

SIBATA

Product lineup

- ASBESTOS SAMPLING



Procedures for measurement of suspended asbestos

Sampling

Ambient air (Site border), Industrial hygiene, and Building environment

Filter clearing





Clearing a filter by acetone vapor.
Filter Clearing Kit, "Quick Fix"

**Counting using
Phase-contrast microscope**

Counting Analysis by phase-contrast microscope (X400). Length: $5\mu\text{m}$ and more, width: less than $3\mu\text{m}$, Aspect ratio: 3 and more.

**Asbestos Fiber
Concentration**

Purposes and methods of Asbestos measurement for air environment in Japan

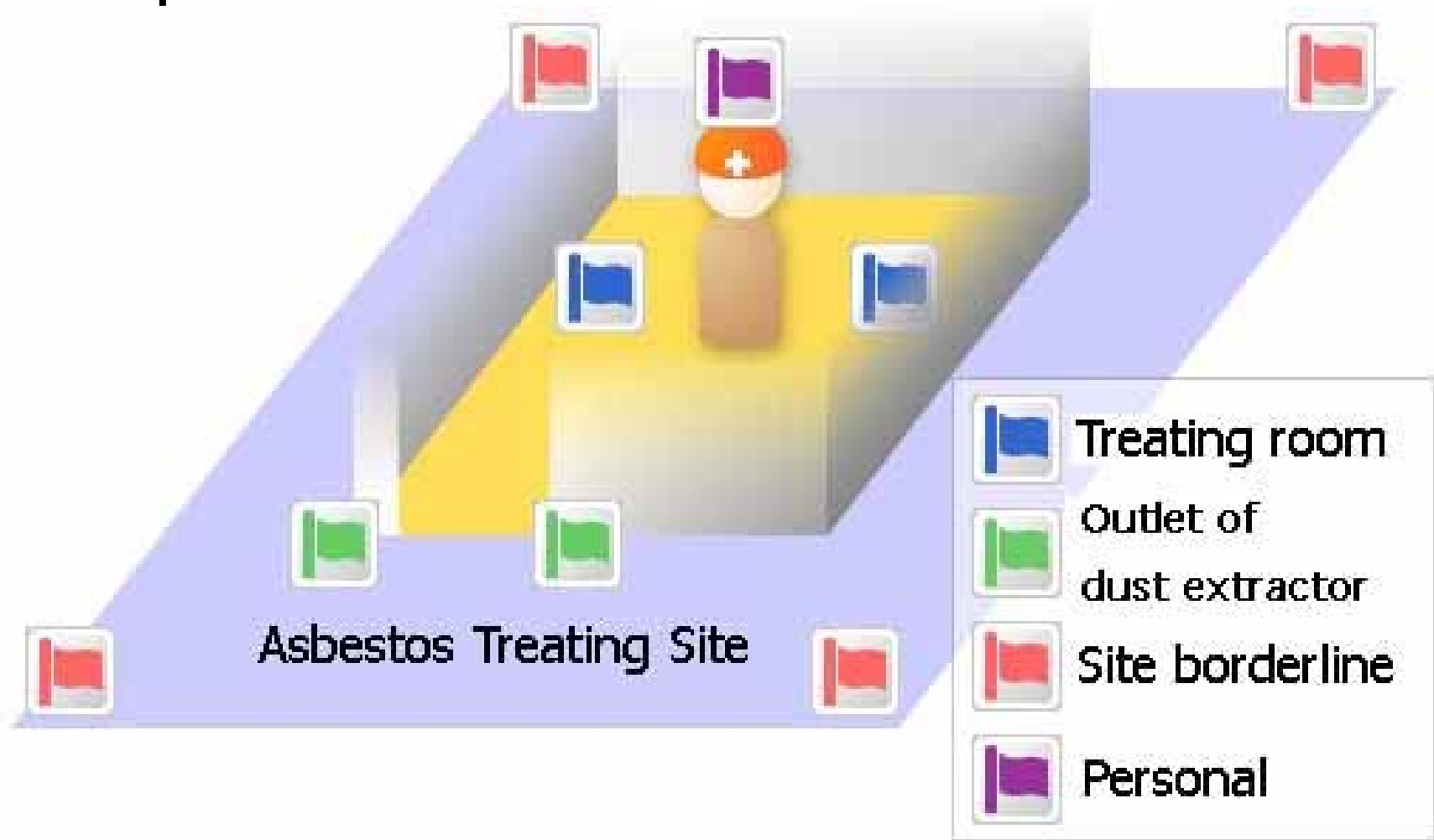
Item	Industrial Hygiene measurement	Building room	Border line of lot	Individual exposure measurement
Purpose	Industrial Hygiene measurement in unit work places based on the Industrial Safety and Health Law	Measurement of concentration of asbestos dust in building room for which spraying asbestos is used	The concentration of the asbestos within the border line of lot in the asbestos manufacturing office and processing workshop is measured based on the air pollution control law	The exposure of worker's individual industrial hygiene is measured based on fieldwork environment guideline
Sampling Position	50 to 150cm in height for unit work place	50 to 150cm for height in unit work place	Five places in total. North, south, east, and west in border line of lot. Place where the most asbestos should be suspended into air.	Worker's inhalable region
Flow rate / time	Side velocity of 4.0 to 5.0 cm/s. 15min. or more in 1L/min usually.	5L / min × 120min	10L / min × 240min	8h or more in 1~ 2.5L / min usually.
Standard	0.15 f / cm ³	—	10 f / L	0.15 f / cm ³
Our samplers	APS-6 / 62 	AS-510 / 520 	AS-100 	APS-1 

