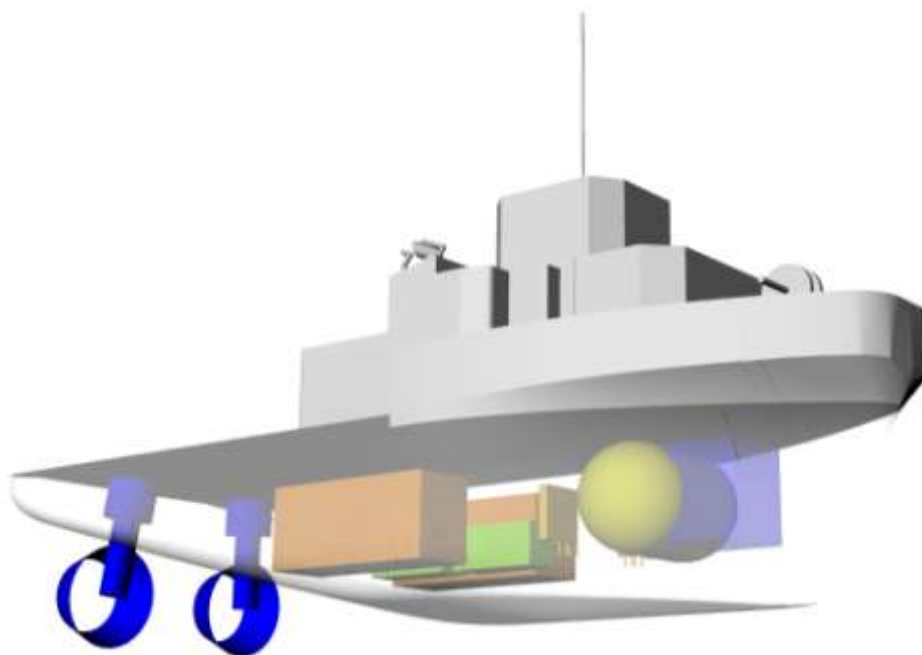




RM LNG DUAL FUEL ELECTRIC TUG



Name of Vessel:

RM LNG Dual Fuel Electric Tug

Type of Vessel:

ASD Harbour Tug (electrical transmission of power)

Class:

LNG FUELLED VESSEL

ESCORT/SALVAGE TUG, FI FI SHIP 1, OIL REC SHIP,

AUT-UMS

Operation Area:

UNRESTRICTED NAVIGATION

Designer & Builder:

Rosetti Marino SpA – RAVENNA - ITALY

Gas Generators:

No 2 Wärtsilä DF 9L20DF

1520 kWe at 1200 RPM

Diesel Generators:

No 2 Lindenberg

580 kWe at 1800 RPM

Electrical System :

SIEMENS

Gas System:

Wärtsilä

Single skid tank + cold box

Propulsion:

No 2 FP thrusters Schottel

SCD 1515 (Combi Drive)

4 blades, D = 2.6 m

(integrated electric motor)

Technical Data:

Length overall: 32.50 m

Length b.p.: 30.91 m

Moulded breadth: 10.80 m

Depth: 5.60 m

Scantling draught: 4.90 m

Bollard Pull (Gas+Diesel mode) ~ 70 t

Bollard Pull (Gas mode) ~ 50 t

Maximum speed: ~ 13.5 knots

Cruise Speed ~ 9 knots

Gross tonnage 455 tons

Crew No 8 persons

Capacities:

LNG (gross) 21.6 m³

LNG (net) 20.5 m³

Diesel Oil 111 m³

Oil recovery / DO 38 m³

Fresh water 20 m³

Ballast water 11.3 m³

Ranges:

