

## 基于CFD的固体颗粒对流量计振动管的磨损分析

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摘要：

流过流量计振动管的固体颗粒的轨迹是不规则的，固体颗粒与流量计振动管内壁发生碰撞，造成了振动管的磨损，限制了流量计的使用寿命。利用CFD流体力学计算软件对管道流体所含固体颗粒对流量计振动管的磨损进行分析与计算，预测流量计的使用寿命，对工程实践有一定的指导意义。

关键词：固体颗粒；磨损；粘度；CFD；预测

## Analysis of Solid Particles Wear Flowmeter Vibration Tube Base on CFD

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**Abstract:**

Trajectories solid particles flow through the vibration tube of flowmeter are irregular. The abrasion of tube is caused by collision of solid particles and the wall of tube. And the abrasion will affect the life of the flowmeter. The CFD software can analyse and calculate the abrasion of vibration tube by solid particles truly and effectively. It can predict the service life of vibration tube and plays an important significance in engineering practice.

**Keywords:** solid particle; vibration tube; viscosity; CFD; predict

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