



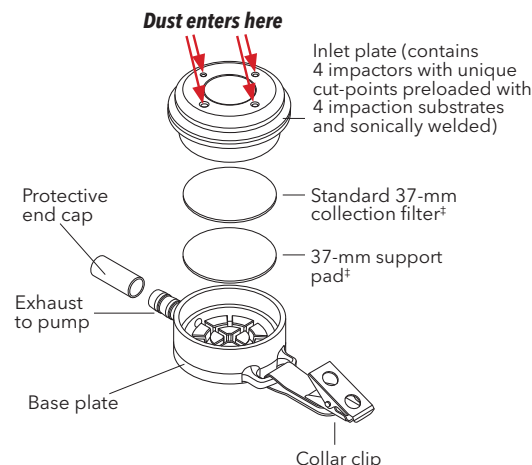
Parallel Particle Impactor (PPI) Samplers – Thoracic

Precise Match to ISO 7708/CEN Criteria



KEY FEATURES

- Collection efficiency precisely matches ISO 7708/CEN size-selection criteria
- Operate at 2 L/min for optimal thoracic sampling of hard metals containing cobalt (Co) and tungsten carbide as Co
 - Reusable model ideal for sampling metalworking fluids (NIOSH Method 5524 and TLV)
- Available in reusable conductive aluminum or single-use plastic
 - Disposable PPIs are lightweight and fit easily under helmets and other PPE
- Disposable PPI Sampler Options
 - Preloaded with MCE or quartz filter and pre-oiled impaction substrates by SKC
 - Empty except for pre-oiled impaction substrates ready for lab or user to load filter
- Respirable PPI models are available

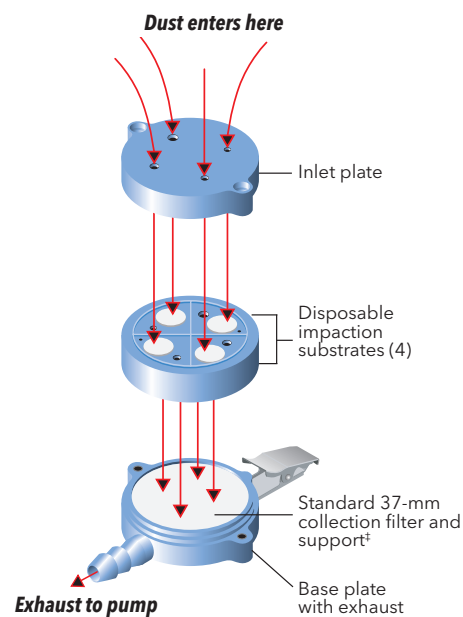


Disposable PPI

SKC Thoracic Parallel Particle Impactor (PPI®) Samplers are similar to traditional 37-mm filter cassettes in that they collect dust on standard 37-mm filters. That's where the similarity ends! The impaction-based PPI Samplers are designed to provide a precise match to the ISO 7708/CEN criteria in a unique way.

How PPI Works

The SKC PPI Sampler contains four small impactors in the inlet section of the device. Each impactor features a unique 50% cut-point to target a specific one-quarter segment of the ISO 7708 curve resulting in a precise fit along the entire curve. A sample pump pulls air through the inlet plate. Particles larger than each impactor's 50% cut-point are scrubbed and retained on the porous oiled impaction substrate, while smaller particles continue to the standard 37-mm collection filter for analysis.



Reusable PPI

† User-installed on non-preloaded PPIs; available already installed on disposable preloaded PPIs. See ordering information.



