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Authors: Yiqun Huang, Man Zhang, Junfu Lyu, Zhi Liu, Hairui Yang



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Effects of gas leakage on the separation performance of a cyclone. Part 2: Simulation

Yiqun Huang, Man Zhang, Junfu Lyu, Zhi Liu, Hairui Yang*

Key Laboratory for Thermal Science and Power Engineering of Ministry of Education, State
Key Laboratory of Power Systems, Department of Energy and Power Engineering, Tsinghua
University, Beijing 100084, China

* Corresponding author: Tel./fax: +86 010 62773384

E-mail address: yhr@tsinghua.edu.cn

Highlights:

- The CPFD method was used to simulate the gas-solid flow in cyclone and standpipe.
- Gas leakage reduced the swirling intensity in the cyclone.
- Gas leakage made the downward vortex turn upward in advance.
- Gas leakage increased the pressure in the standpipe and the cyclone cone.
- The particle circulations in the cyclone might be enhanced by gas leakage

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