

Mats, Insoles, or Both?



Hog Heaven with caution yellow border

Prolonged standing is experienced in many professions and can lead to fatigue in the feet, legs and lower back. Frequent exposure to hours of standing can be associated with an increased risk of musculoskeletal disorders (MSD's), plantar fasciitis, and varicose veins. Anti-fatigue mats and shoe insoles help to alleviate these problems.

Anti-fatigue mats are commonly used when operators are exposed to prolonged standing on hard surfaces (concrete, steel, wood, tile etc.). Studies* have shown that anti-fatigue mats are associated with significantly lower discomfort ratings when compared to standing on hard floors.



Insoles were invented to help reduce lower extremity discomfort and fatigue. Insoles fit directly into the operator's shoes and use cushion to absorb impact when a person

takes a step. Insoles are not meant to be replacements for matting as their scope & ability is limited but they can assist in situations where additional comfort may be needed or an operator is not confined to an area that can be matted.

- Insoles can crush down in the small areas where the heel and ball of the foot constantly interact in a relatively short period
- Insoles should be properly fitted for everyone; many sizes may need to be stocked
- Insoles can increase shoe tightness
- You can't visually tell if an operator is using an insole
- You can't visually tell the condition or wear of an insole
- Insoles address less than 10% of the items in the chart to the left when it comes to issues manufacturers face with floors

Common sense will tell you that the use of anti-fatigue mats and shoe insoles are not mutually exclusive. Standing workers generally experience less discomfort with the combination of insoles and anti-fatigue matting.

GOALS	Shoes & Insoles	Anti-Fatigue
Anti-Fatigue, strain, reduction of aches due to standing long periods of time	✓	✓
Work area identification (Kaizen, Kata, 5S)		✓
Injury reduction when & where falls occur		✓
ESD (conductive) concerns addressed		✓
Switchboard (non-conductive) concerns addressed		✓
Slip resistance in wet, icy, oily, greasy, areas in addition to inclement weather issues		✓
Outlines work areas, yellow bevelled edge to indicate change in work area surface & height		✓
Improves work area appeal (aesthetics)		✓
Area identification (logos or messages can be printed on the surface of the mat for a variety of reasons)		✓
Total cost of ownership & life-cycle management		✓
Visually see them in place and working		✓
Easily managed (inventory control, can visually see wear & know when to replace)		✓
Slip, trip & fall prevention reducing cost & liability		✓



Cutaway view of Hog Heaven showing closed cell nitrile rubber cushion

If you must choose one or the other, a mat would be the best choice. It has been said *"a horse and a car are both forms of transportation, but you wouldn't ride the horse to work in this day and age. There are simply better options"*.

*Study: Ergonomics of Flooring. The Influence of Flooring on Standing Comfort and Fatigue – Dr. Mark Redfern – University of Michigan