※Please use the AIP-105 for sampling requires flow rate of 5L/min. In this case, MP-Σ 500 and SIP-32L will not fit the specifications.





Concentration measurement in asbestos removal construction (Public architectural repair work standard specifications)

Measurement time	Measurement code	Place	Point	Remarks
Before removal	Measurement 1	Investigated room	Two or three points for each	Note 1
	Measurement 2	Outside of investigated room	Two points in total	Ambient air
During removal	Measurement 3	Investigated room	Two or three points for each	Note 1
	Measurement 4	Exhaust of dust removal device (negative pressure)	Two points for each at position of exit blow velocity of 1m/sec or less	—
	Measurement 5	Outside of investigated room	Four direction one point for each (borderline of lot)	—
After removal (During sheet treatment)	Measurement 6	Investigated room	Two points for each	—
After removal (one week after removing the sheet)	Measurement 7	Investigated room	Two or three points for each	Note 1
	Measurement 8	Outside of investigated room	Two points in total	Ambient air

Note 1: Two points measurement is for area of room of each construction part of 50m² or less, and three points for 300m² or less. It is necessary to confer with the supervisor staff for area larger than 300m².

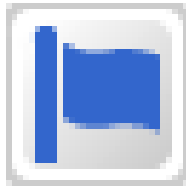


Measurement Method

	 Measurement 3	 Measurement 1, 2, 4, 6, 7, & 8	 Measurement 5	 Individual exposure measurement (recommendation)
Counting equipment	Phase-contrast microscope			Same as on the left
Diameter of membrane filter	Φ25mm		Φ47mm	Φ25mm
Flow rate	1L / min	5L / min	10L / min	1~2.5L / min
Sampling time	5min	120min	240min	Working hour
Clearing	Aseton-triacetin method, or Diethyl oxalate method			Same as on the left
Counting condition	200 numbers of total asbestos fibers, or 50 microscopical fields			Same as on the left
Asbestos fiber that is to counted	Length: 5 μ m or more, Width: less than 3 μ m, Aspect Ratio: 3 or more			Same as on the left
Quantitation limit	50 f / L	0.5 f / L	0.3 f / L	—
Our samplers	APS-6	AS-510 / 520	AS-100	APS-1

※This catalogue is made based on Public architectural repair work standard specifications, Chapter 9 paragraph 1, asbestos processing construction (Ministry of Land, Infrastructure and Transport. There are lot of providing situations of actual measuring method and condition because of the ordinance of the each one local government.

