

Prediction of particle precipitation in a series of standard cyclones

Geometry and numerical mesh :

Series of standard cyclones used in experiments by König (1990)

		Z10	Z20	Z40	Z80
Diameter of the cyclon	D	40 mm	80 mm	160 mm	320 mm
Height of the cyclon	H	195 mm	390 mm	780 mm	1560 mm
Inlet cross section	$a \times b$	$4.5 \times 18 \text{ mm}^2$	$9 \times 36 \text{ mm}^2$	$18 \times 72 \text{ mm}^2$	$36 \times 144 \text{ mm}^2$
Diameter of the gas exit	d_T	10 mm	20 mm	40 mm	80 mm
Height of the gas exit	h_T	31 mm	62 mm	124 mm	248 mm
Diameter of the particle exit	d_B	10 mm	20 mm	40 mm	80 mm

Number of grid blocks :

42

Number of CV's :

241520

