GSA Gas Purifiers

N2, O2, Ar, CH4, CO, CO2…Various gas separation
Purification equipment
Global Standard Air & Gas

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Diverse Gas Purification Systems

High-purity Gas and Ultra High-purity Gas

High-purity gases are used in diverse fields such as semiconductor, petrochemicals, metal engineering, experiments and researches. In particular, it is critical to maintain the properties and quality of high-purity gases in semiconductor, display and other productions.

Regular industrial gases may have some impurities. In addition, they could be contaminated during transport or storage.

Why High-purity Purification System?

A high-purity purification system is needed in various fields where high-purity gases are demanding to provide high-purity gases by purifying low-purity gases.

If high-purity gases are continuously used, it is able to recover initial acquisition costs fast without issues such as short supply and delayed delivery, showing decent economic efficiency.

Features

• Expertise in gas purification systems
Optimum PSA and system design according to customer needs

• Highest quality
Supplies high-purity gases in a stable fashion based on long design experiences

• High reliability
Keeps the product highly reliable with the use of proven, high-quality components

• Great flexibility
A highly flexible system which meets diverse gas supply conditions

• Rational design
All systems including pipelines pre-assembled and tested before release; time and money for trial run minimized

• Easy maintenance
Easy access and management through convenient daily routines

Diverse Gas Purification Systems

N_2 Purifier

Supplies high-purity nitrogen whose impurity concentration (10ppm or above) is reduced to 10ppb or below by eliminating oxygen, CO_2 and others, using a desiccant

- High-pressure nitrogen purification system
- Low-pressure nitrogen purification system

O_2 Purifier

Supplies high-purity oxygen whose impurity concentration (10ppm or above) is reduced to 10ppb or below by eliminating CO, CO_2 and others, using PD catalyst and desiccant

- High-pressure oxygen purification system
- Low-pressure oxygen purification system

CH_4 Purifier

A purification system designed to use CH_4 by eliminating a large amount of impurities in natural gases such as nitrogen and carbon dioxide

Ar Purifier

Supplies high-purity argon whose impurity concentration (10ppm or above) is reduced to 10ppb or below by eliminating N_2, O_2, CO_2, CO and others, using PD catalyst and desiccant

- High-pressure argon purification system
- Low-pressure argon purification system

H_2 Purifier

Supplies high-purity hydrogen whose impurity concentration (10ppm or above) is reduced to 10ppb or below, using a desiccant and heated getter

- Heated getter-based hydrogen purification system
- Liquefied nitrogen-based hydrogen low-temperature purification system

Helium Low-temperature Purifier

Supplies high-purity helium whose impurity concentration (10ppm or above) is reduced to 10ppb or below, using liquefied nitrogen

Argon Recovery & Purification System

Supplies argon by removing nitrogen, oxygen, moisture and others, using a desiccant

High-purity O_2 PSA and Ar PSA System

Divides oxygen from the oxygen generator into high-purity oxygen and argon and supplies

Separates and supplies high-purity oxygen by vacuum-removing and separating the oxygen adsorbed by CMS

A system designed to supply argon after separating nitrogen, using ZMS

CO_2 Removal System

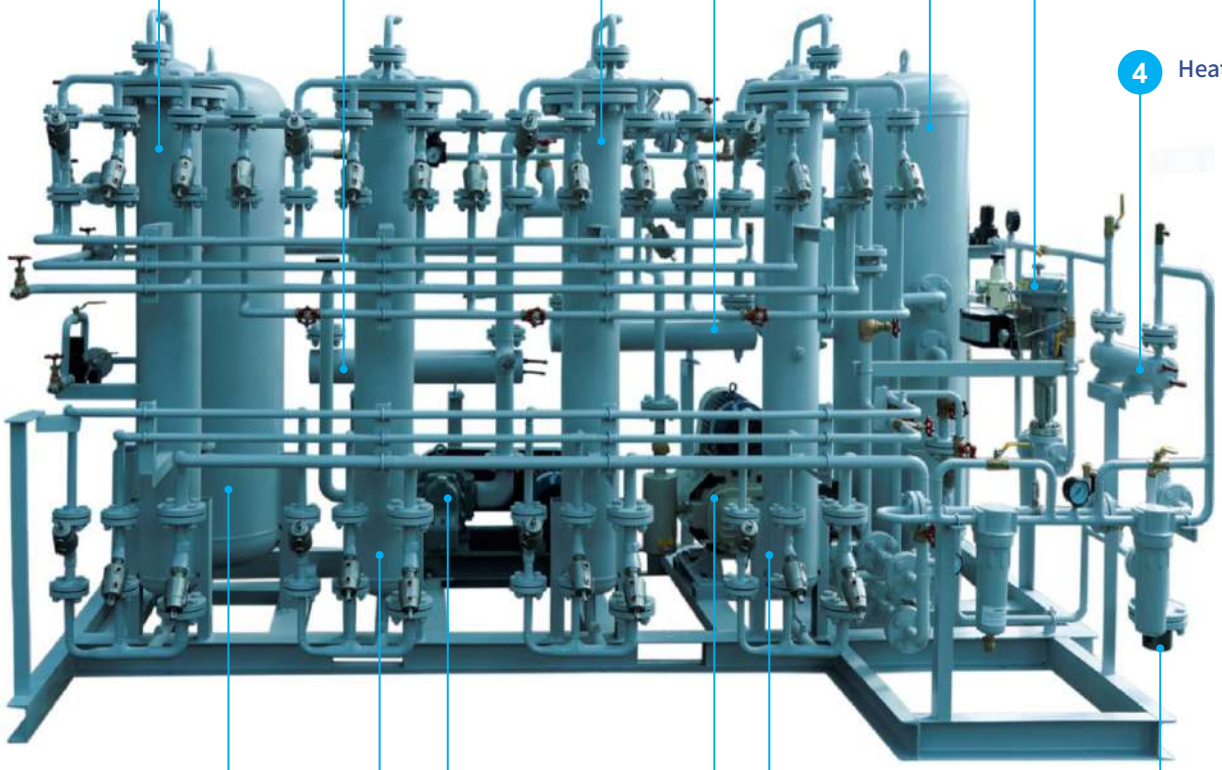
A system designed to eliminate CO_2 in the compressed air

CO_2 Purification and Liquefying System

Carbon dioxide produced by various causes such as rising demand for energy used in diverse fields even though it accounts for 80% of greenhouse gas

The CO_2 purification and liquefying system is a system designed to remove impurities from the collected carbon dioxide and liquefying them

Components


1 Absorption Tower
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4 Heat Exchanger-A
4 Heat Exchanger-B
3 Gas Holder
5 Flow Control Valve
4 Heat Exchanger-C
6 Blower
8 Electric Heater
1 Absorption Tower
1 Absorption
2 Waste Gas Holder
7 Vacuum Pump