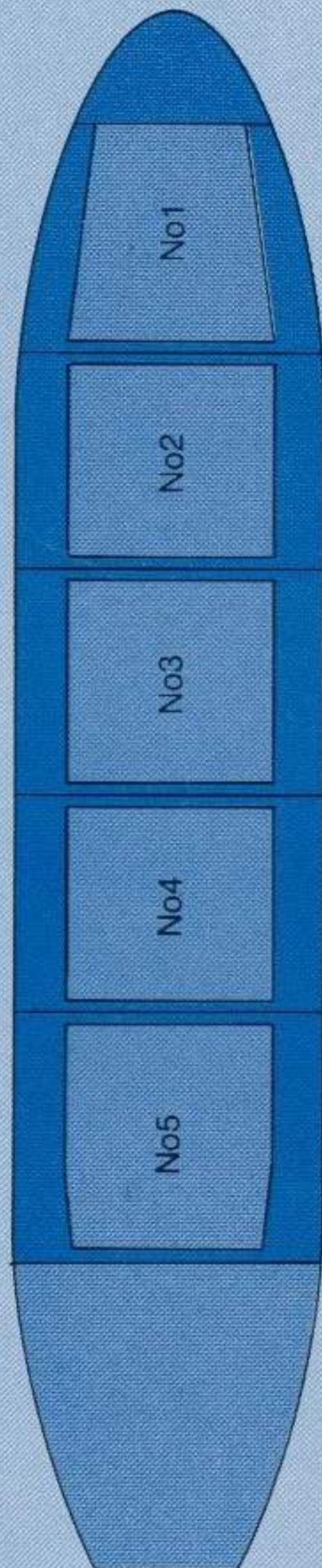
## Cargo Tank Capacities

Tanks	Cu. metres 98%	Tonnes SG 0.583	Tonnes SG 0.602
No.1p	4746	2767	2857
No.1s	4753	2771	2861
No.2p	5942	3464	3577
No.2s	5951	3470	3583
No.3p	5945	3466	3579
No.3s	5951	3470	3583
No.4p	5948	3467	3580
No.4s	5946	3467	3580
No.5p	6671	3889	4016
No.5s	6677	3893	4020
Total	58530	34124	35236

## Deadweight Scale (Approximate figures)

Draft (Metres)	DWT(tonnes)	Displacement(tonnes)	TPC
11	38967	57743	58.0
10	33199	51975	57.0
9	27505	46281	56.0
8	21936	40712	55.0
7	16474	35250	54.0

Freshwater allowance = 282 mm



## Manifold Connections

Size/type:	2 x 16" liquid manifold, 2 x 12" vapour manifold, 6" booster manifolds.	
	LVVL manifolds conform to OCIMF standards for refrigerated LPG carriers for cargoes 0 to -140 degrees centigrade. Cross over pipes outboard of the manifolds are available on board to allow VLLV presentation.	
Bow to Centre of Manifolds:	101.80 metres (334ft. 0in.)	
Stern to Centre of Manifolds:	108.20 metres (355ft. 0in.)	
Distance Between Vapour and Liquid Manifolds:	3.00 metres (9ft. 10in.)	
Service Drafts and Manifold Heights:	mid draft	W/L to manifold
98% Butane and Full Bunkers	11.03 metres	12.46 metres
98% Propane and Full Bunkers	10.84	12.65
Ballast + 3 days bunkers	7.69	15.80

## Ballast Arrangements

Capacity:	20196 cubic metres
Location & Type:	Full protective location 5 tanks sub-divided
Ballast Pumps:	2 centrifugal pumps, each 1,000 m <sup>3</sup> /hr.

## Mooring Equipment

Number & Location of Winches:	6, 3 forward, 1 maindeck aft, 2 poop.
Moorings:	wires 10 x 220m x 38mm, 92 tonnes. ropes 2 x 420m x 72mm, 109 tonnes 4 x 220m x 72mm, 72 tonnes
Length of Anchor Cable:	12 shackles each side.
Number & Type of Bowstopper:	1 AKD 200 tonne SWL

## Cranes/Derricks

Hose Handling:	1 x 10 tonnes SWL
Stores Handling:	1 x 5 tonnes SWL

Particulars believed to be correct but not guaranteed.



ISOMERIA

