

三種地板摩擦測試儀之比較  
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摘要

Slips and falls are major occupational incidences. Slipping of the foot on the ground may be attributed to the lack of friction at the footwear and floor interface. The coefficient of friction (COF) at the footwear and floor interface has been adopted as one of the major indices to assess the risk of slipping and falling. The COF measurement on workplaces requires the use of portable friction measurement device. Many friction measurement devices have been developed. Each device is designed based on different principle and requires different operating procedure. Different friction measurement devices even report different readings. The variations of friction measurement readings and operating procedure of three portable friction measurement devices, namely the Brungraber Mark II, the Pendulum Skid Tester, and the Horizontal Pull Slipmeter, were compared in this study. Friction measurements on three floors, under six contaminated and two inclination conditions were conducted. The results showed that the Brungraber Mark II has better sensitivity to liquids on the floors. The phenomenon that liquid reduces the slip resistance of the floor may better be identified using this slipmeter. The Horizontal Pull Slipmeter, on the other hand, was less capable to identify such a phenomenon.

關鍵字：Risk of fall, Coefficient of friction, Friction measurement device, Surface condition