



Vacuum Pressure Swing Adsorption
utilizing special adsorption material

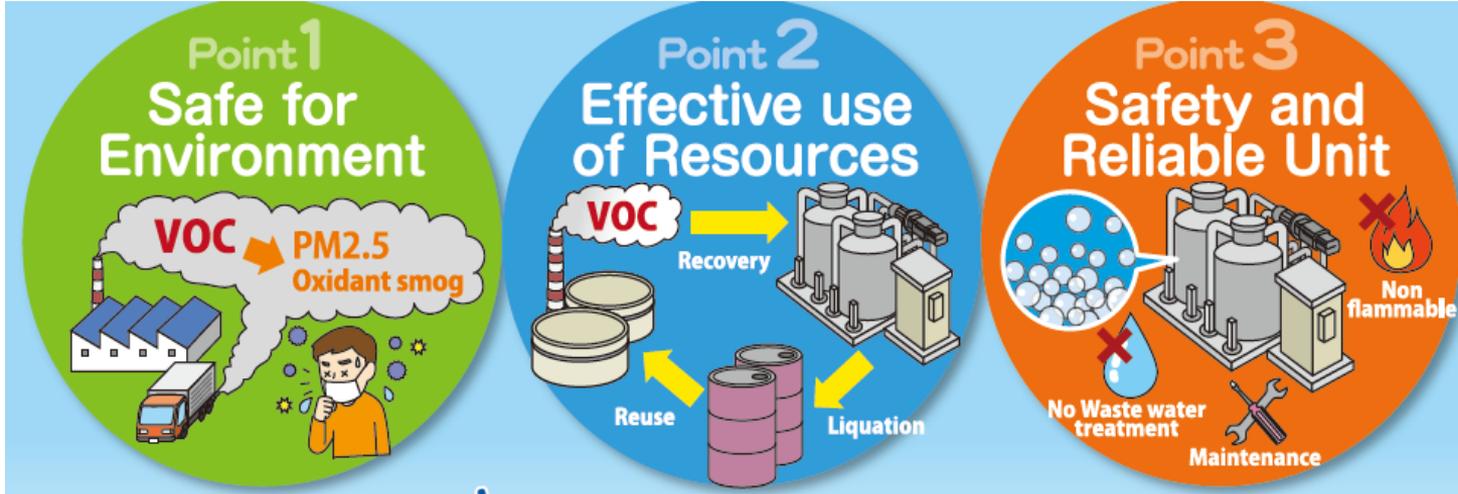
SES-VRU



SYSTEM ENG SERVICE CO.LTD



How SES Supports Your Operations



Our VRU is used in such places.

Oil refinery , Oil Terminal, Storage tank, Petrochemical, Chemical, Pharmaceuticals, more

Because Silica gel
**Treat VOC
with safety**



**Patent
technology**
Special Silica gel
VPSA method

Safety



Copolymer gas



High recovery rate



Dry operation



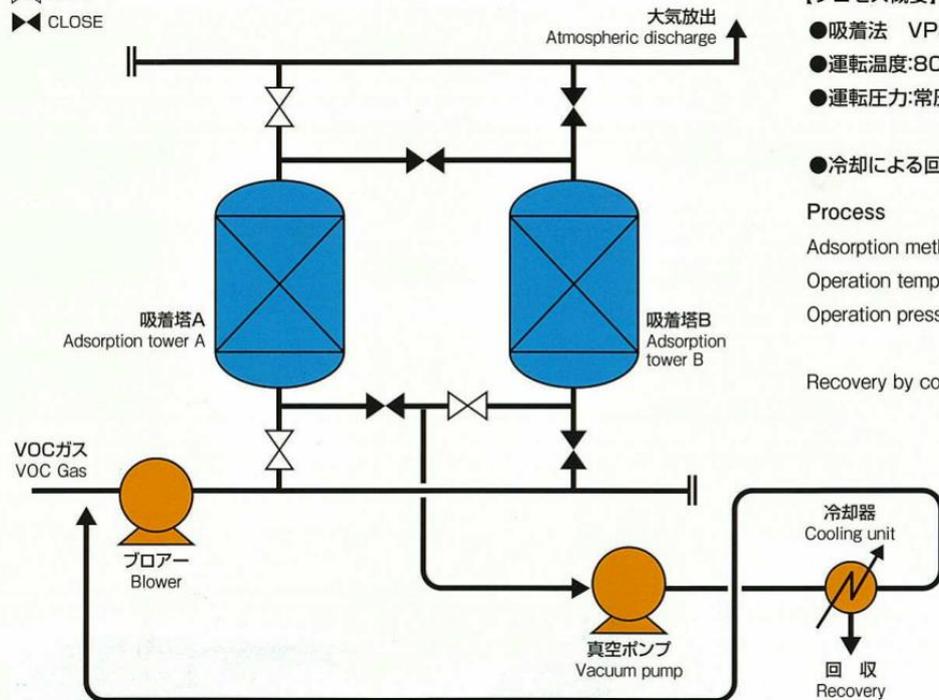
Good maintenance



Simple Process

SES-VRU Simple flow sheet (Cooling type)

◇ OPEN
 ◀▶ CLOSE



【プロセス概要】

- 吸着法 VPSA法
- 運転温度: 80°C以下
- 運転圧力: 常圧~3.3kPaA
(25Torr)
- 冷却による回収

Process

Adsorption method : by PSA method

Operation temp. : 80°C or less

Operation press. : Atmos.--3.3kPaA
(25Torr)