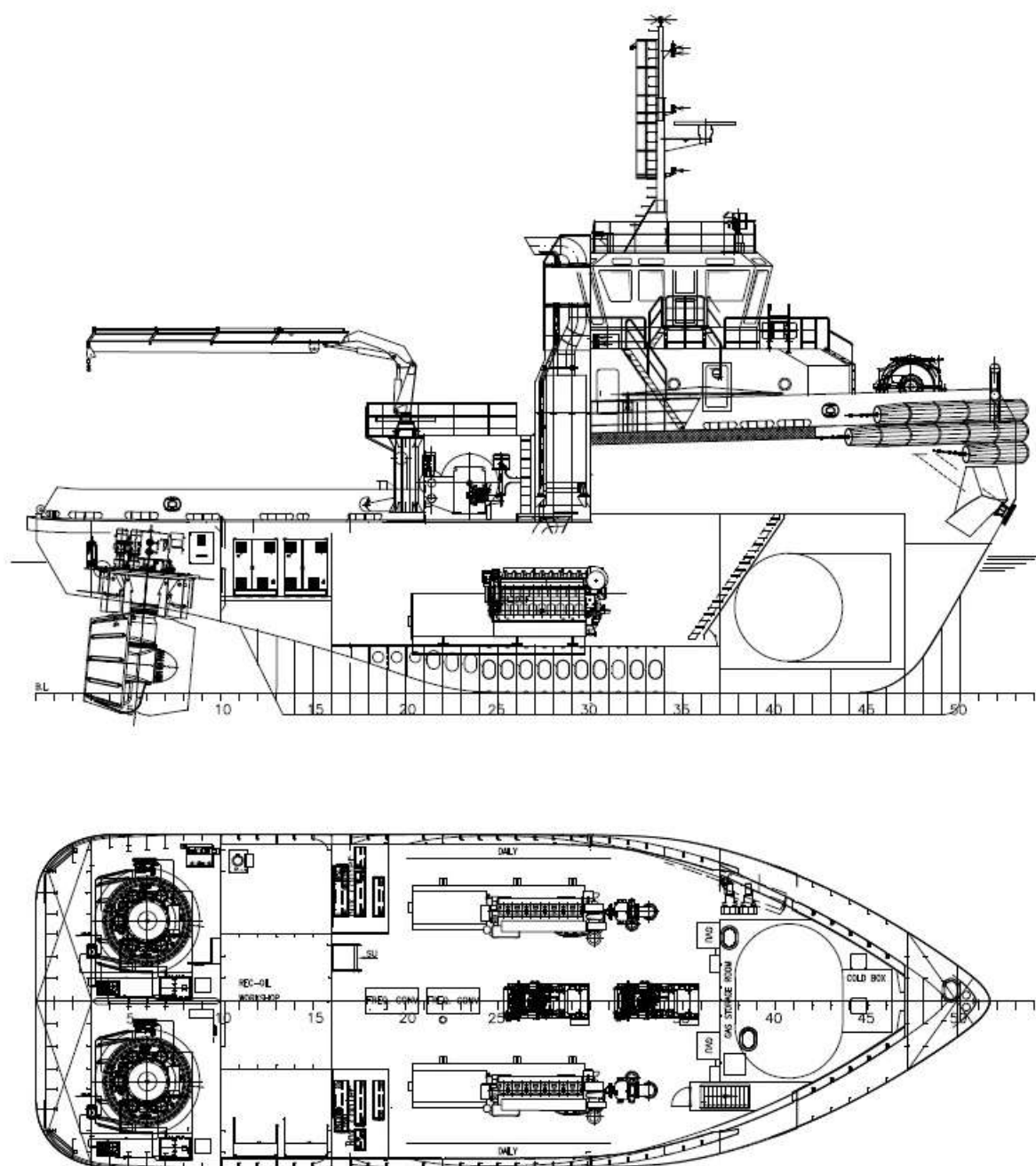
Harbour service (Gas) ~ 28 working hours

