



Noise, Heat Stress, Ergonomics, and Housekeeping Guide

Category: Work Environment

Audience: Safety, supervisors, operators

Badge: Work Area

General work-area guidance for noise, heat, slip/trip hazards, cable management, repetitive work, lighting, and housekeeping around robotic welding equipment.

Important limitation: This document is a general planning aid only. It does not replace OSHA requirements, employer safety programs, equipment manuals, SDS review, qualified risk assessment, training, lockout/tagout procedures, PPE selection, or competent safety review.

Noise and Heat

- Assess noise exposure when welding, grinding, air tools, fans, extraction units, or cleaning stations are operating.
- Evaluate heat stress risk for long shifts, PPE, radiant heat, hot parts, and poor ventilation.

Ergonomics

- Plan part loading height, reach, lifting, fixture access, and service positions to reduce strain.
- Use mechanical assistance for heavy or awkward loads.

Housekeeping

- Keep cables, gas lines, coolant hoses, wire, scrap, spatter, and tools out of walkways and robot travel areas.
- Clean floors and fixtures to prevent slips, trips, and poor part fit-up.

Field Checklist

Item	Verified	Notes
Noise controls reviewed		
Heat controls reviewed		
Lighting adequate		
Walkways clear		
Hoses/cables managed		
Scrap removed		
Loading ergonomics reviewed		

Reference Basis

- OSHA 29 CFR 1910 Subpart Q - Welding, Cutting and Brazing.
- OSHA 29 CFR 1910.147 - Control of Hazardous Energy (Lockout/Tagout).
- NIOSH welding fume and manganese exposure resources.
- RAS equipment planning information for robotic arc welding systems using 480V / 60Hz / 3-phase power, RAS-500PR power supply, water-cooled torch packages, torch cleaning, and wire cutting stations.

Revision: RAS Safety Knowledge Base expanded safety resource set. Verify against current site-specific rules before use.