

## EHS and Ergonomic Innovation Go Hand in Hand



Reducing the ergonomic stress and strains associated with pharmaceutical operations can be difficult. However, the cross-functional Ergonomic Teams at Pfizer's Lincoln, Nebraska and Puurs, Belgium facilities found a way to implement innovative solutions and challenge the status quo that highlights the value of local innovation in addressing Environmental, Health and Safety (EHS).

Virtually all of the changes were made by taking a fresh look at how a task was being done and asking the simple question, *"What would it take to do the job better ergonomically?"*

### TORQUE WRENCH

Colleagues were often tightening the tri-clover valves too tightly when manually assembling sterilization tanks. As a result, they developed wrist problems and risked greater injury from valves that could break under pressure from being closed too tightly. But, not closing the valves tight enough could lead to quality issues as valves could leak and require re-sterilization. A team of colleagues found an innovative solution that reduced EHS risks and improved quality: standardized torque wrenches to close and open all tri-clovers and valves instead of using their own hands. Since using torque wrenches, there have been no ergonomic or safety issues reported and fewer leaks. The added bonus is less rework because of failed leak tests.

### TANK-TUGGER

The addition of a metal bar to the bottom leading edge of tanks has made it possible for individuals to safely move even the largest production tanks left, right, backwards, or forwards by manipulating controls located on the unit's handles, meaning fewer back and shoulder strains.

### BOTTLE DE-CAPPER

Media preparation for vaccine production included twisting off by hand the caps of several yeast extract bottles, which can cause repetitive motion injuries. By introducing a new de-capper, which quickly removes caps with an electronic drill-like device attached to the top of the unit, Pfizer colleagues virtually eliminated repetitive motion injuries from this activity. To further reduce torque on the wrists of colleagues who had to hold bottles during the de-capping process, the de-capper was then adjusted to include an operating handle. This device has the added benefit of reducing task completion time by more than half, resulting in a cost savings as well as an ergonomic improvement.

### TANK STEAM LOCK BREAK TOOL

When process tanks used in biological production are sterilized, the steam lock caps are often "baked" making it difficult to remove them. Previously, operators used two wrenches, moving in opposite directions and applying significant force to loosen them. One industrious colleague began using a stainless steel tool with an extended handle that fits snugly over the metal steam lock caps, eliminating the need for two wrenches. Colleagues working in the area were able to safely remove the "baked" steam locks with minimal effort.

So, the answer to the question, *"What would it take to do the job better ergonomically?"* is about colleague collaboration and innovation coupled with the company's commitment to reduce ergonomic injuries.