

JF Bernard, Akron

Intervention Key Words: Hydraulic bender, Hydraulic power notcher, Cutting

Industry: Manufacturing

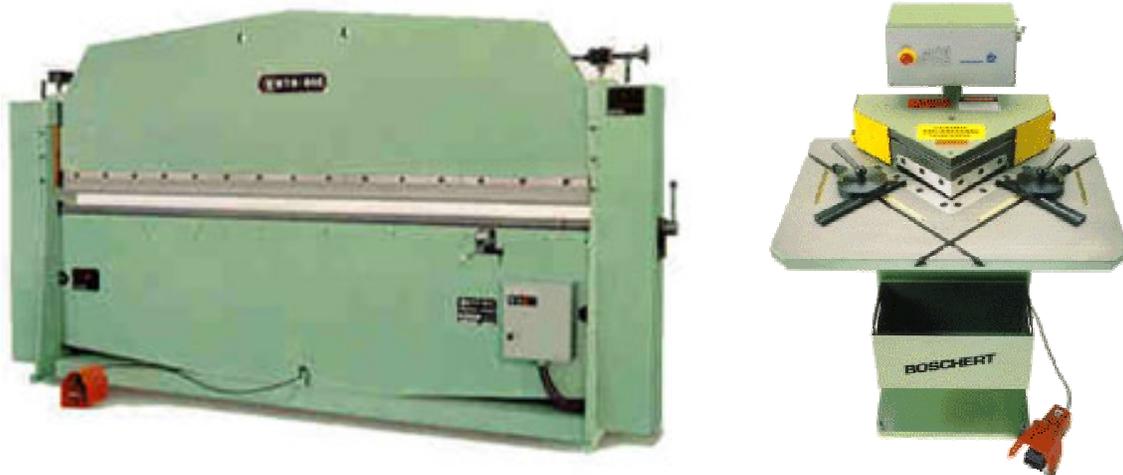
Risk Factor(s): Repetitive motion, Awkward Postures- Back deviations, Shoulder deviations, Wrist deviations, High Hand Force- Pinching/Gripping, Manual Handling- Pushing/Pulling

Situation:

JF Bernard is a manufacturing facility which manufactures parts for the heating, cooling, and refrigeration industry. Their work involves bending, cutting, shearing and welding of sheet metal from 16 to 26 gauge in thickness. Much of the work that they do is done manually, which is why they are concerned with injuries from Cumulative Trauma Disorders. CTD risk factors include deep bending, jarring and hard pulling while fabricating sheet metal fittings. Back problems have been the main concern due to the nature of the work performed. Repetition has also been a factor, with workers manually bending up to 10,400 bends per year and making 36,000 manual cuts annually.

Solution:

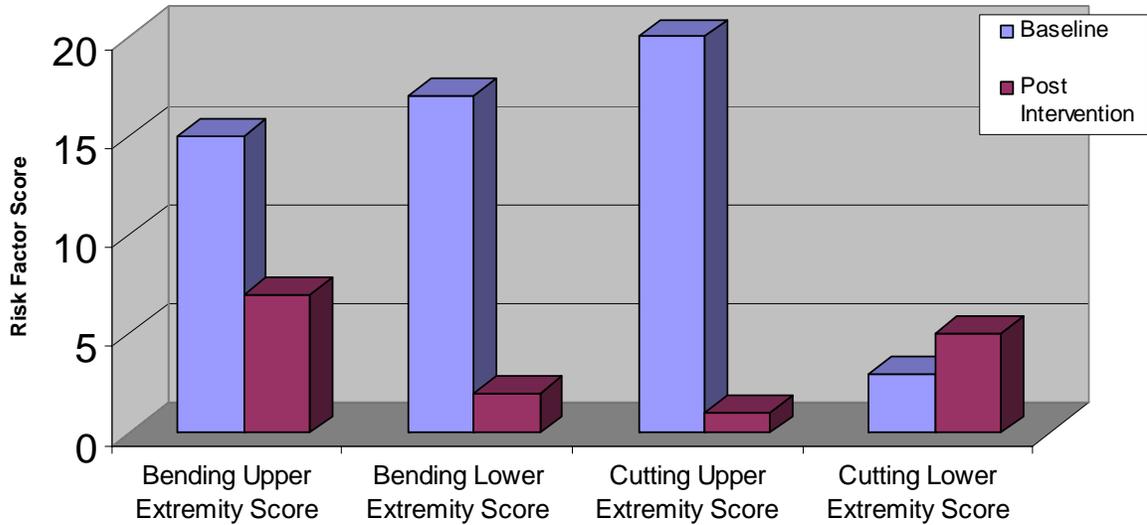
In order to address their CTD issues, JF Bernard purchased a ROTO-DIE hydraulic bender, which makes bends mechanically with the push of a foot pedal. This eliminates many of the risk factors once present in this task. They also purchased the Eagle hydraulic power notcher which replaces the repetitive manual cutting once done on their products with an automated power cutter that is also operated by a foot pedal. The total cost for implementing the new machines was \$40,760. JF Bernard received \$31,600 in assistance from SafetyGrant\$.



Hydraulic Bender and Notcher

Results:

- Both CTD rate and Lost Days rate (per 200,000 hours) were at 0 for the year prior to the intervention and remained at 0 for 2 years following.
- Restricted Days rate decreased 100% from 300 in the same time period while Turnover rate decreased from 130 to 19, an 85% improvement.



- When averaged over 2 tasks, CTD Risk Factor scores decreased nearly 73% following the intervention.