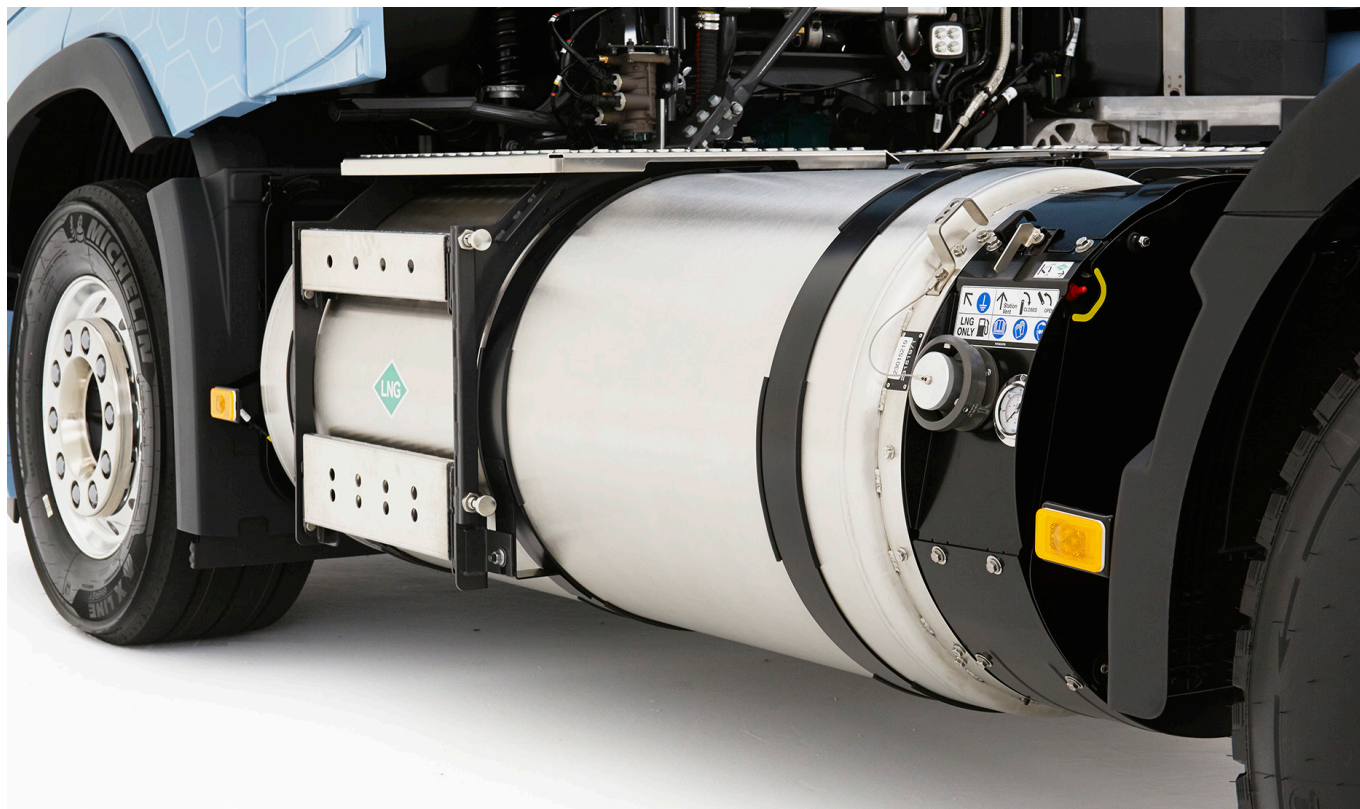


FACT SHEET

Gas tank



This photo showing the largest LNG tank – LGAS205.

Gas tank, left hand side

The LNG (Liquefied Natural Gas) tank is designed with the highest safety margin, to withstand extreme pressure. It is made in robust design, with a double-shell structure – separate inner and outer casing – consisting of 4 mm stainless steel.

The LNG tank is mounted on the left hand side of the chassis. The LNG tanks are available in three different sizes.

Sales variants

LGAS115 115 kilogram, left side gas tank

LGAS155 155 kilogram, left side gas tank

LGAS205 205 kilogram, left side gas tank



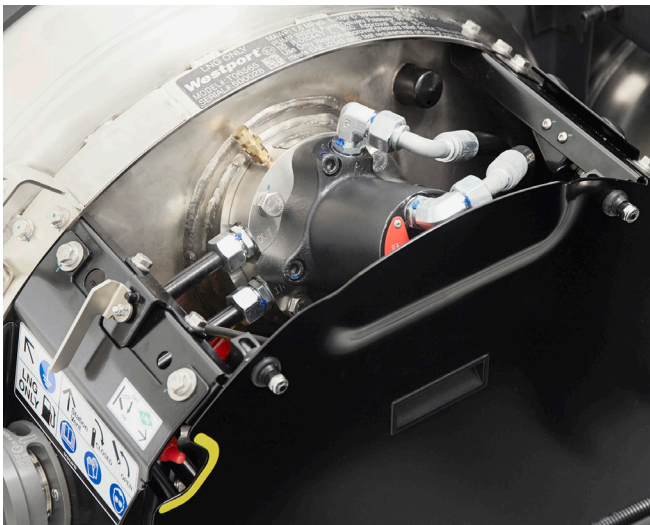
High fuel flow filling

LNG can be pumped with a high fuel flow, equivalent to current diesel refuelling.