Distributed by
Air-Met Scientific
1800 000 744
sales@airmet.com.au
www.airmet.com.au

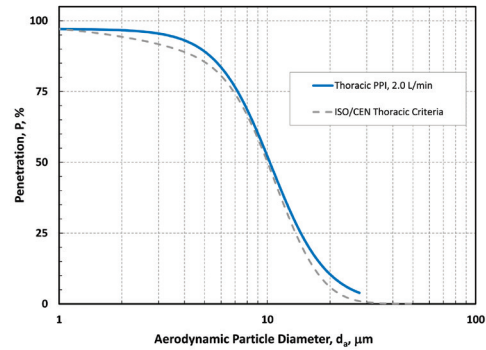
More information



2 | Parallel Particle Impactor (PPI) Samplers - Thoracic

SKC PPI Performance

SKC Thoracic PPI Samplers were evaluated side by side with other size-selective samplers. Potassium sodium tartrate (PST), dioctylphthalate (DP), glass spheres (GS), and coal mine dust were used as test aerosol. A load of approximately 6.8 mg of coal mine dust on the PPI substrates did not adversely affect PPI performance.



Comparison of thoracic PPI Sampler with thoracic ISO/CEN convention

PERFORMANCE PROFILE

Sampling Rate	• 2 L/min
Sample Pump	• AirChek® Touch Series
Sample Time	• Dependent on method used
Sample Media	• 37-mm, 2.0-μm PTFE filter† in Reusable PPI (NIOSH 5524), 37-mm, 0.8-μm MCE filter, or 37-mm Quartz filter
Tubing	• 1/4-in ID tubing
Impaction Substrate	• Four 3/8-in diameter pre-oiled porous plastic discs (preloaded in all Disposable PPIs)
Analysis	• Gravimetric or chemical
Dimensions	• Height (clip to exhaust): 4.25 in (10.8 cm) • Diameter: 1.8 in (4.6 cm) • Depth: 1.2 in (3.0 cm)
Weight	• Disposable Plastic: 1.1 oz (31.2 gm) • Reusable Aluminum: 3.3 oz (93.6 gm)
Shelf-Life (Disposable PPI)	• 18 mos from date of manufacture (based on preloaded impaction substrate)

† Back pressure on PTFE filters can vary within the same lot.

ORDERING

Preloaded Disposable PPI Sampler** Available as Cat. No.

(Contains impaction substrates, collection filter as noted, and cellulose support.)

225-3861	Thoracic PPI (blue), 2 L/min, plastic, with 0.8 μm MCE collection filter
225-3862	Thoracic PPI (blue), 2 L/min, plastic, with R-100 Quartz collection filter
225-3863-PW	Thoracic PPI (blue), 2 L/min, plastic, with 5.0 μm PVC filter

**Designed for one-time use

User-loaded Disposable PPI Sampler Available as Cat. No.

(Contains impaction substrates. Requires collection filter and support pad available separately.)

225-386	Thoracic PPI (blue), 2 L/min, plastic
---------	---------------------------------------

Reusable Aluminum PPI Sampler Available as Cat. No.

(Requires collection filter, support pad, and impaction substrates; see below.)

225-381	Thoracic PPI (blue), 2 L/min, anodized aluminum
---------	---

Recommended Collection Filters for User-loaded PPI Samplers (required for sampling)

225-17-33	PTFE Filters,† 37 mm, 2.0 μm, for MWF, NIOSH 5524, 100 pk
225-1939	MCE Filters, 37 mm, 0.8 μm, 100 pk
225-1827	Quartz Filters, 37 mm, 100 pk
225-5-37	PVC Filters, 37 mm, 5.0 μm, 100 pk

† Back pressure on PTFE filters can vary within the same lot.

Filter Supports for User-loaded PPI Samplers (required for sampling)

225-27	Support Pads, cellulose, 37 mm, 100 pk
225-26	Stainless Steel Support Screen, 37 mm, wide mesh

Impaction Substrates for Aluminum PPI Samplers (four required for each sample)

225-388	Porous Plastic Discs, 3/8-inch diameter, pre-oiled, ready to use, disposable, 200 pk
---------	--

Recommended Accessories

225-389	Calibration Adapter for Disposable PPI
225-111	Multi-purpose Calibration Jar for Aluminum PPI
225-8303A	Filter Keeper, for transport and storage of 37-mm filter, 10 pk
225-8371	Forceps, stainless steel, with non-serrated flat tips



For details and additional accessories, visit the [Thoracic PPI](#) on our website.