※Please use the AIP-105 for sampling requires flow rate of 5L/min. In this case, MP-Σ 500 and SIP-32L will not fit the specifications.

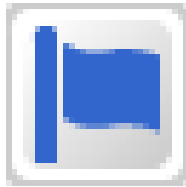


Asbestos Stand Sampler

Model : APS-7



Model	APS-7
Example of use	Flow rate: 1L / min Filter diameter: ϕ 25mm
Component	Filter Holder (for ϕ 25mm) x6pcs. Membrane Filter AAWP-02500 x100pcs. Mini Pump, MP- Σ 300N Tripod Holder bracket Tweezers
Code	080140-7



Asbestos Stand Sampler Disposable Filter Holder Type Model : APS-72



Model	APS-72
Example of use	Flow rate: 1L / min Filter diameter: ϕ 25mm
Component	Sampling Holder (disposable) x 50pcs. Mini Pump, MP- Σ 300N Tripod Holder bracket Tweezers
Code	080140-72

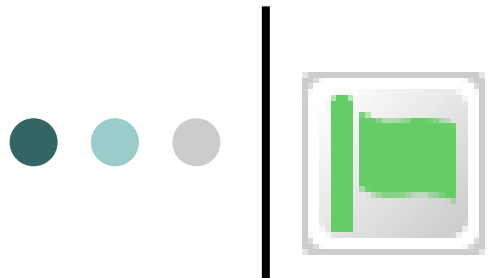


Asbestos Dust Sampler

Model : AS-510



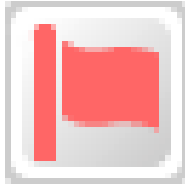
Model	AS-510
Example of use	Flow rate: 5L / min Filter diameter: ϕ 25mm
Component	Filter Holder (for ϕ 25mm) 6pcs. Membrane filter AAWP-02500 X100pcs. Asbestos Sampling Pump, Model AIP-105 Tripod Holder bracket Tweezers
Code	080140-510



Asbestos Dust Sampler Disposable Filter Holder Type Model : AS-510



Model	AS-520
Example of use	Flow rate: 5L / min Filter diameter: ϕ 25mm
Component	Sampling Holder (disposable) x50pcs. Asbestos Sampling Pump, Model AIP-105 Tripod Holder bracket Tweezers
Code	080140-520

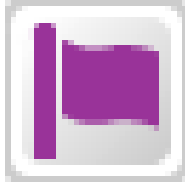


Asbestos Dust Sampler

Model : AS-100



Model	AS-100
Example of use	Flow rate: 10L / min Filter: ϕ 47mm
Component	Filter Holder (for ϕ 47mm) Membrane Filter AAWP-04700 100pcs. Filter clip (for ϕ 47mm) 10sets Asbestos Sampling Pump, AIP-105 Tripod, Extension rod for tripod Holder bracket Tweezers
Code	080140-100



Personal Asbestos Dust Sampler

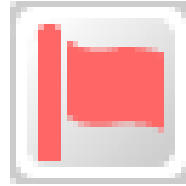
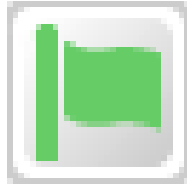
Model : AS-100



Model	APS-1
Example of use	Flow rate:1L / min Filter diameter: ϕ 25mm
Component	Filter Holder (for ϕ 25mm) x 6pcs. Membrane Filter AAWP-02500 x100pcs. Mini Pump, Model MP-2N Flowmeter Tube Tweezers
Code	080140-07

