

Innovative Footwear Provides Relief from Pain

By **Carla Salizzoni**

At first glance, **Z-CoiL**® shoes often strike people as some kind of gimmick. But this unique line of Pain Relief Footwear™ is steadily gaining ground among foot care professionals who are recognizing the functional benefits of its design. Invented in Albuquerque by a runner in his 50s who was continually plagued by running injuries, the footwear is engineered to reduce the damaging effects of repetitive impact on the body by acting basically as shock absorbers for the feet. For years, Z-CoiL customers have reported significant relief from many painful ailments of the feet, knees, hips, and lower back that are typically caused by overuse, injury, or disease.

Built for Pain Relief

The most notable feature of Z-CoiL shoes, of course, is the conical steel coil under the heel. Like a shock absorber in a car, this “spring suspension system,” together with

dense cushioning under the metatarsal heads, greatly reduces the shock of impact when walking or running.

In fact, a study performed by Los Alamos National Laboratories found that Z-CoiL shoes reduced the rate of impact to the body by up to 50 percent, while also delivering a 40 to 50 percent kinetic energy return. The report concludes, “The initial impact forces appear to be less abrupt in the Z-CoiL shoes, resulting in a reduction of the jarring effect to the foot and lower leg as the heel impacts the ground.”

Similar tests performed by Sandia National Laboratories showed “an increase in cushioning, at various forces, of over 100 percent in the toe box and 50 percent in the heel of a Z-

CoiL shoe when compared to [a] name-brand cushioned shoe.”

Also built into the shoe is a rigid, three-quarter-length orthotic that performs the same function as the solid frame of a car, providing a stable platform for the shock-absorbing coil. Moreover, this prefabricated orthotic distributes weight evenly across the mid-foot and offers excellent support from the heel to

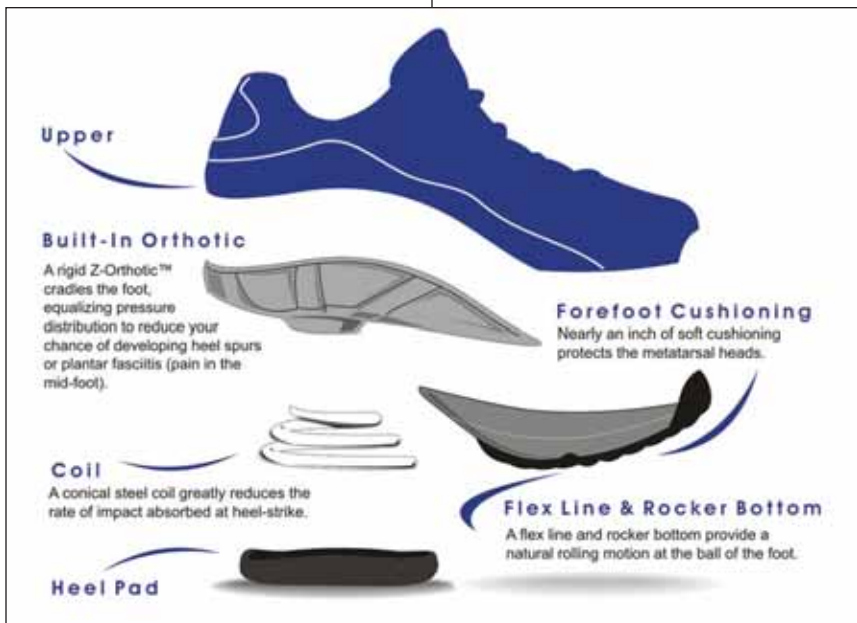
A variety of adjustments can be made to Z-CoiL footwear to address many different foot and gait issues.

the metatarsal heads to address such painful conditions as plantar fasciitis and heel spurs.

A built-in flex-line located directly under the MP joints and a rocker-bottom forefoot work in tandem with the flexible coil to create a smooth, rolling gait. This helps to treat mid-foot and forefoot symptoms and pathology, similar to a custom-made shoe or cast boot rocker sole.

