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[JEP](#) > Vol. 3 No. 4, April 2012



## Study of the Desulfurization Process and Gas-Solid-Liquid Phase Distribution under the Complex Humidification Conditions in Dense Tower

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### Author(s)

Baorui Liang, Cunyi Song, Qian Jia, Donghui Zhang, Xiaoyue Sun, Fan Pan

### ABSTRACT

In making the gas-solid-liquid phase analysis, based on the collaborative study of the internal and external humidification ratio of desulfurization efficiency, determine the humidifier ratio within 60% to 75%, that can make the best balance between the respective merits of a simple tower humidifiers tower humidifier way, optimizing the overall desulfurization reaction, effectively reducing the sticky wall, stick in the desulfurization efficiency and reduce the wall to achieve a balance between the balance, without increasing the sorbent and process water, under the premise can promote the desulfurization reaction, improve the desulfurization sorbent utilization and efficiency, help desulfurization reaction system is stable, efficient and economic operation, the gas-liquid-solid three-phase to achieve better synergy.

### KEYWORDS

Composite Humidification; Dense-Phase FGD; Turbulence Intensity

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