Slip Resistance of Floors in a Supermarket

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Abstract

Floor slipperiness assessment was conducted in a supermarket in central Taiwan. The floor slip resistances in the meat cutting, cooking, and baking areas were measured. The friction measurements were conducted using the Brungraber Mark II slipmeter. The results showed that the slip resistance in the meat cutting areas was significantly higher ($p<0.05$) than those of the other two areas. The slip resistances between the cooking (0.49) and baking (0.51) areas were not significant. The slip resistance of the dry surface (0.64) was significantly higher than those of the wet (0.28) and oily (0.34) surfaces. The slip resistances between the wet and oily surfaces were not significant. All the wet and oily floors in the shop had COF values lower than 0.5, a safety standard commonly adopted in the USA. Ergonomic interventions were recommended.

Keyword：slip & fall, floor slipperiness, coefficient of friction, field measurement