Asbestos Dust Sampling Pump

Model : AIP-105



Model	AIP-105
Flow rate range	1.5~13L / min (No pressure)
Flowmeter	1.5~15L / min
Max suction pressure	80kPa
Operation temperature limit	0~40°C
Timer	0.1sec. ~9990hr.
Inlet	Outer diameter : ϕ 8mm (IN)
Power supply	AC100V 50/60Hz 0.5A (Fuse 2A) or DC12V (Battery Unit, BU-105: Option)
Dimintions	200(W) \times 250(D) \times 210(H) mm (umbo is excluded)
Weight	Approx. 4.0kg
Code	080800-105

Battery Unit for AIP-105

Model : BU-105



バッテリーユニット装着時

Battery Unit attached

Model	BU-105
Battery	DC12V lead battery (12V 12Ah × 2)
Operation time	Φ25mm Open face, Disposable 5L/min: 5 hours and more Φ47mm Open face 10L / min: 5 hours and more
Operation temperature	10~40°C
Dimensions	200(W) × 250(D) × 145(H) mm (umbo is excluded)
Weight	Approx. 10.5kg
Code	080800-106



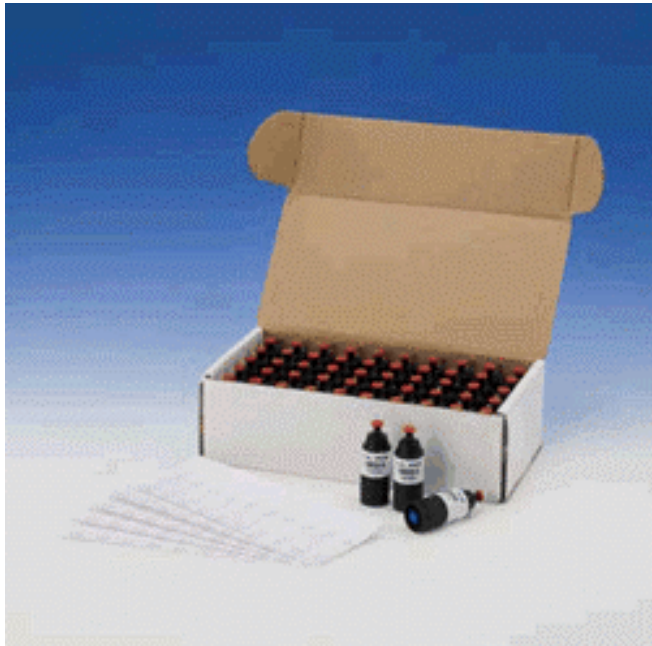
Battery Charger for AIP-105 Model : BC-105



Model	BC-105
Rated output	DC24V 75W
Operation temp.	10~40°C
Power supply	AC100V 50 / 60Hz 1.5A (Fuse 2A)
Dimensions	200(W) × 250(D) × 85(H) mm (Umbo is excluded)
Weight	Approx. 1.5kg
Code	080800-107

Battery Charger attached

Asbestos Fiber Sampling Holder Disposable Type



Membrane Filter	Φ 25mm, white	Φ 25mm, with grit
Component	50pcs. / box	
Dimensions	Approx. ϕ 29x80 mm	
Rubber stop diameter	Φ 7.65mm	
Code	080140-61	080140-62

Filter Clearing Kit “Quick Fix”



Item	Filter clearing Kit “Quick Fix”
Power Supply	AC115V 50/60Hz 150W
Dimensions	118(W) x 107(D) x 245(H)mm
Code	080140-47



Dispenser, “HANDIEPETTER”



Item	Dispenser, “HANDIEPETTER”
Accessory	Syringe 0.6, 1.5, 6.0mL x one for each
Code	025070-1



Mask Fitting Tester, MT-03



Model	MT-03
Measuring principle	Light Scattering method
Measuring range	0 – 9999999 count
Leakage	0 – 100%
Power supply	AC100 – 240V 50/60Hz
Dimensions	270(W) x 310(D) x 210(H) mm
Weight	Approx. 4.3kg
Code	080200-06