



Safety Tip of the Week

Preventing the Injury of Workers by Robots

The Occupational Safety and Health Administration (OSHA) does not currently have a standard for the robotics industry. However, there is direction from the National Institute of Occupational Safety and Health (NIOSH), and many other organizations.

Recommendations By NIOSH

To minimize risks NIOSH offers the following recommendations regarding the design of robotic systems, the training of workers, and their supervision.



The Design of a Robotic System

Regarding both existing robotic equipment and new designs, NIOSH recommends the following with respect to robotic systems:

- Include physical barriers and adequate clearance distances around all moving components of the robotic system to prevent “pinch points”;
- Implement motion sensors, light curtains, or floor sensors that stop the robot whenever a worker crosses the barrier and clearly indicate danger zones; and
- Include remote “diagnostic” instrumentation outside of and provide adequate illumination in the control and operational areas of the robotic system;

Training of Workers

Train workers involved in programming, operating, or maintaining the specific robot in question, including refresher courses re-emphasizing safety and any new technological developments for experienced programmers, operators, and maintenance workers. This training should emphasize safe work practices and stress familiarity with all working aspects of the robot.

Summary:

These are NOT OSHA regulations. However, they do provide guidance related to worker protection.

ROBOTS ARE SERIOUS BUSINESS!