



RESPIRATORY SOLUTIONS FOR NEW SILICA STANDARDS

The US Occupational Safety and Health Administration (OSHA) has published its final rule to help curb various silica-related diseases including silicosis in America's workers by limiting their exposure to respirable crystalline silica. Moldex strongly encourages anyone exposed to crystalline silica to review and understand the entire regulation prior to work. The regulation, preamble, US OSHA Fact Sheet on Construction and FAQ are available on the OSHA website and should be consulted to help ensure a complete understanding of this regulation (www.OSHA.gov).

About 2.3 million workers are exposed to respirable crystalline silica in their workplaces, including 2 million construction workers who drill, cut, crush, or grind silica-containing materials such as concrete and stone, and 300,000 workers in general industry operations such as brick manufacturing, foundries, and hydraulic fracturing, also known as fracking.

Key Provisions Of New Standards With Regard To Respiratory Protection:

- Reduces the permissible exposure limit (PEL) for respirable crystalline silica to 50 micrograms per cubic meter of air, averaged over an 8-hour shift.
- Requires employers to provide respirators when engineering controls cannot adequately limit exposure.

Two Different Standards

OSHA developed two standards to protect workers from exposure to respirable crystalline silica—one for construction, and the other for general industry and maritime—in order to allow employers to tailor solutions to the conditions in their workplaces.

Construction industry stakeholders indicated the need for guidance and a standard that is different than a standard for general industry. Among their concerns was the impracticality of exposure monitoring based on short duration of task and constantly changing conditions, such as weather, job sites and materials. In response OSHA developed 29 CFR 1926.1153, Table 1. It identifies 18 common construction tasks that may generate high exposures to respirable crystalline silica and for each task, specifies engineering controls, work practices, and respiratory protection that effectively protect workers. Employers who fully and properly implement the engineering controls, work practices, and respiratory protection specified for a task on Table 1 are not required to measure respirable crystalline silica exposures to verify that levels are at or below the PEL for workers engaged in the Table 1 task. US OSHA does not specify the type of respirator to be used, only the minimum assigned protection factor (APF) the respirator must have per 29 CFR 1910.134(d)(3)(i)(A).

Moldex recommends employers review and understand 29 CFR 1926.1153, the preamble to the regulation, the FAQ and Fact Sheet on Construction for detailed information on silica hazards and other compliance information. A respirator program meeting the requirements of 29 CFR 1910.134 must be implemented when respirator use is required. Employers and workers must read, understand and follow the procedures and recommendations in the respirator manufacturer's user instructions.

The table below is an abridged version of Table 1 – 29 CFR 1926.1153. It is recommended that users review and understand the full version before beginning any work.

OSHA STANDARD ON RESPIRABLE CRYSTALLINE SILICA

APF = Assigned Protection Factor

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TASK	WHEN USED	Minimum APF for given time AND all specified engineering controls are in place per 29 CFR 1926.1153(c)		TASK	WHEN USED	Minimum APF for given time AND all specified engineering controls are in place per 29 CFR 1926.1153(c)	
		≤ 4 HR/DAY	> 4 HR/DAY			≤ 4 HR/DAY	> 4 HR/DAY
Stationary masonry saws	OUTDOOR or INDOOR	OPTIONAL	OPTIONAL	Walk-behind saws	OUTDOOR	OPTIONAL	OPTIONAL
					INDOOR or IN ENCLOSED AREA	APF 10	APF 10
Handheld Power saws (any blade diameter)	OUTDOOR	OPTIONAL	APF 10	Driveable Saws Outdoor Tasks Only ¹	OUTDOOR	OPTIONAL	OPTIONAL
	INDOOR or IN ENCLOSED AREA	APF 10	APF 10				
Handheld Power saws for cutting fiber-cement board (with blade diameter of 8 inches or less)	OUTDOOR or INDOOR	OPTIONAL	OPTIONAL	Rig-mounted core saws or drills	OUTDOOR or INDOOR	OPTIONAL	OPTIONAL

¹ - Applies to outdoor work only. Indoor work is not covered in Table 1 – 29 CFR 1926.1153 or this chart

MOLDEX APF 10 RESPIRATORS

MOLDEX APF 50 RESPIRATOR

2-Strap

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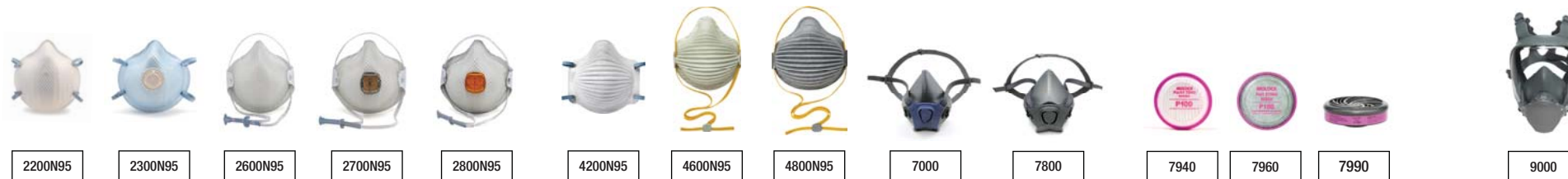
Half Mask

P100 Filters for Reusable Respirators

Full Face

Currently only Moldex P100 filter disks can be used as a stand-alone particulate filter with the 7000, 7800 and 9000 Series reusable respirators.

