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In accordance with:
VDI 2066 Part.10, EN 13284-1,
EN 12341, ISO 23210-2009

Stack Impactors

Multistage Impactor for PM₁₀ and PM_{2.5} mod. MSSI

MAIN FEATURES

Multistage cascade impactor, realized according to ISO23210-2009 norm for the nozzle dimensioning.

3 particulate cut size during the same sampling:

Standard version

- > Fraction > 10 micron.
- > Fraction from 2,5 to 10 micron.
- > Fraction below 2,5 micron PM4 impactor version.
- > Fraction > 10 micron.
- > Fraction from 4 to 10 micron.
- > Fraction below 4 micron.

Available in Titanium or in stainless steel AISI 316.

MSSI impactor is realized according to ISO23210 norm for the nozzle dimensioning. The impactor allows the simultaneous determination of total dust, PM10 and PM2.5 fractions (PM4 stage also available).

The impactor can be supplied with two different inlet cones to allow the vertical and horizontal sampling, depending on the stream direction into duct (fig. 1 and 2).

The impactor is designed for a high sampling flowrate, about 2 m³/h, depending on emission characteristics, to reduce sampling time.

The device is supplied with a dedicated software, which allows to calculate sampling flowrate, nozzle and others factors to optimize the quality of the measurement.

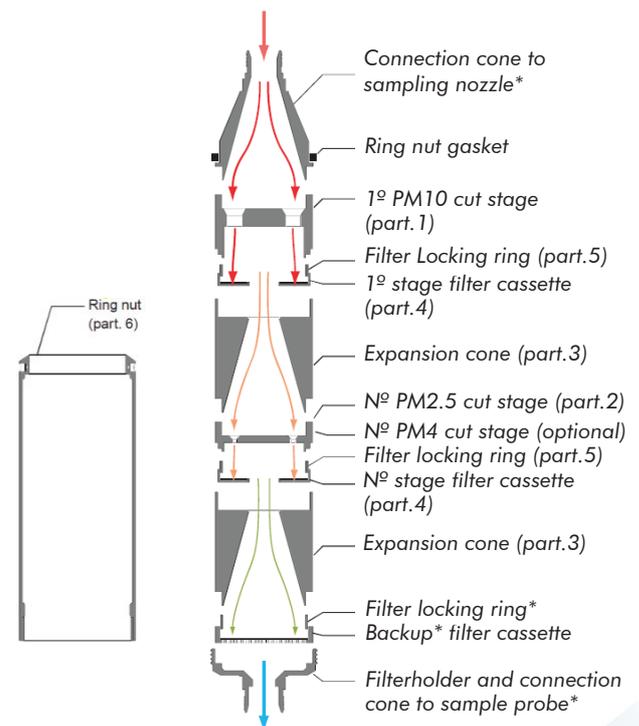
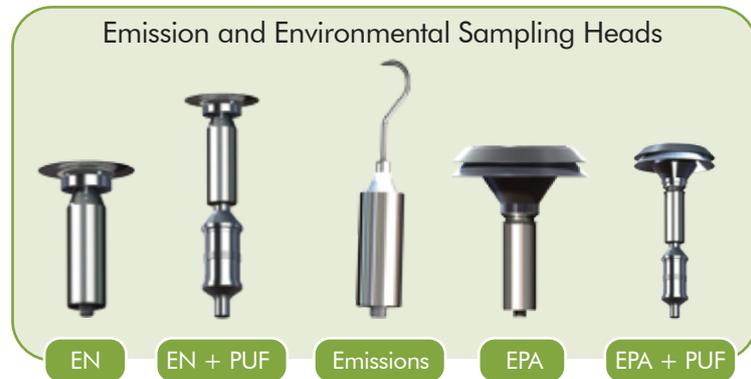
The Titanium impactor allows to determine the gravimetric fraction and to perform the chemical analysis (i. e. heavy metals determination) on the filters as well.



Fig.1 Assembled Impactor with nozzle and cone for sampling in vertical position



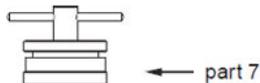
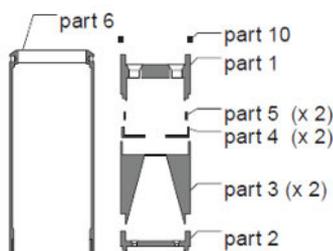
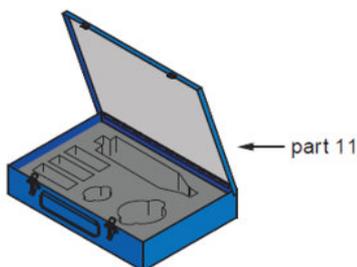
Fig.2 Assembled Impactor with nozzle for sampling in horizontal position





KIT MSSI PM10 / 2.5 / 4 MULTISTAGE STACK IMPACTOR

The MSSI PM10-2.5 impactor is provided with a metal carrying case with compartment, containing the following items:



| Part | Quantity | Description | Codes |
|------|----------|--------------------------------------|-----------------|
| 1 | 1 | I° PM10 cut stage | 999TI175 |
| 2 | 1 | II° PM2.5 cut stage | 999TI174 |
| 3 | 2 | Expansion Cone | 999TI173 |
| 4 | 2 | I° and II° stage filter cassette | 999TI170 |
| 5 | 2 | I° and II° stage filter locking ring | 999TI171 |
| 6 | 1 | Ring nut | 999TI172 |
| 7 | 1 | Cutter device for filter diam. 47mm | 999BB365 |
| 8 | 1 | Assembling base impactor | - |
| 9 | 6 | Petri dish for filter diam. 47mm | BA99-001-0047CR |
| 10 | 1 | Spare gaskets set | AC99-107-9911KP |
| 11 | 1 | Carrying case | - |

MSSI Titanium Kit: P/N AC99-107-0000KP

MSSI AISI 316 steel Kit: P/N AC99-107-0010KP

MSSI PM4 Impactor: P/N AC99-107-9902SP

SPARE PARTS

| Part | Description | Cod. Titanium | Cod. Inox |
|------|--------------------------------|-----------------|-----------------|
| 4/5 | I°-II° stage filterholder case | AC99-107-9900SP | AC99-107-9901SP |
| - | Back-up filterholder case | AC99-105-0002SP | AC99-106-0002SP |
| 9 | 100 Petri dish for filter | BA99-001-0047CR | |
| 10 | Spare Gasket set | AC99-107-9911KP | |

SAMPLING KIT

In order to allow the widest interchangeability with other Tecora accessories, avoiding expensive duplicate, the **MSSI** impactor can be used with filter holder diam 47mm, curves and nozzles used for total particulate isokinetic sampling.

MSSI is supplied with a filter cutter device to make a hole in the 1st and 2nd stage in order to use flat filter diam 47mm made of quartz fiber or other support available on the market.

PM10-2.5 MSSI IMPACTOR ASSEMBLING SIZE ON ISOKINETIC PROBE WITH XL PITOT TERMINAL

Impactor and gooseneck curve size for horizontal positioning allow the use of the Pitot tube XL used with cyclones PM₁₀ - PM_{2.5}.

Pitot XL terminal:
P/N. AC99-099-0064SP

It is also supplied with a base to support the impactor during its assembling.

The unified connections allow the use of the **MSSI** impactor with the one block probes and heated probes manufactured by **TCR TECORA[®]**.

For further information regarding compatible kit please see Product Data Emission Line - Isokinetic Filter Assembly - EA.012.EN.

