

# Tool Review

*“The tool eliminates the need for roof mechanics to continually bend over or kneel...”*

## Pain in the Neck?

### *Ergonomic Roofing Tool Provides a Cure*

by Dan Genovese, product manger, OMG Roofing Products

**R**oofing is tough work, and virtually every roof worker's body takes a beating. In fact, according to labor statistics, work-related repetitive-stress injuries are most common among hard workers, such as roofers, who handle tools, materials, and equipment every day.

Soft tissue injuries are called musculoskeletal disorders or MSDs. These injuries to muscles, nerves, tendons, ligaments, joints, cartilage, spinal discs and other soft tissue, can occur over the course of months or even years and often result in life-long debilitating damage.

Acute injuries, such as cuts, bruises, or fractures from falls, have been a long-time concern among roofing contractors. However, improved safety programs and training, greater worker awareness, and the use of personal protective equipment (PPE) have contributed greatly to an industry-wide reduction in the number of acute injuries among roofers.

Reducing the incident rate of MSDs is considerably more complicated however. MSDs are generally the result of ongoing and repetitive bending or twisting activities over a long period of time, rather than one particular incident or action. It is the cumulative trauma that results in these disorders.

The roofing industry is largely populated by an aging or more mature workforce, which contributes to the problem. The older the body is, the more likely it is to suffer the effects of MSD. So it is the older workers who have been on the job longer who are more likely to suffer from repetitive-motion injuries due to years and years of the same physical activity. To compound the problem, the roofing industry has experienced difficulty in attracting



**ROOF MECHANIC USING THE ACCUTRAC.**

new, younger workers.

In addition to being relatively common, musculoskeletal disorders are costly in several ways: lost productivity on the roof, increased insurance claims and costs, higher healthcare costs, and lost time.

As a result of these economic and health issues, a greater number of roofing contractors are looking for effective ways to prevent, minimize, or eliminate MSDs. In fact, the industry has come a long way in a short time and an industry-wide ergonomics movement is taking on MSDs.

Ergonomics is the applied science of equipment design, as for the workplace, intended to maximize productivity by reducing operator fatigue and discomfort. It is also known as human engineering or human factors engineering. In short, it is the study of the interaction between people and their work environments for the purpose of preventing injuries. Ergonomic solutions customize workplace conditions to support the physical capabilities and the well being of the workforce. In the roofing industry, this includes the worker's methods for using his or her tools, equipment, and materials.

**THE PLATES AND SCREWS EASILY  
LOAD INTO THE ACCUTRAC.**



The goal of ergonomics is to promote health, productivity, and longevity. One solution comes in the form of a breakthrough tool: an automated insulation attachment system called AccuTrac, by OMG Roofing Products. The tool eliminates the need for roof mechanics to continually bend over or kneel in order to mechanically attach insulation. With this tool, tasks that would usually require two workers are combined into one process, freeing labor to perform other project tasks.

In low-slope applications the traditional method of fastening roof insulation requires the roof mechanic to work in an awkward, bent-over or kneeling position. The process typically includes two laborers each repeatedly bending over: one to loosely position the plate on the insulation board, and the other following to install the screw through the plate and into the deck below. The AccuTrac automated insulation attachment system allows one worker to install the fasteners and plates while standing.

As with any properly designed ergonomic tool, one fringe benefit is improved productivity. For versatility, a universal drive shaft accepts both Hex and Phillips driver bits. In addition, an anti-jam feeder tube reduces jamming caused by double-feeding fasteners. Chances of downtime and vibration injury are greatly reduced.

In addition, because the system requires only one roof mechanic rather than two, the job supervisor has the flexibility to redistribute the labor force to perform other rooftop duties. The use of additional tools increases fastening performance by saving time, manpower, and overall costs.

The simple and easy-to-operate tool comes with on-site training. Experienced technicians stay on the job with the roofing team until everyone has mastered the process. This kind of customer service helps roofers avoid unnecessary injuries by learning the proper use of equipment and the best use of the tool to maximize productivity.

The roofing industry is working hard to enhance its image, safety, and health efforts, as well as looking for new ways to prevent injuries. In an industry with an aging workforce, sky-high insurance premiums and claims, high absenteeism and turnover, and low morale, ergonomically designed stand up tools provide a good solution to a growing problem. 