Reduces production costs, saves energy, and helps preserve the global environment

MU Green Technology®



New possibilities for coal-fired thermal power!

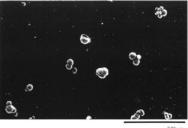
Highly efficient gas cooling, absorption and dissipation as well as dust removal.

Maintenance-free — can operate continuously for 8,000 hours each year.

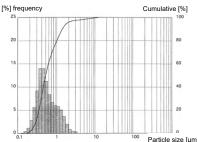
From the company that was the first in Japan to market an absorber using a hydrolysis reaction for silane gases^{*} with a static fluid mixer

* SiCl_4, SiH_3Cl, .SiH_2Cl_2, Si(CH_3)Cl_3, SiF4, etc.

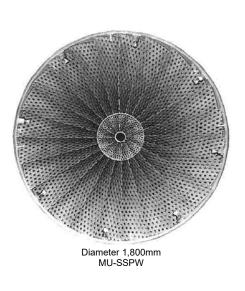
The key was the invention of the <u>MU</u> <u>S</u>tatic <u>S</u>piral <u>P</u>erforated <u>W</u>ings[®]. The spiral internal MU-SSPW unit can be fabricated up to a diameter of 10.0m.



SEM photograph of silane oxide in absorption liquid



Particle diameter and particle size distribution of SiO₂ following dust removal





Before deploying MU Scrubbe



After deploying MU Scrubber

Applications

- 1. System for carbon capture and storage (CCS) of gaseous carbon dioxide (CO₂) emitted by coal-fired thermal power plants and cement factories.
- 2. System for absorption, refining and capture of coal oven gas (COG) emitted by coking plants, which includes approximately 55% hydrogen.
- 3. Hydrolysis treatment system for complete removal of dust and HCI from gaseous silicon tetrachloride (SiCl4) and titanium tetrachloride (TiCl4).
- 4. Treatment system for removal of fine particle (0.3µm or smaller) dust and hazardous gases emitted from waste incineration plants in urban areas.
- 5. Absorption treatment system for use in the event of an emergency atmospheric release of large quantities of gaseous NH₃.
- 6. Low pressure loss vent purification system for use in the event of an accident at a nuclear power station.
- 7. Direct absorption, separation and capture system for gaseous CO₂ in air.
- 8. Gas-liquid contact absorption system for seawater and stored gaseous CO₂.
- 9. Desulfurization and dust removal system for large vessels using seawater.
- 10. System for purifying tritiated water discharged from nuclear power stations using a gadolinium aqueous solution.

Three concentric layer MU-SSPW

USP	
4.466.741	7.510.172
4.747.697	7.975.991
4.878.925	10.124.396
5.605.400	10.195.695
6.431.528	11.253.812

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Technology partnership: WU USA CORPORATION

Patents: Japan, USA, EU, China, Czech Republic, India, Singapore

