



**Piping &
tubing system
package &
GVU
(Gas Valve Unit)**

Piping & tubing system package

| FGSS (Fuel Gas Supply System)

Vaporizer & Glycol Water Skid

As one of the major equipment in LNG industry, LNG Low Pressure Vaporizer Skid vaporizes LNG so it will be transferred and used.

The primary purpose of a Glycol Water System in LNG facilities is to prevent hydrate formation, maintain temperature control, and ensure safe transportation and processing of LNG.



LNG Low Pressure Vaporizer Skid



LNG Glycol Water Skid

Bunkering Station

Bunkering Skid on LNG-powered vessels refers to the system that supplies liquefied natural gas (LNG) as fuel to the vessel. Our Bunkering Skid is equipped with an ultra-low temperature transfer system.



LNG Low Pressure Vaporizer Skid

High Pressure Buffer Tank Skid

An LNG High Pressure Buffer Tank Skid is an essential component used in the storage and management of liquefied natural gas (LNG) in high pressure systems. It serves as a buffer or intermediary storage unit that helps regulate pressure and flow within the LNG infrastructure, particularly in facilities where LNG is being stored, transported, or re-gasified.



High Pressure Buffer Tank Skid

Piping & tubing system package

| WTS (Water Treatment System)

EGR (Exhaust Gas Recirculation) WTS Unit

In EGR system, the discharged wastewater is purified through a centrifuge and filter, and the contamination level of the water is measured to meet environmental regulations before being discharged overboard.



EGR WTS Unit

WTS Pump Unit

A device that sends the water stored in the EGR Drain Tank to the EGR WTS Unit.



WTS Pump Unit

Buffer Tank with Supply Unit

A tank is used to store excess water from the EGR system, where a neutralizing agent (NaOH) is added to regulate the pH of the acidified water. This process controls both the quantity and quality of the water used in the EGR system.



Buffer Tank with Supply Unit

GVU / GRU (Gas Regulating Unit)



The Gas Valve Unit (GVU) is a critical device designed to ensure the safety of the fuel supply system in ships that use low-flashpoint fuels, such as LNG (liquefied natural gas). The GVU controls the flow of gas fuel to the engine and performs essential functions like shutting off or regulating the gas supply in emergency situations.

As a key safety component for ships using gas fuel, the GVU plays a particularly crucial role when LNG is used as fuel. Given the high flammability of gas fuel and the potential for major accidents in the event of a leak, the ability to precisely control the gas flow and instantly shut it off when needed is essential.

Therefore, the GVU is a vital device that ensures the reliability and safety of a ship's gas fuel system, serving as a critical interface between the engine and the fuel tank.

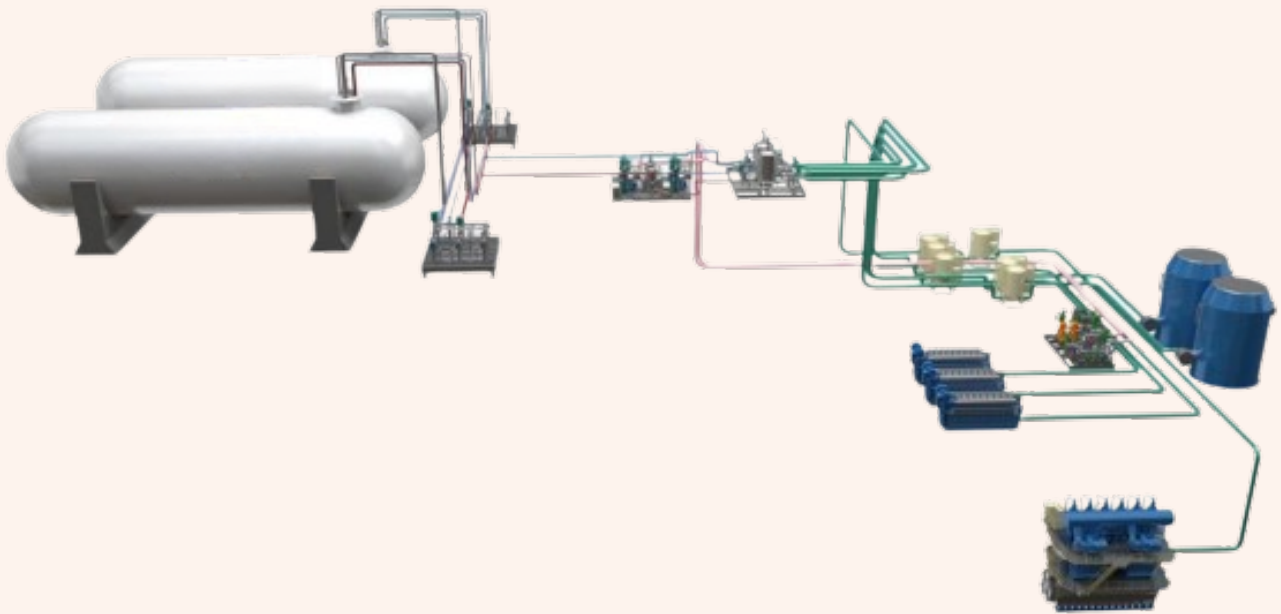
Certificates

- ① G.R.U Performance Test Certificate -KR.
- ② G.R.U Performance Test Certificate - KOMERI.
- ③ Gas Feeding System with G.R.U.
- ④ G.R.U-CD
- ⑤ Ventilation System in DWP-GRU-CD
- ⑥ G.R.U. HAZOP Report - LR



