### Safety talk

Trading Post Brewing uses a platform ladder when adding hops to the tanks. This allows a firm footing with three-point contact.

# Beer maker adds three-point contact to the brew

By Marnie Douglas

While the craft brewing industry booms, local employers want to keep the injury rates from doing the same. These tips will help both employees and employers stay safe when working at heights.

Craft brewing is a hopping business in British Columbia — there are close to 160 craft breweries throughout the province and the industry continues to grow. But breweries and distilleries can be hazardous places to work. Among the potential hazards are electricity, packaging machines, lift trucks, cleaning chemicals, gases such as oxygen and CO2, and heights.

Brewing tanks are typically three metres tall and hold some 3,000 litres or more, so workers and employers need to consider the risk of working at height when performing tank inspections and cleaning, and adding ingredients from the top of the tank. Falls from heights can result in serious injuries, including fractures, contusions, abrasions, and head and spinal injuries.

Jose Barranco, industry specialist in manufacturing and retail with WorkSafeBC, says many breweries are

now using a process called dry hopping — the act of adding hops to the fermentation process prior to bottling.

"This means climbing to the top of the tank and adding the hops to the brew. The safety hazard here is using a standard ladder to climb to the top of the tank and carrying a bucket. It's a relatively new hazard and we're working with brewers on finding solutions," he explains.

Some are using hooks to attach ladders to the top of the tank but that doesn't eliminate several safety issues, such as always maintaining three points of contact.

## How do you avoid climbing stand-alone ladders?

One solution is to use platform ladders, says Tony Dewald, head brewer at Trading Post Brewing Company in Langley.

"It's like a staircase on wheels," he says. "We lock it into place in front of the tank and it's sized specifically to the tank. Anyone is then able to safely inspect or clean the tank or add more material like yeast or dry hops."

Platform ladders are a safe alternative to traditional ladders in that they allow the user to maintain three points of contact while in use. If the user needs a bucket or anything at the top of the stairs, another employee will bring in a forklift so there's no need to carry anything up the stairs.

"It does make working at heights much more safe and simple," Dewald adds.

His 2,500-square-foot warehouse includes five fermenting tanks and two bright beer tanks (pressure-rated and temperature-controlled tanks that hold beer in preparation for packaging). After 29 years in the brewing industry, Dewald says he's seen too many risky and unsafe situations and wanted to bring his knowledge of best practices to Trading Post.

"There are solutions; it's a matter of putting them into place. We don't want anyone to have to take any needless risks," he says.

### Tips for staying safe

The following are five tips to reduce the risks of working at heights inside a brewery:

Try to eliminate tasks involving height or modify them so workers can do them from below. If possible, add dry ingredients using pneumatic conveyance, recirculation systems, platform ladders, or scissor lifts. If workers still need to climb to the top of tanks, they should use platform ladders or scissor lifts.

If possible, install protected work platforms, catwalks, and staircases, so no one has to climb a ladder. Platforms and catwalks should have guardrails and toeboards to prevent tools and materials from falling.

- If the tank is more than 3 metres (10 ft.) tall, further restraint or fall arrest systems are needed. Make sure your workers are trained on how to use the fall protection system and its limitations.
- If you must use a ladder, make sure it has the proper reach and weight capacity, and that it meets the standard required for the workplace. It should have slip-resistant feet and should be on a flat and even surface.
- Don't carry heavy or awkward objects up or down. When climbing, face the ladder and maintain three-point contact at all times (one foot and two hands on the ladder, or one hand and two feet).

#### For more information

WorkSafeBC published the Health and Safety for Craft Breweries and Distilleries guide in 2019. It contains health and safety information for the craft brewing and distilling industry to help identify and eliminate hazards. Find your free copy and more by searching for "craft breweries" on worksafebc.com.  $\otimes$ 

