

Specifications

GLNG RTLF LNG system	
LNG maximum loading rate	80 m ³ /h per bay
LNG operating inlet pressure	4.2 barg
LNG pressure Alarm High	4.8 barg
LNG pressure Alarm High High	4.9 barg
LNG pressure Trip High (SIL 1)	5.2 barg
LNG inlet relief valve set pressure	5.8 barg
LNG Payload size	Variable (dependant on: request; tank capacity and road transport weight limit of unit [max 44,000kg])
LNG connection type (GLNG hoses/couplings are sourced from B.T.S engineering Ltd. Contact number: 01324 666154 Midthorn Yard, Laurieston Road, Grangemouth, FK3 8XX)	LSF TR105 (Liquid Swivel Female TR105 thread form)
GLNG RTLF Vapour system	
Vapour control valve (PV32334) set point	0.6 barg
Vapour pressure, loading to start at less than	2.0 barg
Vapour pressure Alarm High	4.7 barg
Vapour maximum design pressure (RTLF vapour header pressure test performed at 1.5 times design pressure [15barg])	10 barg (If vapour pressure is high [above 4 barg] this will lengthen the time taken to depressurise the tanker)
Vapour connection type (GLNG hoses/couplings are sourced from B.T.S engineering Ltd. Contact number: 01324 666154 Midthorn Yard, Laurieston Road, Grangemouth, FK3 8XX)	VSF TR70 (Vapour Swivel Female TR70 thread form)
GLNG RTLF Utility system	
Air operating pressure	4.0 barg
Air connection type (actuation of tankers ESD valves, loss of air closes valves)	Product code: AC71EF (female) Brand: PCL
Nitrogen operating pressure	4.0 barg
Nitrogen connection type (for purging of tankers pipework and site hoses)	Product code: HK Series 8, ML8HP36BS Brand: Hanson (ISO 7241-1 Series B, 1" quick release 316 stainless steel socket, nitrile seal (female), BSPP female thread)
Earthing system	Dedicated earthing station at each bay (Earth connected throughout loading providing safety permissive, when earth is achieved)
Drive away protection	Entrance and exit barriers (fitted with proximity switches)

General Tanker requirements	
Maximum vehicle (truck + tanker) departure weight	43 900 kg
Minimum Tanker relief valve setting (LNG, Vapour, or Nitrogen system)	5.8 barg
LNG connection type	LM TR105 (Liquid Male TR105 thread form)
Vapour connection type	VM TR70 (Vapour Male TR70 thread form)
Air connection type (actuation of tankers ESD valves, loss of air closes valves)	Any interchangeable fitting with: PCL AA7103 (e.g. Rectus 25/26, Legris 25/26, Cejn 320, Norgren 234/238, Schrader InterCheck 35)
Nitrogen connection type (for purging of tankers pipework and site hoses)	Any interchangeable fitting with: Hanson HK Series 8, ML8KP36BS (ISO 7241-1 Series B, 1" quick release 316 stainless steel plug, nitrile seal (male))
Earthing point	Single dedicated earthing point (For ISO tankers, ability to earth tank and trailer to single earthing point)
Drive away protection	Vehicle chocked during loading Trailer air break cut off when tank in use
Loading and decant procedure	Copy to be kept in cab of vehicle, specific to tank and pipework design.
Vapour maximum design pressure (RTLFG vapour header pressure test performed at 1.5 times design pressure [15barg])	10 barg (If vapour pressure is high [above 4 barg] this will lengthen the time taken to depressurise the tanker)
Cold Tanker arrival requirements	
Requested tanker arrival pressure, less than	3.0 barg
Vapour temperature during venting	Less than -10°C (If greater than -10°C a warm fill will be undertaken)
Tank contents	LNG
Oxygen content maximum	100 ppm (Pass criteria when measured on site: Less than 2%)
Water content maximum	1 ppm (vol.) (Pass criteria when measured on site: Dewpoint less than -46°C)
Carbon dioxide content maximum	100 ppm
New tanker/Return to service/Warm Tanker arrival requirements	
Maximum tanker arrival pressure	3.0 barg
Minimum tanker arrival pressure	0.2 barg
Contents	Methane gas or Nitrogen
Oxygen content maximum	100 ppm (Pass criteria when measured on site: Less than 2%)
Water content maximum	1 ppm (vol.) (Pass criteria when measured on site: Dewpoint less than -46°C)
Carbon dioxide content maximum	100 ppm
Return to Service Certificate stating: Work completed on the tanker Tank and pipework condition post maintenance (to include pressure, contents (gas or nitrogen), Oxygen, water and carbon dioxide)	Complete and return: a) 4 days before arrival the certificate is to be emailed to: Damien.Cahill@nationalgrid.com box.GLNGCommercial@nationalgrid.com b) Certificate presented on arrival at RTLFG
Defect Report Appendix 10	Complete and return: a) 4 days before arrival the defect report and evidence of repair to be emailed to: Damien.Cahill@nationalgrid.com box.GLNGCommercial@nationalgrid.com b) Certificate presented on arrival at RTLFG