



OUTDOOR
AIR QUALITY



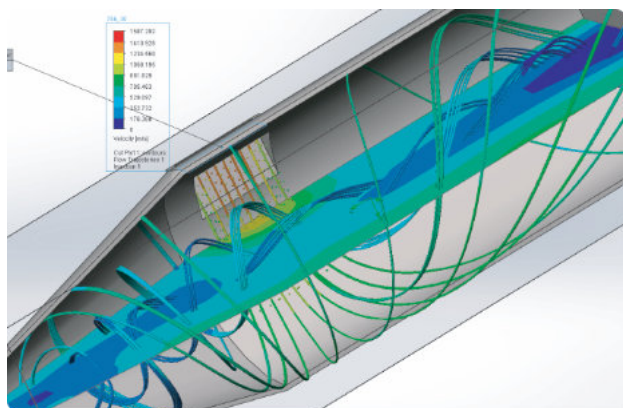
OCCUPATIONAL
HEALTH

MULTISTAGE CYCLONE

PM_{10} , $PM_{2.5}$, PM_1 , PM_4 , POP's

The multistage cyclone allows high volume sampling, avoiding the pressure drop due to traditional membrane filter sampling systems.

Three stage cyclone for size-selective aerosol sampling. Different configurations are available: dry or liquid particle collection in each sampling stage, POPs sampling (gas + PM). The multistage cyclone is combined with traditional high volume samplers for effectively aerosol sampling for outdoor and indoor environmental monitoring.



Example: Environmental sampling (flow 150-200 l/min)



MAIN FEATURES:

- ⊗ Three-stage cyclone separator: 4 stages available for PM_{10} , $PM_{2.5}$, PM_1 , PM_4 fractions;
- ⊗ Dry and wet version;
- ⊗ Workflow: 9-12 m³/h (flow 150-200 L/min) other flows on request;
- ⊗ The cyclone avoids the collection of the aerosol particles on the filter by filtration, making it possible to easily recover the sample (wet/dry) directly from the container for analysis;
- ⊗ High air flow rate (up to 200 L/min)
- ⊗ Different sampling support for wet/dry particle collection (Pyrex, PTFE...)

Available

DRY Version and WET Version





The cyclone can work with all high volume samplers commercially available



Aisi 316
Titanium
Aluminium



9-12 m³/h
150 l/min
200 l/min

Pyrex Container



Sample in Solution



POPs Sampling



Option:
PUF last stage

Deposited aerosol

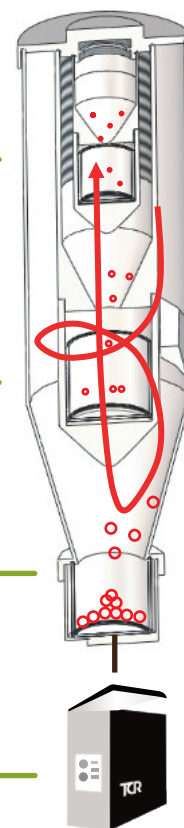
< PM₁

PM_{2.5} - PM₁

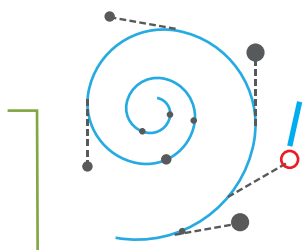
PM₁₀ - PM_{2.5}

> PM₁₀

Regular High
Volume Sampler



Particles, according to their inertia, escape from the main trajectory of the vortex because of centrifugal force and drop into the collection stage



FEATURES:

Maximum flow rate	12 m ³ /h
Operating Temperature	-20°C + 350°C
Stages	PM ₁₀ - PM _{2.5} - PM ₁ - PM ₄ - POP's
Container Material	Pyrex - PTFE - Steel - Titanium - PE
Sampling Stage Diameter (Inner Diameter)	60 mm (stage 1 and 2); 40 mm (stage 3)
Sealings	Viton-PTFE
Lockings	Threaded ring
Pneumatic connections	Standard quick coupling for traditional samplers
Applications	Environmental, emissions, microbiological sampling, viruses, bacteria, toxicology...

ACCESSORIES and LCA CODES:

Multistage 3S Cyclone for Aerosol Collection, Flow Rate 12m ³ /h, 3 stages Pm ₁₀ - Pm _{2.5} - Pm ₁ + Final Full Backup Filter, AISI / Alloy with surface protection treatment	AC99-100-1001SP
Qty 3 Pyrex Collection Plates for Multistages 3S Cyclone, Dry Version collection test tubes	AC99-100-1050SP
Qty 3 PTFE Collection Plates for Multistages 3S Cyclone, Dry Version collection test tubes	AC99-100-1051SP
Qty 3 AISI Collection Plates for Multistages 3S Cyclone, Dry Version collection test tubes	AC99-100-1052SP
Qty 3 Alloy Collection Plates for Multistages 3S Cyclone, Dry Version collection test tubes	AC99-100-1053SP
Qty 3 Pyrex Collection Plates for Multistages 3S Cyclone, Wet Version collection test tubes	AC99-100-1060SP
Qty 3 PTFE Collection Plates for Multistages 3S Cyclone, Wet Version collection test tubes	AC99-100-1061SP
Qty 3 AISI Collection Plates for Multistages 3S Cyclone, Wet Version collection test tubes	AC99-100-1062SP
Qty 3 Alloy Collection Plates for Multistages 3S Cyclone, Wet Version collection test tubes	AC99-100-1063SP
Gasket replacement kit for multistages 3s - Cyclone	AC99-100-1080SP

