

ISRP 2002 abstract

Presenter/author	Title	Abstract
Kimura, K. Yuasa, Hisashi <i>Hanno Laboratory, Koken Ltd, Saitama, Japan</i>	The Performance of the Newly Developed Electrostatic Filter	<p>Electrostatic filter is widely used as filters for dust respirators. However, it has been indicated that filtering efficiency of electrostatic filter decreases with the increase of the loading of DOP particles on it, because the mist of DOP causes electrification of electrostatic filter to reduce. By this property, it has been taken to be difficult that electrostatic filter has high filtering efficiency against oil mist. Therefore, generally, the respirator made of electrostatic filter has been used under the environment where only the solid particles exist.</p> <p>We have improved resin-wool filter, and developed two kinds of electrostatic filter with features of maintaining the high filtering efficiency against oil mist. In this study, the performance of these two electrostatic filters, "MIGHTY MICRON FILTER" and "UNI-MICRON FILTER" were evaluated against DOP particles. Filtering efficiency was measured with FILTER TESTER MODEL 8130 of TSI Inc. As a result, it was confirmed that these filters had the performance that comply with R95, R99 and R100 of the NIOSH standard.</p>