

ISRP 2002 abstract

Presenter/author	Title	Abstract
Matsumura, Y.** Myojo, T.* Ogawa, A** Sugimoto, Y* Suzuki, K** *) <i>National Institute of Industrial Health, Kawasaki, Japan</i> **) <i>The Technology Institution of Industrial Safety, Kawasaki, Japan</i>	New Standard for Dust Respirators in Japan	In the light of international harmonization, the standard of dust respirators in Japan was revised in 2000. The previous standard for dust respirators required air containing quartz particles smaller than 2 mm in diameter as the test aerosol. However, sodium chloride (NaCl) aerosol and diethylhexyl phthalate (DOP) aerosol were chosen as the new test aerosols for the revised standard. Count median diameters of these test aerosols are ranging from 0.06mm to 0.10 mm for NaCl aerosol and from 0.15 mm to 0.25 mm for DOP aerosol. The test flow rate for the challenge aerosol (85 l/min) is similar to the NIOSH standard. The levels of collection efficiencies with dust loading are more than 80%(DS1, DL1, RS1 and RL1), 95%(DS2, DL2, RS2 and RL2)and 99.9%(DS3, DL3, RS3 and RL3) for both of NaCl (DS and RS) and DOP (DL and RL). As expected, the penetration (=100-collection efficiency) of each tested respirator by the new standard was around 10 times higher than that by the previous standard. Some of the formerly certified dust respirators could not meet the first level (DS1 or RS1) of the new standard. Respirator manufacturers in Japan have been providing newly certified or redesigned/certified products since 2001.