

Concrete Batch Plant Mixer Maintenance Safety Checklist

Site / Project	_____	Address	_____
Inspector name	_____	Company	_____
Date	_____	Time	_____

Documentation aid only. Adapt this resource to the site, manufacturer instructions, and applicable local requirements. It does not replace a competent person, professional judgment, legal advice, or a required statutory form.

Inspection checklist

Confined Space Entry (Central Mixer Drum)

☐	Is a Confined Space Entry Permit completed and signed by authorized personnel before entry into the central mixer drum? (OSHA 1910.146(e))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Has air quality testing been conducted inside the central mixer drum to verify oxygen levels (19.5-23.5%), absence of toxic gases (CO, H ₂ S), and flammable vapors before entry? (OSHA 1910.146(c)(5))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a forced-air ventilation system in place and operating effectively to maintain safe air quality inside the central mixer drum during occupancy? (OSHA 1910.146(d)(4))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a trained attendant stationed outside the central mixer drum to monitor entrants and initiate rescue procedures if needed? (OSHA 1910.146(d)(3))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a reliable communication system (e.g., two-way radio) established between the entrant and the attendant? (OSHA 1910.146(d)(5))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is appropriate rescue equipment (e.g., retrieval system, harness, lifeline) readily available and in good working order? (OSHA 1910.146(d)(9))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are emergency procedures, including contact information for emergency services, clearly posted and understood by all personnel? (OSHA 1910.146(d)(11))	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Have all entrants received adequate training on confined space entry procedures, hazards, and rescue techniques? (OSHA 1910.146(g))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Has the central mixer drum been thoroughly cleaned and purged of residual concrete and materials before entry? (Best Practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is adequate lighting (explosion-proof if necessary) provided inside the central mixer drum? (OSHA 1910.146(d)(6))	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Lockout/Tagout (LOTO) Procedures

☐	Is a written Lockout/Tagout (LOTO) program in place and readily available? (OSHA 1910.147(c)(1))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all energy sources (electrical, mechanical, hydraulic, pneumatic) effectively isolated and locked out before maintenance begins on the central mixer, conveyor belts, and aggregate bins? (OSHA 1910.147(d))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are LOTO devices (locks, tags) properly applied and clearly labeled with the employee's name and contact information? (OSHA 1910.147(c)(5))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is energy isolation verified by attempting to start the equipment after LOTO is applied? (OSHA 1910.147(d)(6))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	If multiple employees are working on the equipment, is a group LOTO procedure in place and followed? (OSHA 1910.147(f)(3))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Have all authorized employees received training on LOTO procedures and their responsibilities? (OSHA 1910.147(c)(7))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are contractors informed of and compliant with the plant's LOTO procedures? (OSHA 1910.147(c)(4))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is LOTO documentation, including equipment-specific procedures, readily available and up-to-date? (Best Practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are procedures in place for the temporary removal of LOTO devices (e.g., for testing) and subsequent reapplication? (OSHA 1910.147(e)(3))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Has all stored energy (e.g., hydraulic pressure, compressed air) been safely released or controlled before maintenance begins? (OSHA 1910.147(d)(5))	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Fall Protection (Aggregate Bins, Silos, Elevated Platforms)

☐	Is fall protection required for any work performed at heights of 6 feet or more? (OSHA 1926.501(b)(1))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are guardrails with toeboards installed on all open sides of elevated platforms and walkways? (OSHA 1926.502(b))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are personal fall arrest systems (harnesses, lanyards) inspected before each use for damage or defects? (OSHA 1926.502(d)(21))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are anchor points for personal fall arrest systems capable of supporting 5,000 pounds per employee attached? (OSHA 1926.502(d)(15))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is there sufficient fall clearance below the work area to prevent contact with lower levels in case of a fall? (OSHA 1926.502(d)(16))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are ladders used to access elevated areas in good condition, properly secured, and extended at least 3 feet above the landing? (OSHA 1926.1053)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are safe access methods (e.g., ladders with cages, aerial lifts) provided for accessing aggregate bins and silos? (Best Practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Have all employees working at heights received training on fall hazards and the proper use of fall protection equipment? (OSHA 1926.503)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a rescue plan in place to promptly retrieve employees who have fallen while working at height? (OSHA 1926.502(d)(20))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is work at height suspended during adverse weather conditions (e.g., high winds, rain, ice) that could increase the risk of falls? (Best Practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Welding Safety (Mixer Repair)

☐	Are welders wearing appropriate personal protective equipment (PPE), including welding helmets with proper shade, gloves, and flame-resistant clothing? (ANSI Z49.1)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a fire extinguisher readily available in the welding area? (NFPA 51B)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is a hot work permit required and obtained before welding or cutting operations begin? (NFPA 51B)	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐	Is adequate ventilation provided to remove welding fumes and gases from the work area? (ANSI Z49.1)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the welding area properly shielded to protect other workers from arc flash and flying sparks? (ANSI Z49.1)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Have all flammable materials been removed from the welding area or properly protected? (NFPA 51B)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the welding equipment properly grounded to prevent electrical shock? (ANSI Z49.1)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are compressed gas cylinders (oxygen, acetylene) stored and handled safely, away from heat sources and secured to prevent tipping? (CGA P-1)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are welding cables inspected for damage or wear before each use? (ANSI Z49.1)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are all personnel in the welding area wearing appropriate eye protection (safety glasses or goggles)? (ANSI Z87.1)	☐ Pass	☐ Fail	☐ N/A	Notes: _____

Mobile Equipment (Loader, Skid Steer)

☐	Is a pre-shift inspection of the loader or skid steer conducted and documented before operation? (OSHA 1926.602(a)(3)(i))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are operators wearing seatbelts at all times while operating the loader or skid steer? (OSHA 1926.602(a)(2)(i))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the backup alarm on the loader or skid steer functioning properly? (OSHA 1926.602(a)(9)(ii))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is the loader or skid steer equipped with a rollover protective structure (ROPS) and seatbelts? (OSHA 1926.1000)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are operators trained and authorized to operate the specific type of loader or skid steer being used? (OSHA 1926.20(b)(4))	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are pedestrian traffic routes clearly marked and separated from mobile equipment operating areas? (Best Practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Are speed limits enforced for mobile equipment within the plant? (Best Practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____
☐	Is visibility maintained by ensuring clean windows and mirrors on the loader or skid steer? (Best Practice)	☐ Pass	☐ Fail	☐ N/A	Notes: _____

☐ Is the loader bucket or attachment properly secured and in good working condition? (Best Practice) ☐ Pass ☐ Fail ☐ N/A Notes: _____

☐ Is the parking brake functioning correctly and used when the equipment is parked? (Best Practice) ☐ Pass ☐ Fail ☐ N/A Notes: _____

Findings

#	Item	Location	Severity	Action required
1				
2				
3				
4				
5				
6				
7				
8				

Signature

Inspector signature _____

Name _____

Date _____