Sailing (Gas) ~ 560 nautical miles

Sailing (DO) ~ 7000 + 9000 nautical miles



RM LNG DUAL FUEL ELECTRIC TUG



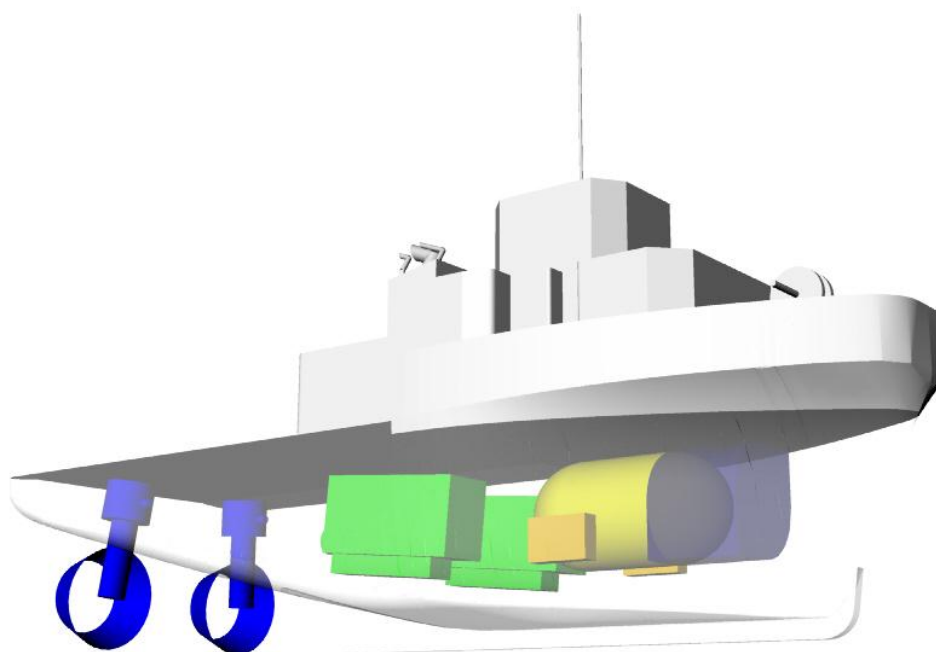
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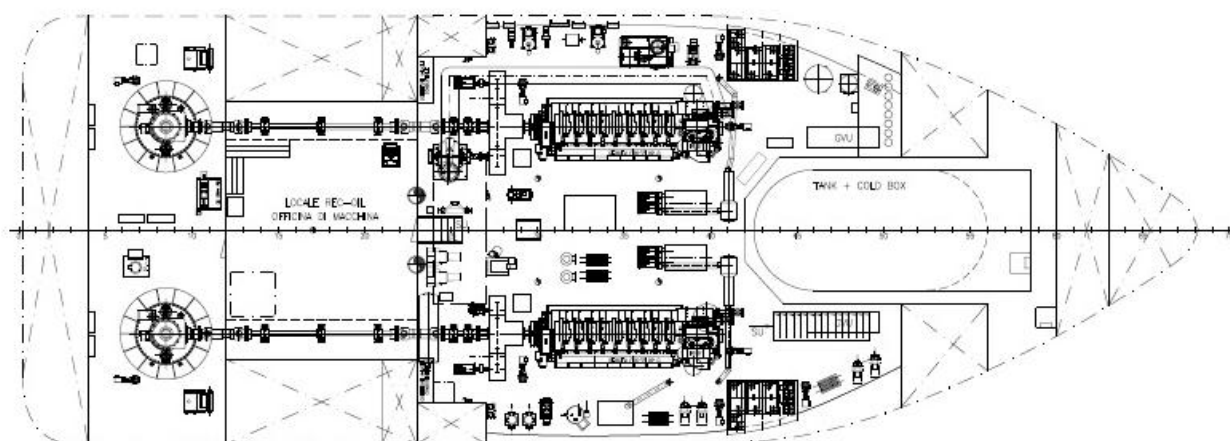
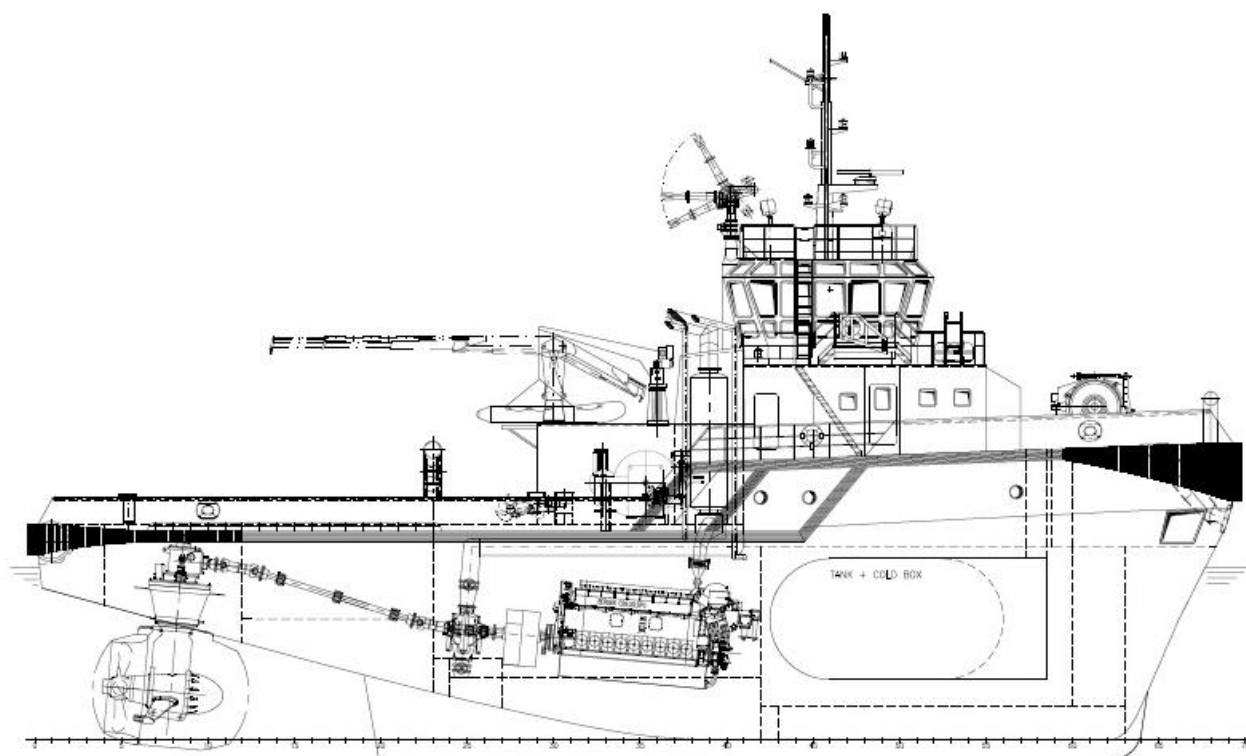
RM LNG FUELLED HYBRID TUG



