

Jasmine Point removes the painter's tape from a dedicated workspace at RIMEX.

Ending slips, trips, and falls

By Holly Munn

Delivering quality products while maintaining safety and productivity is a goal for many manufacturing organizations. In 2011, RIMEX, a B.C.-based company and the world's leading custom wheel manufacturer, decided to take the steps needed to improve efficiency, product quality, and employee safety.

Fabricating the enormous wheels needed to keep the mining, forestry, agricultural, and trucking industries working requires a lot of equipment. There are work orders to take care of, blocks to support wheels, chain trees for products in process, assorted tools, and finished product and raw materials. Items out of place, uneven surfaces, poor work processes, and spills could not only slow down work progress but lead to injury from slips, trips, and falls. But cluttered workspaces aren't necessary and they aren't efficient, says the health and safety team at RIMEX. The company is using workplace design and processes to keep work streamlined and work areas clean.

Keeping manufacturing lean

One of the ways that RIMEX has dealt with the potential clutter and prevented delays and injuries is to adopt the Lean method of manufacturing.

"Lean is a set of techniques that helps identify and eliminate waste from an organization," says Clint Matthias, branch systems coordinator, who also helps oversee rollout of the methods to RIMEX's plants worldwide.

"6S [page 14] is one of the ways we implement Lean and also ensures we create a clean, orderly, and safe workplace for employees," Matthias explains. "When the methodology was implemented by Toyota, it was called 5S. We've added a sixth S — safety — to the program."

Looking at workplace design

"A big part of implementing is going in and cleaning, sorting, and optimizing processes and work areas. When we sort items, we red-tag things that may no longer be needed in the environment and move them

to a common area,” says Matthias. “There shouldn’t be anything in the work area that doesn’t need to be there.”

Every piece of equipment has a designated and marked location. All cables, hose reels, and extension cord reels are directed behind machinery or mounted on the walls. Finished product and raw materials are stored in designated areas away from mainstream production, so the shop floor is not cluttered.

“One of our big goals is to identify and eliminate waste including unnecessary motion. We reduce the chances of employees slipping and tripping if we reduce the motion of people moving around and collecting items such as tools or documentation,” Matthias continues.

“We also make sure everyone uses the 15 minutes at the end of their shift to pick everything up,” adds Roger Hall, RIMEX safety manager. “Our shop is spotless and everyone knows what their responsibility is. New hires don’t know any different.”

Maintaining the commitment

One of the key pillars of 6S is ‘sustain,’ and that includes looking for ways to make things better. RIMEX does monthly audits that complement the 6S program. “We are always trying to have continuous improvement. Our workers take ownership and are empowered to implement their ideas and are always encouraged to ask how we can make things better; the workers themselves push the 6S program,” says Hall.

Workplace inspections are conducted regularly to identify any hazards, such as uneven surfaces, poor work processes, or potential spills, that could not only slow down the work progress but also lead to injury.

The company is seeing greater employee retention and has also seen a reduction in first aid calls. “Our first aid calls have definitely gone down and our injury rate is dropping,” says Hall.

“We celebrate every year we pass our Occupational Safety Standard of Excellence inspection and audits. This is really because of the systems we have in place,” Matthias says.

Stopping slips, trips, and falls in your workplace

“Clearly defined walkways, level walking surfaces, and light levels are all really important factors to consider

when trying to prevent slips and trips,” says Jose Barranco, a WorkSafeBC industry specialist.

“Falls from the same level or height are the third leading cause of incidents in manufacturing. It’s something we call a stubborn risk. People assume that everyone falls and that falls are not preventable, but falls lead to injuries and 20 percent of those are serious. These injuries don’t have to happen,” Barranco adds.

Check out the following resources on worksafebc.com for ways you can manage slips and trips:

- The [Slips, trips, and falls in manufacturing](#) bulletin
- The [Slips, trips & falls](#) home page
- The [Manufacturing industry](#) home page 

6S methodology

6S is based on the 5S method developed in Japan to support just-in-time manufacturing. In North America, the English equivalents for the Japanese terms are used.

- 1 Sort.** Include only what is necessary in a workspace. This removes unnecessary clutter.
- 2 Set in order.** Label necessary items, arrange them in an orderly fashion, and mark their place. This allows anyone to find, use, and return an item.
- 3 Shine.** Clean and maintain. This step ensures the floor is swept and that equipment is safely maintained.
- 4 Standardize.** Use documentation and training to ensure consistency throughout the organization.
- 5 Sustain.** Perform monthly audits, workplace inspections, and pre-shift meetings.
- 6 Safety.** Identify and eliminate additional hazards as a group.