

## Anti-fatigue Technology Comparison

Dr. Kent Karstetter, DPM, performed an independant study confirming that the technology behind hydraulic powered "dynamic" fluid filled anti-fatigue insoles functions very differently than that of "static" industrial brand anti-fatigue insoles and mats. The difference in technologies is clear.

He states; "it is well known in the literature that it is often this inadequate flow of blood to the tissues (ischemia) that is the most common source of discomfort, foot and leg pain and lower extremity swelling (edema). It is this pain and discomfort that most negatively impacts productivity and job satisfaction for people whose occupation requires that they spend most of their day standing and walking on hard surfaces."

## **1. Static Anti-fatigue MATS and INSOLES**

Most anti-fatigue mats and insoles are static in that the pressure exerted along the bottom of the foot does not undergo a significant change during standing or walking. Experience shows that while static cushioned anti-fatigue shoe insoles and mats provide some level of pressure relief (when compared to standing, walking and working on concrete) they actually act to inhibit necessary circulation of oxygen-filled blood through the muscle tissues in the foot and leg.

## 2. Hydraulic Powered Dynamic Anti-fatigue Insoles

Fluid cannot be compressed and is, by it's nature, "dynamic" or constantly active. That single feature adds a therapeutic value which sets Fluid Filled Anti-fatigue Insoles apart from all "static" anti-fatigue products. Dynamic Fluid Filled Insoles are designed to maintain a stable foot bed yet they clearly break away from the traditional "measured and fitted" thinking of foam based insoles and mats as even insignificant changes in standing postures cause a redistribution of pressure on the blood vessels in the bottom of the foot. This encourages constant healthy perfusion (blood flow) to foot tissues. Hydraulic flow regulators in the insoles effectively absorb shock and impact on the heel and foot with each step that is taken. The act of walking (or simply rocking gently from heel to toe) creates hydraulic pressures that force a compressive massaging fluid "wave" in a heel to toe direction along the bottom of the foot. With each step this action compresses the main veins in the bottom of the foot (venous plexus) acting as a "foot powered blood pump" that is effective in increasing circulation in the feet and legs.

Your company can enjoy the financial benefits resulting from increased productivity and employee morale derived from introducing your workers to DYNAFLOW<sup>™</sup> Hydraulic Powered dynamic anti-fatigue insoles. They can play a key role in preventing and relieving occupational and clinical foot, knee, back and general lower extremity pain in the workplace.