Name of Vessel: RM LNG FUELLED HYBRID TUG		Main Engines:	No 2 Bergen Gas C26:33 L9PG 2430 kW at 1000 RPM
Type of Vessel: ASD Harbour Tug (mechanical transmission of power)		Diesel Generators:	No 2 SISU eng + SIEMENS gen 280 kWe at 2100 RPM
Class: LNG FUELLED VESSEL		Electric Motors:	No 2 SIEMENS 180 kWe at 3000 RPM
ESCORT/SALVAGE TUG, FI FI SHIP 1, OIL REC SHIP, AUT-UMS, AVM-APS		Electrical System:	SIEMENS Hybrid Advanced (floating f , DC transmission)
Operation Area: UNRESTRICTED NAVIGATION		Gas System:	Hamworthy Single skid tank+cold box
Designer & Builder: Rosetti Marino SpA – RAVENNA - ITALY		Propulsion:	No 2 CP thrusters US 25 4 blades, D = 2.6 m
Technical Data:		Capacities:	
Length overall:	35.15 m	LNG (gross)	35 m ³
Length b.p.:	33.40 m	LNG (net)	33.25 m ³
Moulded breadth:	12.40 m	Diesel Oil	125.1 m ³
Depth:	6.00 m	Oil recovery / DO	125.1 m ³
Scantling draught:	5.00 m	Fresh water	73.8 m ³
		Ballast water	49.8 m ³
Bollard Pull:	~ 75 t	Ranges:	
Maximum speed:	~ 14 knots	Harbour service (Gas)	~ 42 working hours
Cruise Speed	~ 8.5 knots	Sailing (Gas)	~ 750 nautical miles
Gross tonnage	570 tons	Sailing (Hybrid)	~ 9000 + 9000 nautical miles
Crew No	10 persons		



