

## Prediction of particle precipitation in a series of standard cyclones

### Fluid phase :

Air under normal conditions

Density :  $1.21 \text{ kg/m}^3$   
Kinematic viscosity :  $0.0000179 \text{ m}^2/\text{s}$   
Inlet velocity :  $3.8 \text{ m/s} \dots$   
 $\dots 24.8 \text{ m/s}$

### Disperse phase :

Quartz particles

Inlet velocity :  $3.8 \text{ m/s} \dots$   
 $\dots 24.8 \text{ m/s}$   
Density :  $2500.0 \text{ kg/m}^3$   
Particle diameter :  $0.2 \dots 20 \mu\text{m}$   
Restitution coefficient : 0.95  
Coefficient of kinetic friction : 0.35



### Lagrangian prediction of disperse gas-particle flow in cyclone separators

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