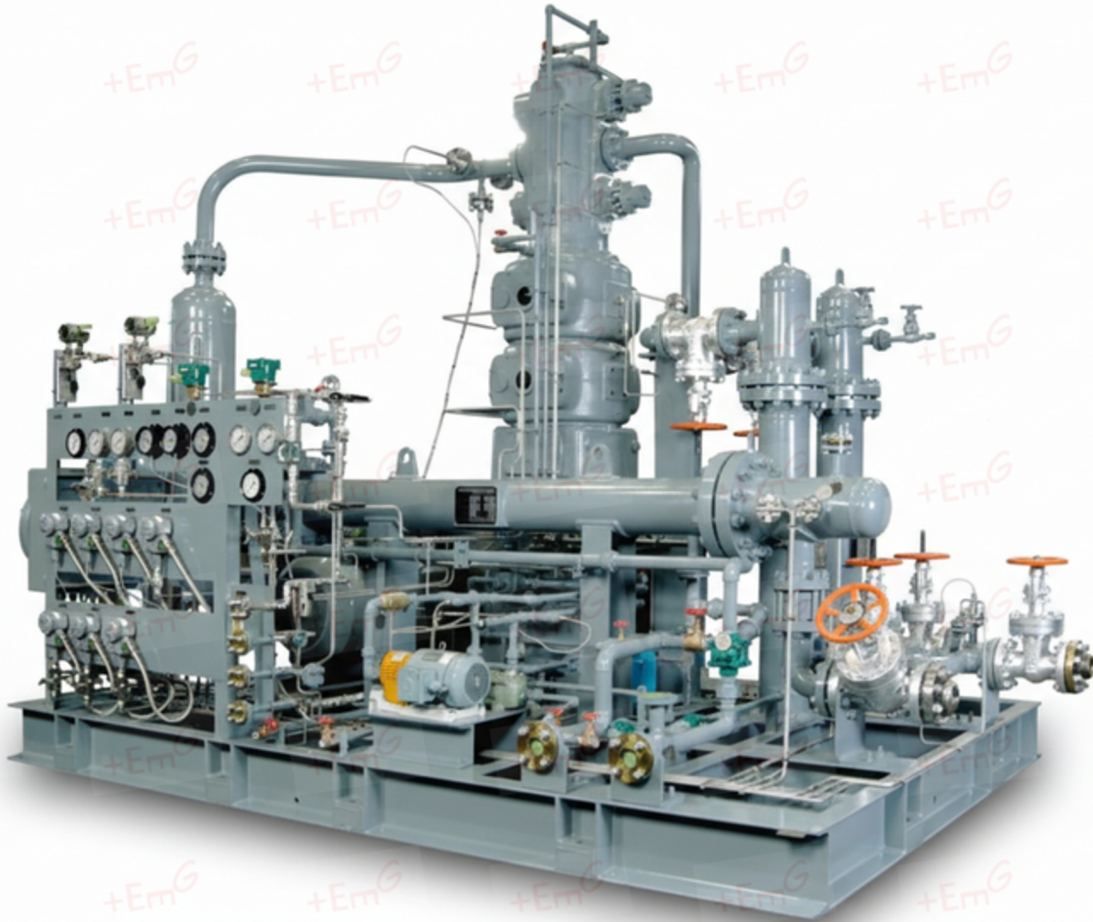


Hydrogen Compressor Package - Model VS-75GH-OL



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**高圧ガス設備
試験・製造認定事業所**
経済産業大臣認定番号
MAB 133

認定 熱交換器、往復動式圧縮機、管類、弁類
機器 その他の附属機器類、複合機器

1. Product Overview

The Model VS-75GH-OL is a vertical reciprocating compressor unit with an oil-free design specifically engineered for hydrogen gas service.

Unlike horizontal configurations, this vertical setup provides a compact footprint for space-constrained installations while maintaining high stability. This unit is ideal for chemical industries, energy sectors, and hydrogen fueling systems that require high-purity compression.

2. Technical Specifications

2.1 A. Operational Conditions

Parameter	Value	Unit
Handled Gas	Hydrogen (H ₂)	-
Capacity (Flow Rate)	1,000	Nm ³ /h
Suction Pressure	11	kg/cm ² G
Discharge Pressure	34	kg/cm ² G

2.1 B. Mechanical Data

Parameter	Value	Unit
Compressor Type	Vertical Reciprocating	-
Cylinder Configuration	Vertical Single-Crank	-
Number of Stages	1	Stage
Lubrication Type	Oil-Free	Cylinder
Cooling Method	Water-Cooled	-
Motor Output	75	kW

3. Key Design Features & Advantages

- **Vertical Configuration:** Minimizes installation footprint, ideal for skid-mounted packages and tight plant layouts.
- **100% Oil-Free Gas Path:** Guarantees hydrogen gas purity without oil contamination, critical for downstream catalyst protection.
- **High Reliability:** Engineered to handle the specific properties of hydrogen gas (leakage prevention & material compatibility).
- **Efficient Cooling:** Water-cooled cylinders ensure stable thermal control during compression.

6. Project Reference

Major Korean Company. Hydrogen Gas Compression. Successfully commissioned and operating.



Figure 1: VS-75GH-OL

4. Applications

- **Petrochemical:** Hydrotreating processes and Hydrogen supply.
- **Chemical Synthesis:** Raw material compression for chemical plants.
- **Energy:** Hydrogen fueling and fuel cell support systems.
- **Polysilicon Industry:** High-purity process gas handling.

5. Scope of Supply

The standard package typically includes:

- VS Compressor Bare Block (Vertical Type).
- 75 kW Main Driving Motor.
- Common Baseplate / Skid.
- Cooling system (Intercooler / Aftercooler).
- Local instrument panel.