

Hyper Tool, Chagrin Falls

Intervention Key Words: Automatic Grinder, Chuck, Gundrills

Industry: Manufacturing

Risk Factor(s): Repetitive motion, High Hand Force- Pinching/Gripping, Awkward Posture- Wrist deviations, Vibration- Localized

Situation:

Hyper Tool specializes in the manufacturing of gundrills. A gundrill is a precision tool used to make consistently sized holes in hard metal products. The carbide tips of the gundrills require 3 phases of extensive grinding, which is done manually using a repetitive, forceful, reciprocating motion. This process results in Cumulative Trauma Disorders (CTDs) such as carpal tunnel if done over an extensive period of time. In addition to repetition, fatigue has played a significant role in causing injuries.

Solution:

In order to address their problems, Hyper Tool purchased 3 automatic surface grinders and the accessories needed to attach their products. The new grinders will automatically grind the parts to the desired specifications while the operator supervises the machine, thus eliminating any contact the employee once had with the manual grinders. Total cost of the intervention was \$50,000. Hyper Tool received \$40,000 in assistance from Safety Grant\$.



Results:

- CTD rate, Lost Days rate, Restricted Days rate and Employee Turnover rate (per 200,000 hours worked) were at 0 for the 12 months prior to the intervention and remained at 0 for 24 months following.
- CTD Risk Factor scores, averaged over 3 tasks, decreased 66% following the intervention.