RM LNG FUELLED HYBRID TUG



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RM LNG RO-PAX FERRY



Name of Vessel:

RM LNG RO-PAX FERRY

Type of Vessel:

Double Ended Ferry

Class:

LNG FUELLED VESSEL

RO-RO PASSENGER SHIP

AUT-UMS

Operation Area:

CLASS D COSTAL NAVIGATION

Designer & Builder:

Rosetti Marino SpA – RAVENNA - ITALY

Main Engines:

No 2 Bergen Gas C26:33L6PG
2x1620 kW at 1000 RPM

Diesel Generator:

No 1 Emergency Genset
120 kW

Electric Generators:

No 4 SIEMENS Shaft Gens
4x180 kW at 3000 RPM

Electrical System:

SIEMENS Blue Drive Basic
(floating f , DC transmission)

Gas System:

No 2x50 m³ Wärtsilä LNGPac
Type C tanks with Cold Box

Propulsion:

No 2 Voith Schneider Props
2 x 26R5/195-2 AE40

Technical Data:

Length overall:	97.00 m
Length b.p.:	95.19 m
Moulded breadth:	18.00 m
Depth:	6.70 m
Scantling draught:	4.20 m
Displacement at full load:	~2900 t
Gross tonnage:	2800 GT

Maximum Speed:	13.5 kts
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Passengers:	300
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Trailers:	22
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Cars:	108
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Capacities:

