Spray Dryer Absorber

SDA

Design features:
A rotary atomizer delivers a slurry of an alkaline reagent into the hot flue gas to absorb the SO$_2$ and other acid gases; a close-coupled particulate control device, typically a fabric filter, is used to collect the unreacted reagent, flyash and reaction products; an optional recycle system returns unused reagent to the rotary atomizer to increase the SDA performance.

Applicable boiler sizes:
To 400 MW for a single module; applications up to 900 MW with parallel modules.

SO$_2$ removal efficiencies:
To 97%.

Reagents:
Lime slurry and optional recycle system.

Fuels:
All solid fuels, including coal, biomass and municipal solid waste, as well as fuel oil.