Piping & tubing system package

Skid is a unit of the parts of the FGSS (The fuel tank, LNG pump, vaporizer, valve, measuring instrument, safety equipment, control device, BOG processing device and LNG device, etc.) supplying LNG to the engine.



Vacuum Pump Unit

This product is equipment designed to create a vacuum state by expelling gas from a container. Unlike conventional vacuum systems that use rotary pumps, this equipment significantly reduces the time required to achieve a high vacuum state (5×10^{-4} torr), thereby shortening operation times

No	Specification	Description
1	DRY PUMP (DV800)	380V, 3-phase, 19.6 kW, 5×10^{-3} torr
2	DIFFUSION PUMP	380V, 3-phase, 10 kW, 5×10^{-4} torr
3	CHILLER	220V, 3-phase, 4.56 kW, 5HP



Certificates



ISO 9001 (ABS-2015)



ISO 14001 (2015)



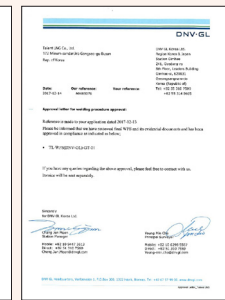
ISO 45001 (2018)



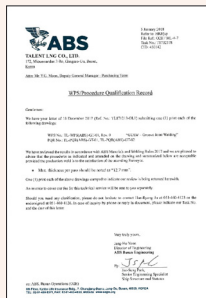
ABS ISO 3834-2 (2021)



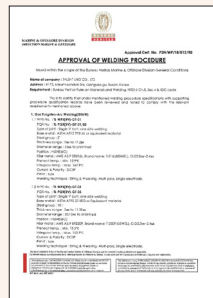
WPS-Procedure Qualification Record (DNV-GL)



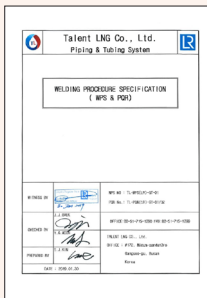
WPS-Procedure Qualification Record (DNV-GL)



WPS-Procedure Qualification Record (ABS)



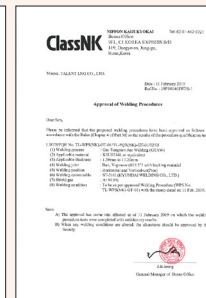
WPS-Procedure Qualification Record (BV)



WPS-Procedure Qualification Record (LR)



WPS-Procedure Qualification Record (RINA)



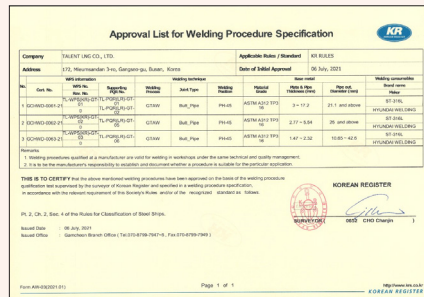
WPS-Procedure Qualification Record (NK)



Certificate of Attendance (Welding Supervision) (GL)



WPS(CSS)



WPS(KR)



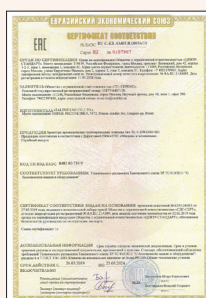
TRCU(EAC) - Flange



TRCU(EAC) - Tube



TRCU(EAC) - Pipeline/Vessel



TRCU(EAC) - Valve



Vacuum Insulated Piping



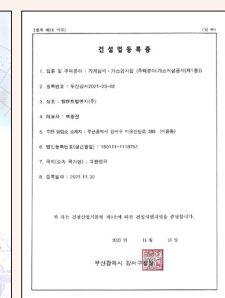
Vacuum insulated double pipe



Gas feeding system of ship engine



Smart air heating system for feeding fuel of ship engine



1st Grade of Gas Construction Business Registration Certificate



Vacuum insulated pipes (Japan)



Vacuum insulated pipes (China)



388, Mieumsandan-ro,
Gangseo-gu, Busan, Korea
TEL. +82-51-715-1290
FAX. +82-51-715-1298
E-Mail. sales@talent-tl.com
greer@talent-tl.com
rider@talent-tl.com