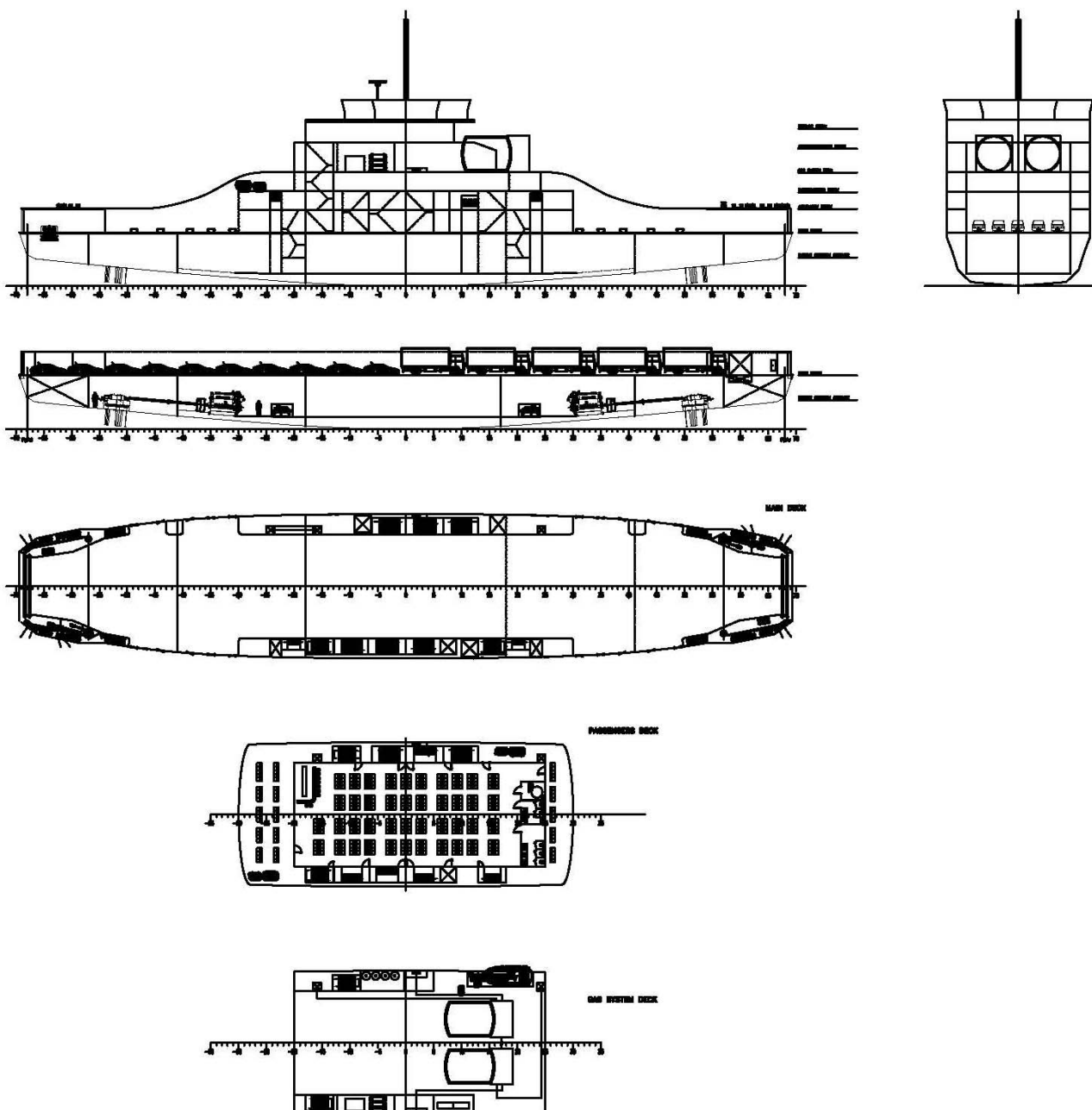
LNG (gross)	50 + 50 m ³
LNG (net)	47.5 + 47.5 m ³
CNG	10 m ³
Diesel Oil	1.5 m ³
Fresh water	1200 m ³
Ballast water	3000 m ³

Ranges:

Sailing full speed	1200 nautical miles
Sailing 7kts	3500 nautical miles



RM LNG FUELLED HYBRID TUG



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RM LNG RO-PAX FERRY



Name of Vessel:

RM LNG RO-PAX FERRY

Type of Vessel:

Double Ended Ferry

Class:

LNG FUELLED VESSEL

RO-RO PASSENGER SHIP

AUT-UMS

Operation Area:

CLASS D COSTAL NAVIGATION

Designer & Builder:

Rosetti Marino SpA – RAVENNA - ITALY

Main Engines:

No 2 Bergen Gas C26:33L6PG
2x1620 kW at 1000 RPM

Diesel Generator:

No 1 Emergency Genset
120 kW

Electric Generators:

No 4 SIEMENS Shaft Gens
4x180 kW at 3000 RPM

Electrical System:

SIEMENS Blue Drive Basic
(floating f , DC transmission)

Gas System:

No 2x50 m³ Wärtsilä LNGPac
Type C tanks with Cold Box

Propulsion:

No 2 Voith Schneider Props
2 x 26R5/195-2 AE40

Technical Data:

Length overall:	97.00 m
Length b.p.:	95.19 m
Moulded breadth:	18.00 m
Depth:	6.70 m
Scantling draught:	4.20 m
Displacement at full load:	~2900 t
Gross tonnage:	2800 GT

Maximum Speed:	13.5 kts
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Passengers:	390
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Trailers:	22
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Cars:	134
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Capacities:

