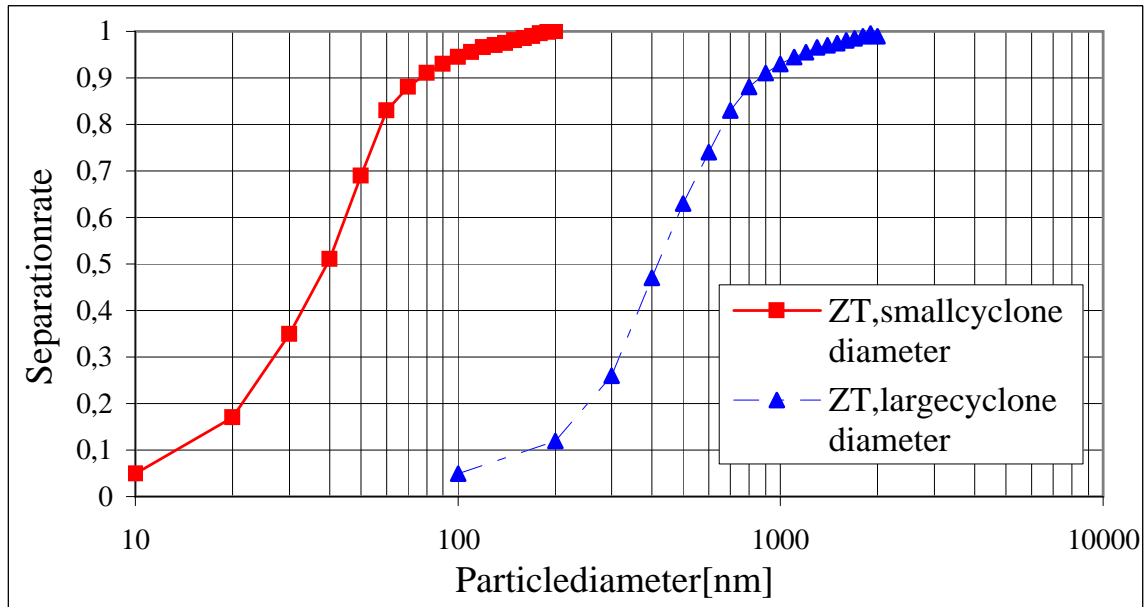


## Particle separation rates for symmetrical double cyclones of different size



- cut size  $x_{50}$  strongly depends on the diameter of the vortex chamber
- symmetrical double cyclone separators can be designed for particle separation in very low particle diameter range (submicron or nanometer particles)

Separation rate for the cyclone with the small diameter of the vortex chamber were obtained from microscopic investigations of the feeding material, the fine particle material from the electrostatic filters and the coarse particle material from the particle settling chamber of the cyclone using scanning electron microscope.

Particle material was aluminium oxide and titanium oxide used as raw material for production of special ceramic material.



### Investigation of Particle Separation in Symmetrical Double Cyclone Separators

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