Recovery by cooling

High Recovery Ratio

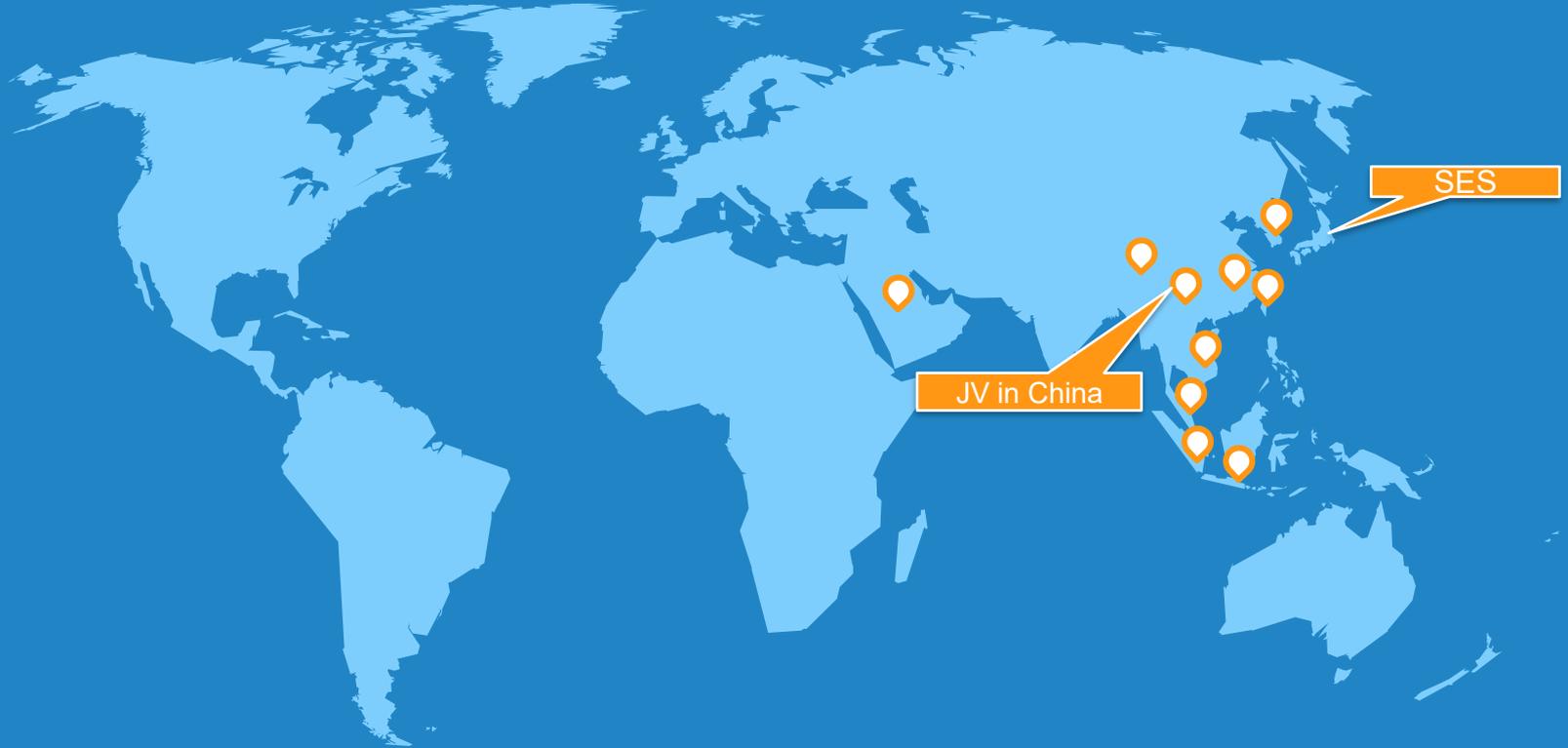
Average of recovery ratio of SES-VRU is approx. more than 95~99%

From actual recovery ratio of the equipment in operation (as at 2026.1.31)

Customer A	Operated years : 8 years Recovering Component : VCM Air Flow : 86m³/h Average inlet gas concentration : 33vol% Outlet gas concentration : Less than 7 ppm	Recovery Ratio 99.9%
Customer B	Operated years : 19 years Recovering Component : Dichloromethane Air Flow : 12.4m³/h Average inlet gas concentration : 29.3vol% Outlet gas concentration : Less than 1 ppm	Recovery Ratio 99.9%
Customer C	Operated years : 10 years Recovering Component : Ethyl acetate Air Flow : 600m³/h Average inlet gas concentration : 11vol% Outlet gas concentration : Less than 28 ppm	Recovery Ratio 99.9%
Customer D	Operated years : 9 years Recovering Component : Acrylonitrile Air Flow : 600m³/h Average inlet gas concentration : 1vol% (Total) Outlet gas concentration : Less than 100 ppm	Recovery Ratio 99.0%

(Recovery ratio shall be different depending on the component and gas-concentration)

Maps





Company Profile



SYSTEM ENG SERVICE CO.LTD

Established : 1990

Capital Stock : JPY 10 million

CEO : Masahiro Nouchi

- Core Business
- Planning, Designing, Manufacturing of Environment Equipment & Plants
 - Planning, Designing, Manufacturing of Testing Equipment.
 - Designing of Hardware & Pipings of Plants

Contact : TEL : +81433503730

Email: m.nochi@system-eng.co.jp