Addresses a Variety of Conditions

Patients suffering from a wide range of conditions have reported either partial or complete relief from pain after wearing Z-CoiL footwear. According to Kevin Brattain, DPM, of the Illinois Valley Podiatry Group, indications for the footwear can include pain due to arthritis of any lower extremity joint and/or back; general heel pain and plantar fasciitis; pes planus; pes cavus; tendonitis of leg, ankle, or foot; PT tendon dysfunction; limb-length discrepancy; first metatarsal phalangeal joint pain; and mid-foot, rear foot and ankle arthrodesis. In addition, he finds that patients who suffer from non-specific complaints of repetitive stress, pain



Z-CoiL® footwear components

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Innovative Footwear...

when standing, and "painful or weak legs" also benefit.

Dr. J Lee, a Chiropractor in Arlington, Texas, writes, "Tremendous shock absorption ability reduces incidents of low back, sciatic, knee and foot pain in several of my patients. I feel very good about referring my chiropractic patients for the possible therapeutic value of the shoes. The shoes keep some of my more difficult cases moving. I wear nothing but Z-Coil shoes on my feet all day, every day in the office!"

Nurses, known to spend long hours on their feet on hard floors, have proven to be the most common, and often the most devoted, Z-Coil customers. Christina Farley, a registered nurse in Metropolis, Illinois, says, "I have had a problem with heel spurs and plantar fasciitis for over four years. I have a huge collection of athletic shoes, but nothing can take the place of my Z-Coil shoes. They truly have saved my feet and career."

Although a Z-Coil footwear distributor himself, with stores in both Peoria, Illinois, and Davenport, Iowa, Dr. Brattain stresses that Z-Coil footwear is not for everyone and should be used judiciously. "As with any treatment modality, Z-Coil footwear is not a universal cure. I consider the shoes to be one more option that may help an existing treatment plan result in an even better outcome," he says.



Z-Coil® Freedom 2000

Adjustable for a Custom Fit

A variety of adjustments can be made to Z-Coil footwear to address many different foot and gait issues. For example, the orthotic can be widened to allow for extremely wide or flat feet, and the upper can be shaped to fit those with very narrow heels, bunions, or hammer-toes. Foam inserts can be added to accommodate high arches, corns, or large calluses. The heel coils come in varying degrees of stiffness, to suit patients of different body weights. And patients are able to insert their own custom orthotics into the shoes as well.

Further adjustments can be made

The Z-Coil product line features many different styles, including athletic shoes, clogs, dress shoes, sandals and work boots.

to the heel coil to address leg-length discrepancies, and to help compensate for cases of over-pronation and over-supination.

The design of the coil also presents stronger and weaker sides, depending on the way the coil is rotated. For example, severe over-pronation can be countered by turning the strongest side of the coil toward the inside of the foot to help normalize the person's gait.

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Z-Duty Work Boot

Because the Z-Coil Footwear company's goal is to achieve the greatest pain-relief benefits possible with its footwear, Z-Coil Pain Relief Footwear is sold only through authorized distributors who are specially trained to custom-fit the shoes. In fact, Z-Coil counts podiatrists, certified pedorthists, chiropractors, and physical therapists among its distributors. There are currently over 140 authorized Z-Coil stores in the U.S. across 40 states, as well as Canada and Puerto Rico.

The Z-Coil product line features many different styles, including athletic shoes, clogs, dress shoes, sandals and work boots. Certain styles come with an Enclosed Heel System™ to address workplace safety concerns, where objects are more likely to get caught in an open coil. The molded foam material that encases the coil slows the speed at which the coil compresses, which dampens its shock-absorbing capabilities to some degree, although a stiffer coil also proves useful when a person is picking up heavy objects. These work shoes also come with or without an ANSI-rated steel toe.

For more information about the shoes, to locate authorized Z-Coil stores, or to learn about available franchise opportunities, visit the company's website at www.zcoil.com, call 800-268-6239, or circle #181 on the reader service card.