Case study

Multi-site Lockout/Tagout at a large beverage company

Beverage production can involve the use of caustic chemicals such as phosphoric acid and 4-methylimidazole. Hazardous or asphyxiant gases like Carbon Dioxide and Ozone can be present in an elaborate piping system as well as other substances that can pose chronic or acute health hazards. The **use of chemical substances at various processing stages and of additives in both food and drink products increased greatly in the last decades.**

Next to this, the **increasing levels of mechanisation and robotisation** have introduced a growing number of large, automated machinery with a high number of moving parts.

For maintenance and cleaning operations, pipe contents and moving machinery must be neutralised to avoid employees getting exposed to dangerous substances or caught in powerful machinery. While machines are guarded whenever possible, many machines used in the sector often have dangerous moving parts to which it is difficult to fit adequate guards.

In order to operate safely, switching the power off before touching even the smallest moving part of any machine has become a necessity. In addition, operators are encouraged to call in properly qualified mechanics to deal with technical problems rather than trying to deal with them themselves.

The variety of machinery and pipes in need of regular maintenance requires beverage companies to have several specialised teams of employees and contractors, who at times are servicing the same area.

Challenge

A large brewery with several sites needed a **solution to neutralise machinery** and to secure energy sources and pipe valves in the off-position for increased safety during maintenance. The customer required this solution to be implemented at all sites for a large number of teams, including specialised employees and contractors.

Solution

Brady proposed a **complete Lockout/Tagout solution with SafeKey padlocks that offer up to 700% more lock & key combinations** than traditional safety padlocks.

SafeKey padlocks feature a unique and innovative locking mechanism that offers 100 000+ key and lock combinations. With SafeKey, larger sets of unique key & lock combinations are possible, with master keys for more team leaders and one grandmaster key to open them all for the company Safety Manager.

In Lockout/Tagout, a proven safety procedure for machine and maintenance interventions, the golden rule is that the professional doing the work removes the lock when the intervention is done. This avoids premature activations of energy sources and pipe valves which could cause serious injury. Only team leaders and selected director level professionals are enabled to overrule after rigorous checking as described in company safety procedures.

Brady supplied up to 5 keyed alike locks for every relevant employee. These padlocks cannot be opened by any colleague in the company, except by the team leader with the master key, or by the company Safety Manager with the grandmaster key. Brady outfitted 9 teams of specialised employees, including technicians, operators, safety and maintenance professionals and third party contractors. They now own uniquely keyed safety padlocks to secure energy sources in order protect their safety while doing interventions. Additional employees and smaller teams in sublocations were also supplied with padlocks, together with master keys held by plant managers, all of which can be opened by the company Safety Manager's grand master key.

Brady's Lockout/Tagout experts helped set up an elaborate key-plan and listed all key and lock codes. This ensures no 2 locks will ever be the same, even after additional SafeKey padlock orders.

In addition, Brady supplied its LINK360 safety software in which relevant stakeholders on all sites can write, edit, approve, print or digitally access machine specific Lockout/Tagout procedures.

Result

When specialised teams are conducting an intervention, team members are now in control of their own safety. They can apply a specific lockout device and lock it in place with their personal padlock to secure an energy source or keep a pipe closed. They can also add their padlock to an ongoing lockout if another team is already active in the area, knowing only they, their **manager or the company Safety Manager can remove their lock and reopen any pipe or reactivate any machine.**

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