With RTT (Return To Tank) system – greenhouse gas emission is minimized. No methane slip during operation.

FACT SHEET

Gas tank



Integrated LNG pump

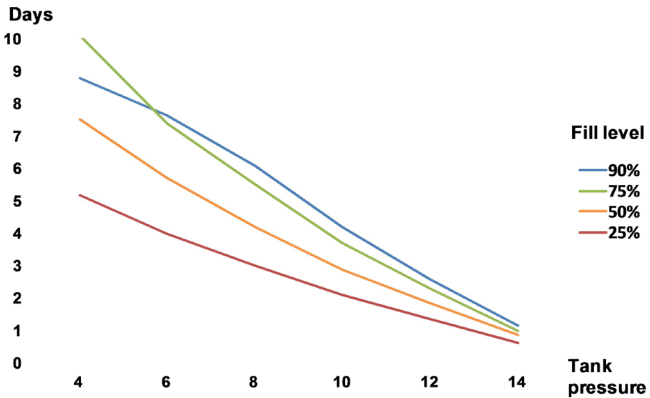
LNG is stored at 4-10 bar pressure at a temperature of -125 to -140 °C in the cryogenic vacuum insulated inner tank.

A hydraulic pump inside the tank increases the pressure and vaporises the LNG, with help from the engine's coolant. The LNG is converted to high pressure CNG (approximately 300 bar) when it leaves the tank.

An IGM (Integrated Gas Module) is placed between tank and engine, there a five-litre buffer volume stabilises the variations in pressure. The high pressure CNG is delivered to the engine, and the engines control system then regulates it down to required injection pressure for the cylinders.

With this isolated tank, LNG does not begin to evaporate until after a week. When the truck stands still for a long time, the temperature increases in the tank and the pressure rises. If the pressure inside the tank exceeds 16 bar, the gas slowly releases under controlled forms via a safety valve.

This shall be avoided as much as possible, methane is an aggressive greenhouse gas and shall not be released into the atmosphere. And it is actually fuel evaporating into the air as well. Always strive to park the truck with full tank and use it frequently.



Increased filling ratio gives longer storage life. The more LNG it is in the tank, the longer times it takes before the gas evaporates. At a filling ratio of 75-90% the storage life is up to 9-10 days.



Tank combination with diesel tank R170A71 and AdBlue tank ADB064 in position ADTP-BC.

Tank installation combination

As the LNG vehicle also uses a certain amount of diesel and AdBlue, a diesel tank and an AdBlue tank are always included in the order of a LNG tank. These tanks are placed on the right hand side of the truck.

The R170A71 is a 170 litre diesel tank in D-shaped style, made of aluminium with a length of 400 mm, a height of 710 mm and placed behind the muffler.

The AdBlue tank is made of plastic, available in two variants: ADB064 (64 litre) is placed in position ADTP-R on the chassis right side together with the diesel tank. ADB065 (65 litre) is placed in position ADTP-BC behind cab.

The LNG hydraulic pump's hydraulic oil tank is located behind the cab.

Tank installation combination		
LNG tank	Diesel tank	AdBlue tank
LGAS115	R170A71	ADB064 / ADB065
LGAS155	R170A71	ADB064 / ADB065
LGAS205	R170A71	ADB064 / ADB065

FACT SHEET

Gas tank

Axle configuration combination							
LNG tank	Tractor 4x2	Tractor 6x2 pusher axle	Tractor 6x2 tag axle	Tractor 6x4	Rigid 4x2	Rigid 6x2 tag axle	Rigid 6x4
LGAS115	–	•	–	–	–	–	–
LGAS155	–	• ¹	–	–	–	•	•
LGAS205	•	–	•	•	•	•	•

Axle configuration combination

LNG tank sizes have been designed to maximize fuel capacity for all configurations.

Note! Maximum 800 mm free space between tank shroud and rear axle is allowed for side impact safety reasons.

Note! FMX models only allowed for RC-SMOOTH on road usage.

- Available
- Not available
- ¹ RAPD-G4 (light weight pusher)

Long driving range

LNG fuel holds more energy for a given volume. More fuel can be stored on the vehicle than with equivalent CNG (Compressed Natural Gas) fuel tanks.



Easy access to chassis with foldable anti-slip footsteps.

Driving range	
LNG tank	Expected driving range (km)
LGAS115	Up to 550 km *
LGAS155	Up to 750 km *
LGAS205	Up to 1000 km *

* Driving range vary dependent on GCW, drive cycle (long haul/regional haul), LNG energy content and LNG temperature at filling.



Cut-away section of LNG tank showing double-shell structure with separate inner and outer casing of 4 mm stainless steel. The inner tank is then vacuum insulated from the outer tank.

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