

.Circuit Protection: Installing fuses, circuit breakers, and residual current devices (RCDs) can quickly disconnect power in case of a fault, preventing further damage or injury. These standards are often based on international guidelines and local regulations, such as: Occupational Safety and Health Administration (OSHA): OSHA sets safety standards for workshops in the U.S., focusing on preventing mechanical and electrical accidents through training, equipment maintenance, and personal protective equipment (PPE). Signage and Labels: Workshops are usually equipped with clear visual cues (warning signs, labels on tools, etc.) to remind workers of potential hazards and the correct use of tools or equipment. Personal Protective Equipment (PPE): Workers are required to wear appropriate PPE such as gloves, goggles, helmets, and protective footwear to minimize injury from mechanical hazards. Training Materials and Courses: Workers are often trained using materials like instructional videos, demonstrations, and workshops on safety standards for equipment use. Application of Standards in the Workshop: Various safety standards provide a framework for addressing mechanical and electrical hazards. ISO (International Organization for Standardization): ISO standards, such as ISO 12100 for safety of machinery, define risk assessment processes and safety measures. Mechanical Hazards and Risk Control: Mechanical hazards arise from tools, machinery, or equipment that can cause physical injuries (e.g., cuts, crushing, or impacts). Controls for electrical hazards include: Proper Grounding and Wiring of Equipment: All electrical tools and equipment must be correctly grounded to prevent electrical shocks. Routine Electrical Inspections: Checking for frayed cords, exposed wiring, or faulty equipment can prevent electrical accidents. Training and Awareness: Workers should be trained to recognize electrical hazards, the importance of de-energizing equipment before maintenance, and the proper use of electrical safety gear. Information Sources in Workshop Safety: Safety Data Sheets (SDS): These provide detailed information about materials, tools, or equipment that may pose a risk in a workshop. 2.3.4.5.