



# SKC Respirable Dust Cyclone Performance Guide

Publication 1519 Rev 1809

## Optimal flow rates to meet performance criteria



**SKC Aluminum Cyclone**  
Cat. Nos. 225-01-01, -01-02  
2.5 L/min for 4- $\mu$ m 50% cut-point

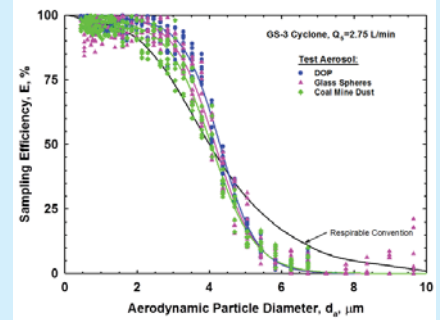
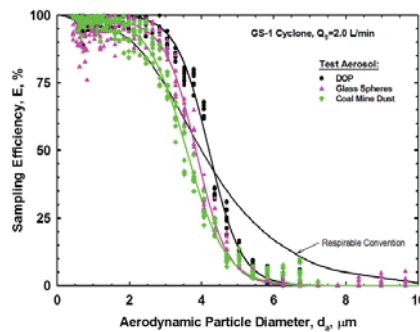
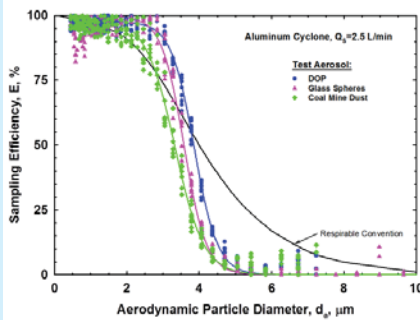


**SKC GS-1 Cyclone**  
Cat. No. 225-105  
2 L/min for 4  $\mu$ m 50% cut-point  
3 L/min for 3.5- $\mu$ m cut-point  
1.7 or 2 L/min with DPM cassette



**SKC GS-3 Cyclone**  
Cat. Nos. 225-100, -103  
2.75 L/min for 4- $\mu$ m cut-point

## Collection efficiency relative to ISO 7708/CEN criteria in OSHA silica rule and ACGIH® TLV®s



## Advantages

- Conductive aluminum eliminates electrostatic effects
- Specified in NIOSH methods
- Meets criteria in OSHA silica rule
- Suitable for ACGIH respirable TLVs

- Not a spark hazard for underground use
- Meets MSHA specifications for silica standard and DPM sampling
- Meets ISO 7708/CEN criteria and OSHA silica rule; suitable for ACGIH respirable TLVs

- Unique design overcomes disadvantages of 10-mm nylon cyclone
- Meets OSHA criteria
- Not a spark hazard for underground mine use

## References available

*Journal of Aerosol Science* 09/1998; 29  
<http://doi.org/b958xd>  
Reprints are available from SKC.

*NIOSH Method 7500*  
[www.cdc.gov/niosh/docs/2003-154/pdfs/7500.pdf](http://www.cdc.gov/niosh/docs/2003-154/pdfs/7500.pdf)

*NIOSH Method 0600*  
[www.cdc.gov/niosh/docs/2003-154/pdfs/0600.pdf](http://www.cdc.gov/niosh/docs/2003-154/pdfs/0600.pdf)

*OSHA Final Rule on Respirable Crystalline Silica*, [www.osha.gov/silica/](http://www.osha.gov/silica/)

*AIHA Journal* 1995; 56,  
<http://doi.org/bdjrmv>

*AIHce Presentation 191, 2003*  
<http://bit.ly/1NW1wgf>  
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*AIHA Journal* 1995; 56,  
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*Journal of Aerosol Science* 07/1997; 28 pp.  
<http://doi.org/fhsgrz>

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*OSHA Final Rule on Respirable Crystalline Silica*, [www.osha.gov/silica/](http://www.osha.gov/silica/)