



Breathe In and Breathe Out

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You're familiar with dust masks. Even if you're a mechanical shop, you probably have some lying around, purchased, perhaps, when your sandblasting cabinet developed a bad leak. Did you know those are considered respirators? And while they are easy and convenient to use, you do need to take a few precautions to ensure they are used correctly.

What makes those respirators? A respirator is something designed to filter the air you breathe or to provide clean air to you. In the US, a respirator has to meet standards set by NIOSH, the research and training sister of OSHA. If it has just one strap and is called a nontoxic particle mask, it isn't (legally) a respirator. We advise against using those. They're good for removing the boulders, the dust particles that would be caught in your nose and throat. But they don't stop any dust that can deeper into your lungs. They don't belong in the workplace.

Instead, the minimum for industrial use is an N95 filter. It has the designation *N*, because it will not stop oily particulates. 95 refers to the filtering efficiency. It can stop 95% of particles that are 0.3 microns in size (microscopic), a particularly hard size to capture.

OSHA calls the disposable N95 respirators filtering facepieces, because "dust mask" so often refers to the cheap nonparticle mask. And OSHA rightly considers them respirators, covered by the Respiratory Protection Standard.

If you require employees to use respirators, OSHA's respiratory protection standard says that you have to make sure the employees receive medical approval to use respirators. You need to train employees each year. You need to test the fit of the respirator on the user each year. And you have to have a written program that describes what respirators are required and how they will be cared for. Doesn't that seem like a lot of bother for a dust mask?

Fortunately, most uses of dust masks (filtering facepieces) in both mechanical and body shops are voluntary. Employees use the respirators for comfort, not because dust levels are so high that they could be overexposed. For tasks such as sanding body filler, we recommend using N95 respirators, unless other dust control measures (such as vacuum-equipped tools) are available, because breathing a lot of dust is uncomfortable and because too much exposure to any dust can eventually cause lung damage. But as long as the dust doesn't contain silica or hazardous pigments such as lead, it's unlikely that exposure is above legal or recommended exposure limits.

What's the effect if use of the N95 filtering facepiece isn't mandatory? Your regulatory burden becomes minimal. You don't need a written respirator program, you don't need to train or fit test...and you don't need to make users shave (if dust mask use is required, the user must not have any facial hair where the respirator seals to the face). All you need to do is give those voluntary respirator users Appendix D to OSHA's respirator standard. That can be found

quickly by searching the Internet for that exact phrase (or drop us a note, and we'll provide it to you at no charge).

Appendix D is less than a page long. It instructs users to read and follow the manufacturer's instructions. They should choose respirators that have been shown to be effective, because they have been certified by NIOSH. Respirator users must not wear the respirator where it won't protect them. And they need to keep track of their respirator so they don't use someone else's by mistake. That's all.

Dust masks – N95 filtering facepieces – can do a very good job protecting workers' lungs against dusts and mists. Ventilation systems, enclosures, and wet methods to control dust are even better, because they protect everyone in the area. But if you lack those, correct use of the filtering facepieces can help keep your employees healthy.

For help with respirator selection, training, and use, employee exposure questions, or other safety and health issues, please contact Complete Health, Environmental & Safety Services, Inc. (CHESS, Inc.) at 651-481-9787 or 1-877-481-9787 (toll-free). CHESS specializes in helping small to medium sized business with occupational health and safety issues. We have been providing services to the automotive industry for over 15 years.

<p>This article is intended to provide general information (not advice) about current safety topics. To discuss your specific concerns and how CHESS may help, please contact CHESS at 651-481-9787 or chess@chess-safety.com.</p>
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