Operating Instructions

863 Valley View Road, Eighty Four, PA 15330
724-941-9701 • skcinc.com

Multi-purpose Calibration Jar
Cat. Nos. 225-111 and 225-112

Introduction

The Multi-purpose Calibration Jar is used in flow rate verification trains with the GS-1 Respirable Dust Cyclone Cat. No. 225-105; GS-3 Respirable Dust Cyclones Cat. Nos. 225-100 and 225-103; Reusable Aluminum Parallel Particle Impactors (PPIs) Cat. Nos. 225-380, 225-381, 225-382, and 225-383; and Low-volume PUF Tubes Cat. No. 226 Series.

Description

The Multi-purpose Calibration Jar is a polypropylene jar with a quick-screw lid. On top of the lid are a barbed elbow fitting for easy connection to a flowmeter and an outlet with Tygon tubing attached for connection to a sample pump; on the inside of the lid is a Luer adapter. Two sizes are available, Cat. Nos. 225-111 (32 ounces) and 225-112 (large, for devices up to 8 inches long by 3.25 inches in diameter); each one has an adapter with a soft tubing end and a rigid end. SKC recommends using the smallest calibration jar possible if using a piston-style primary calibrator, since dead volume in the jar can lead to erroneously low readings.

Required Equipment

- ☑ **Sample pump** capable of specified flow rate
- ☑ **1/4-inch ID (3/8-inch OD) Tygon tubing** for connection to flowmeter
- ☑ **Flowmeter**

Operation

Setup and Flow Rate Verification in Calibration Jar *(Figure 1)*

SKC recommends using the smallest calibration jar possible. To achieve this, do NOT use Cassette Holder Cat. No. 225-1 during flow rate verification.

1. Prepare the GS-1 or GS-3 Cyclone/cassette assembly, Reusable PPI, or Low-volume PUF Tube for jar flow rate verification per applicable operating instructions. ***Note:*** Representative media **must** be in line for flow rate verification.

2. Unscrew and remove the lid from the calibration jar. Attach the sampler to the inside of the jar lid as follows:
   a. **Cyclone:** Attach the cyclone/cassette assembly outlet to the Luer adapter on the inside of the jar lid. **Ensure that the grit pot remains on the cyclone body during flow rate verification.**

   b. **Reusable PPI or Low-volume PUF Tube:** Attach the soft tubing end of the supplied adapter to the PPI outlet or PUF Tube outlet (narrower end). Attach the rigid end of the adapter to the Luer adapter on the inside of the jar lid.

3. Place the attached sampler inside the jar. Put the lid on the jar, turning it until it is tightly sealed.

4. Using 1/4-inch flexible tubing, connect the outlet (suction port) of the flowmeter to the barbed elbow fitting on top of the jar lid.

5. Connect the tubing attached to the lid outlet to the sample pump inlet.

6. Turn on the sample pump and verify the desired flow rate *(see pump and flowmeter operating instructions)*.

7. After verifying flow rate, disconnect the tubing from the pump and calibration jar; open the jar and remove the sampler, replacing it with an unused sampler and/or media for sampling.

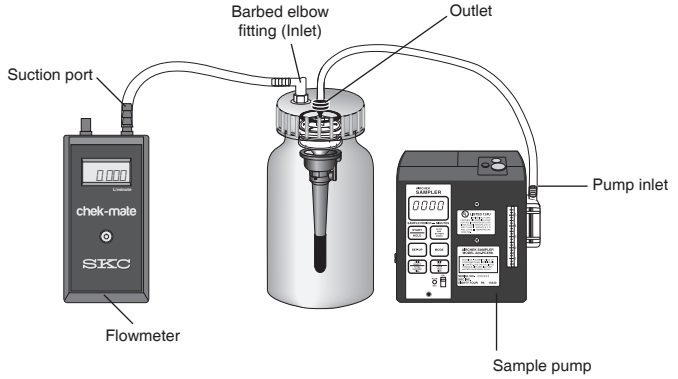

Figure 1. *GS-1 Cyclone/cassette assembly inside Multi-purpose Calibration Jar*

SKC Limited Warranty and Return Policy

SKC products are subject to the SKC Limited Warranty and Return Policy, which provides SKC's sole liability and the buyer's exclusive remedy. To view the complete SKC Limited Warranty and Return Policy, go to skcinc.com/warranty.

Form 37105 Rev 250204