



OUTDOOR
AIR QUALITY



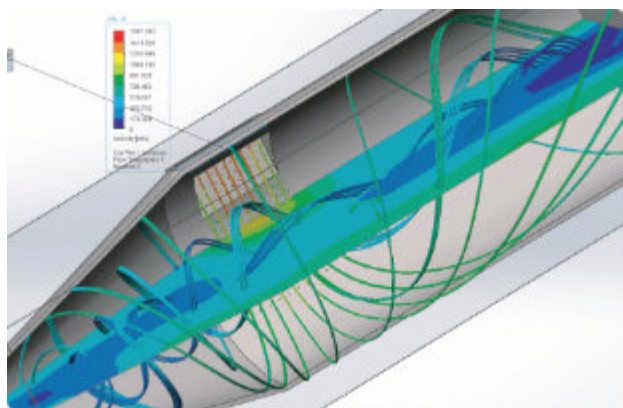
OCCUPATIONAL
HEALTH

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 run with samplers of other manufacturers (please check the feasibility with our TCR Tecora product specialist)



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

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

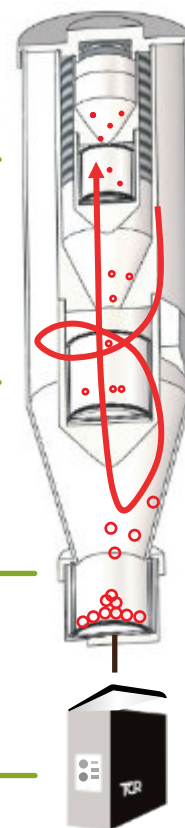
< PM₁

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

