## ISO 23875 STANDARD FOR CAB AIR QUALITY

## Protect Workers' Air Quality; Reduce Occupational Exposure to Dust and and CO<sub>2</sub>

ISO 23875 is an international standard that creates a consistent approach to designing, testing, operating, and maintaining operator enclosures with respect to air quality; performance requirements include:



### **Defined** CO<sub>2</sub> Levels



First alarm threshold: Ambient CO<sub>2</sub> level plus 400 parts per million (PPM). Second CO<sub>2</sub> alarm threshold: 2,500 PPM.

#### **Defined Fresh &** Recirculation System Efficiency



**RESPA FFX2** 

SY-KLONE

Maximum respirable particulate matter concentration less than 25 micrograms per cubic meter of air at start and end of decay test (maximum 120 second decay time).

### Increased **Filter Efficiency** Requirements



Filtration that exceeds 94% efficiency at 0.3 microns is recommended. Filters must pass the required intake air leakage and particle decay tests.

## **Defined Pressurization** Requirements



Operator enclosures must maintain a minimum pressure of 20 Pa with key on and HVAC blower turned off.

## Defined, Real-Time Monitoring Requirements

Monitor must include an audible alarm for CO<sub>2</sub> and pressurization to alert the operator when levels exceed the permissible pressure range and CO<sub>2</sub> thresholds.

## Meet ISO 23875 requirements with Sy-Klone Cab Air Quality Systems For new and existing mobile equipment, fixed plant, and enclosures

#### ISO 23875 performance requirements:



Levels







Efficiency





Defined

Real-Time Monitor

The Sy-Klone RESPA® fresh and recirculated cab air quality systems, RadialSHIELD® high-efficiency HEPA and EPA filters, and the RESPA Advisor®+ Monitor, combined with a well-sealed cab, provide the engineering controls needed to prepare a cab to meet ISO 23875 performance requirements.

## **Contact Sy-Klone for more information:**

Sy-Klone.com Sales@Sy-Klone.com











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Implementing ISO 23875 at your company or job site



- Contact Sy-Klone for a Solution Provider referral, or connect your existing mobile HVAC service provider with Sy-Klone
- Solution Provider can retrofit existing fleet for you, or provide products to your maintenance department for installation

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## HQ

- Adopt ISO 23875
   as company-wide
   cab air quality standard
- Include "ISO 23875-compliant cab" on new machine tenders and heavy equipment purchase specifications
- Create a plan for retrofitting existing fleet



**Electrical Cabinets** 

**Fixed Enclosures** 

## **Job Site**

- Adopt ISO 23875 as a cab air quality approach for existing heavy mobile equipment
- Monitor cab pressure to develop planned maintenance cycle for filter changes

- Create a schedule for routine testing of cab air quality
- Work with Solution Provider for ongoing maintenance, testing, and certification if desired