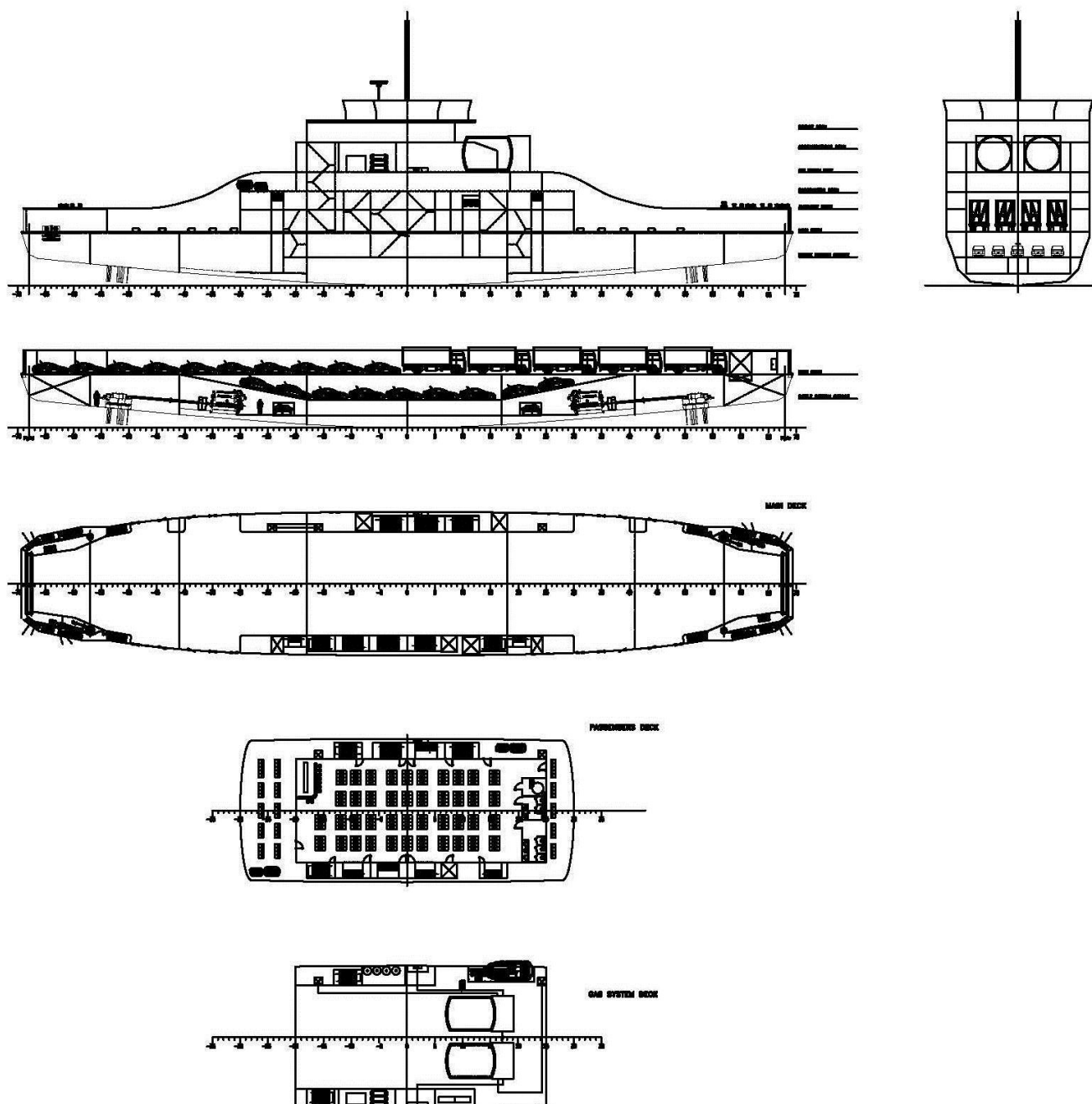
LNG (gross)	50 + 50 m ³
LNG (net)	47.5 + 47.5 m ³
CNG	10 m ³
Diesel Oil	1.5 m ³
Fresh water	1200 m ³
Ballast water	3000 m ³

Ranges:

Sailing full speed	1200 nautical miles
Sailing 7kts	3500 nautical miles



RM LNG FUELLED HYBRID TUG



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