

Capture of formaldehyde gas from chemical factory.



Type of exhaust gas: Formaldehyde-containing gas

Air volume : 260m³/min

Model : Rio Deoriser DR-30W

Problem

Customer wanted to reduce concentration of formaldehyde gases generated during manufacture, which are harmful to human health

Challenges

Caution is required to avoid corrosion, explosions, etc. because dangerous exhaust gases that do not dissolve in water, such as carbon disulfide and hydrogen sulfide, are emitted along with formaldehyde.

Solutions

With the Bio Deoriser DR-30W, we set internal air velocity at 0.68 m/sec so as to maximize contact time.

Effects

As expected, carbon disulfide and hydrogen sulfide could only be captured at rates of about 30% to 40%, but 95% or more of formaldehyde could be captured.