Full facepiece respirators must be fit tested using quantitative methods for an APF of 50



IMPORTANT – The OSHA Silica Standards are a minimum. An employer can provide their employees with a respirator even though the standard may not require it. As always, when the employer provides an employee with a respirator they must comply with 29 CFR 1910.134, and any other Federal, State or Local regulations, as appropriate. **Moldex respirators MUST NEVER be used for sandblasting** or for any associated applications where direct exposure to sandblasting may occur and the employer must refer to the respective OSHA regulations when sandblasting.

Your local Moldex Territory Manager or our Technical Service Helpline (800-421-0668 x512) can discuss alternative products and their features. It is the responsibility of the employer or safety professional to review the worksite to determine if the PPE is appropriate for the hazards and to identify any additional hazards that must be controlled. Assessments should be repeated as needed to identify changes in conditions, tasks, tools and work practices as the project progresses.

REFERENCE - OSHA's final rule to protect workers from exposure to respirable crystalline silica, the standards for construction and general industry and maritime, full text of Table 1 – 29 CFR 1926.1153 as well as small entity compliance guides can all be found on OSHA's website at www.osha.gov.

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Handheld and stand-mounted drills (including impact and rotary hammer drills)	OUTDOOR or INDOOR	OPTIONAL	OPTIONAL	Jack-hammers and handheld power chipping tools	OUTDOOR	OPTIONAL	APF 10
					INDOOR or IN ENCLOSED AREA	APF 10	APF 10
Dowel drilling rigs for concrete Outdoor Tasks Only ¹	OUTDOOR	APF 10	APF 10	Handheld grinders for mortar removal (i.e., tuck-pointing)	OUTDOOR or INDOOR	APF 10	APF 25 ²
Vehicle-mounted drilling rigs for rock and concrete	OUTDOOR or INDOOR	OPTIONAL	OPTIONAL	Handheld grinders for uses other than mortar removal)	OUTDOOR	OPTIONAL	OPTIONAL
					INDOOR or IN ENCLOSED AREA	OPTIONAL	APF 10

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² - For operations which require a respirator with an APF of 25 a Moldex 9000 Series full facepiece respirator, quantitatively fit tested and fitted with particulate pre-filter plus gas/vapor cartridge or stand-alone particulate filter disk, at a minimum, must be used.

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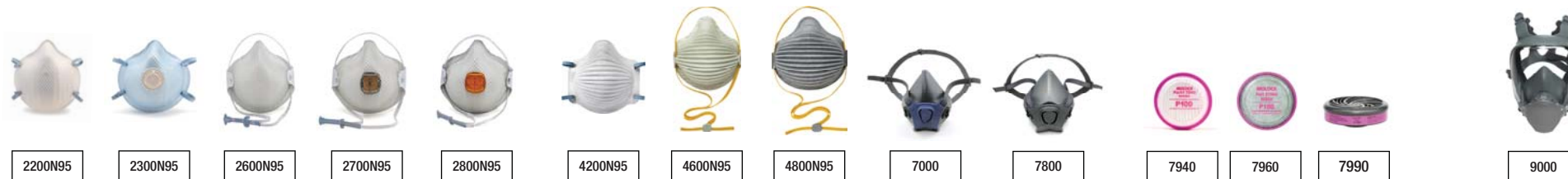
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Walk-behind milling machines and floor grinders	OUTDOOR or INDOOR	OPTIONAL	OPTIONAL	Crushing machines	OUTDOOR or INDOOR	OPTIONAL	OPTIONAL
Small drivable milling machines (less than half-lane)	OUTDOOR or INDOOR	OPTIONAL	OPTIONAL	Heavy equipment and utility vehicles used to abrade or fracture silica-containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials	OUTDOOR or INDOOR	OPTIONAL	OPTIONAL
Large drivable milling machines (half-lane and larger)	OUTDOOR or INDOOR	OPTIONAL	OPTIONAL	Heavy equipment and utility vehicles for tasks such as grading and excavating but not including: demolishing, abrading, or fracturing silica containing materials	OUTDOOR or INDOOR	OPTIONAL	OPTIONAL



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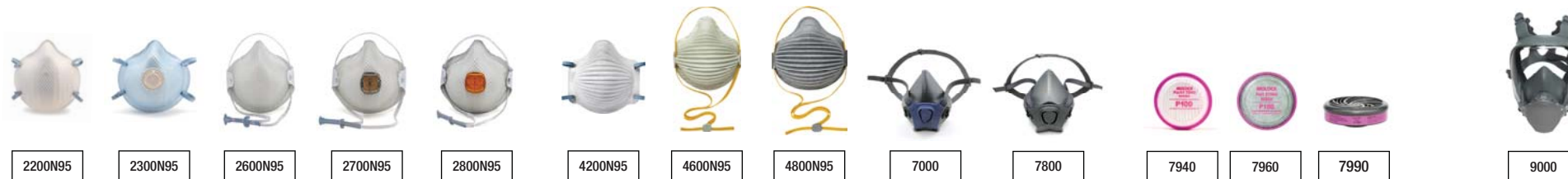
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