SMART MANUFACTURING E X P E R I E N C E

ROBOT DEMONSTRATION SAFETY REGULATIONS

In the interest of safety, show management requires all sponsors displaying robots in their exhibit to maintain safe equipment displays and demonstrations in accordance with the following rules:

- 1. All demonstrations involving any moving and potentially hazardous machines, displays, or parts must have hazard barriers as specified within these regulations to prevent bystanders from accidental injury.
- 2. Hazard barriers are to be made of solid panel, rail, or fencing materials at least 36" high. Flexible barriers such as drapes, chains, or rope are prohibited.
- 3. Sponsors should plan for adequate viewing of all demonstrations from within their exhibit area. All equipment and hazard barriers must be placed 24" from any traffic aisle. Aisles are to be used as passageways, not areas for people to congregate while watching demonstrations.
- 4. Sponsors shall provide hazard barriers surrounding the overall work envelope of all robots in motion. The overall work envelope is defined as the area within the maximum reach of all the robot's moving components regardless of intended robot program. Moving robot components include the arms, frame, hoses, wires, end-of-arm tooling, grippers, and the work pieces or tools held by those grippers. Hazard barriers must be placed 24" beyond the robot's overall envelope.
- 5. Robot or equipment demonstrations that involve moving parts, tools, or work pieces that are not permanently fixed in the robot's grippers or tool/part holders, must provide hazard barriers sufficiently high and strong enough to prevent those parts, tools, or work pieces from striking bystanders if accidentally released during any robot or equipment malfunction. If necessary, the overall work envelope should be completely enclosed.
- 6. Any machine that produces metal chips, sparks, dust, or liquid spray must be shielded to prevent any harmful material from reaching a bystander.
- 7. Sponsors planning to spray paint or weld must use exhaust venting equipment to prevent dust and toxic fumes from escaping into the show area. Arc welding flash shall be enclosed on all sides with flash sight screens. All sponsors must adhere to all fire and safety codes in effect for the exhibition hall.
- 8. Demonstrations should always be supervised by a representative of the manufacturer who can stop the demonstration in case of an emergency. Personnel of sponsors must not be within the work envelope unless appropriate hazard sensing systems to protect them are made part of the demonstrations.
- 9. Show management encourages all sponsors to be fully insured against personal injury and property damage in conjunction with their exhibits.

Although the safety record at expositions is free of any serious accidents, there is always a possibility of injury when dealing with industrial equipment and this possibility should be considered before planning a demonstration.

Exposition management will tour the show to verify your compliance with these rules. If violations are discovered, the sponsor will be asked to voluntarily modify the layout to comply with these rules. Failure to correct the violation in the time allotted following notification may result in the involuntary correction by show management at the sponsor's expense. Power will be denied to the non-complying sponsor until the violation is corrected.