

5,100 cbm LNG Bunker-Vessel
'Engie Zeebrugge'
for Gas4Sea(Engie,NYK,Mitsubishi)

Project Data: 2735

Shipyards:

Hanjin Heavy Industries & Construction,
 Korea

Year of completion: 2017

Classification: BV

TGE's scope:

Cargo handling system with cargo tanks, LNG
 fuel gas system



5,100 m³ LNG bunker vessel courtesy of Gas4Sea

Vessel:

5,100 m³ LNG bunker vessel

Length o.a.	101,8 m
Beam:	18,4 m
Draught (LNG):	4,8 m
Speed:	14,9 kn

Characteristics of gas plant:

Capacity:	5,100 m ³
Number of cargo tanks:	2 (cylinder type)
Material of cargo tanks:	9% Ni steel
Cargoes:	LNG
Design temperature / pressure:	-163°C / 4.0 bar g
Maximum cargo density:	500 kg/m ³
Number of segregations:	1
Cargo manifolds:	2 liquid lines, 2 x 8" ANSI 150 lbs flange 1 vapour line, 6" ANSI 150 lbs flange
Bunker manifolds:	2 liquid lines, 2 x 8" ANSI 150 lbs flange 1 vapour line, 6" ANSI 150 lbs flange
Loading rate	1,000 m ³ /h
Bunker rate	600 m ³ /h
Deepwell pump	4 x 300m ³ /h at 200 mLC
BOG-handling & fuel gas system:	2 x cargo compressors with intercoolers 2 x aftercoolers 2 x submerged fuel gas pumps 2 x forcing vaporizer 2 x fuel gas buffer tank 1 x fuel gas metering system
Cargo piping system:	Stainless steel, AISI 316L
Inertgas plant:	
PSA type	Capacity: 340 Nm ³ at 99.5 vol. % N ₂
Membrane system	Capacity: 80 Nm ³ /h at 4 vol. % O ₂
Gas combustion unit: (by yard)	Capacity: 800 kg/h
Gas chromatograph	