

# Solvent Recovery Unit



Highly safe N<sub>2</sub> gas sealed circulation system

## GAS410

0.12 to 0.65m<sup>3</sup>/min

1,300ml/h or more

With integrated freezer  
With integrated compressor

### Inert N<sub>2</sub> Gas Sealed System used in conjunction with Spray Dryers



The Inert N<sub>2</sub> Gas Sealed System is used to prevent external discharge when combined with a spray dryer (ADL311SA or GB-210A) when using an organic solvent.

- Dehumidifier (Freezer) integrated in GAS410. No extra Freezer/dehumidifier equipment needed
- Compressor included, no need for a separate compressor to operate the spray dryer ADL311SA when using organic solvent samples
- Flammable or toxic solvents can be processed by combining a N<sub>2</sub> gas sealed circulation system and a solvent recovery system (with freezer and capacitor)
- Explosion safety with closed loop N<sub>2</sub> inert gas system
- Recovery of solvent to protect the environment and enable minimized pollution.
- Drying of easily oxidized materials is possible
- Supports low temperature drying of materials that easily deform with heat
- No freezing risk due to organic solvent with aqueous solution mixtures which could cause damage to the closed loop GAS410 system
- Spray drying and recovery of products and solvents are performed with meticulously devised safety measures



Example of installation: ADL311SA + GAS410

### Specifications

Model	GAS410
Solvent recovery system	Capacitor + freezer
Circulating gas	N <sub>2</sub> gas (sealed circulation when connected to ADL311SA or GB-210A)
Circulating volume flow	0.12 to 0.65m <sup>3</sup> /min
Compressor (for spraying)	Linear compressor integrated
Circulation blower	Roots blower
Solvent recovery container	2L flask
Freezer	Air-cooled condensation full-sealed type: 400W R404A
Solvent recovery mechanism	Capacitor cooling mechanism
Filter	Cartridge filter
Instruments	Cooling trap temperature display monitor Filter differential pressure meter (Monitor for clogging of filter) O <sub>2</sub> density display monitor Blower wind amount adjusting volume
O <sub>2</sub> sensor	Solid electrolyte (Zirconium) limit current type
Pump	For circulation to measure Oxygen
Safety device	O <sub>2</sub> density meter, Flammable gas alarm, Electric leakage breaker, N <sub>2</sub> gas forced introduction (when removing nozzles)
External dimensions	W700×D950×H1,500 mm
Weight	Approx. 130 kg
Power source (50/60 Hz) rated current	AC200 to 240V 5A (15A)
Required N <sub>2</sub> amount	15 L/h at 0.1 MPa
Accessories	Set of connection parts, anti-seismic clamps, interface cable, sample gas for gas alarm inspection, 2L flask