Overhead Bridge Crane Annual Inspection Checklist (OSHA 1910.179)

1.0 Form Objective & Asset Scope

This annual inspection log is designed to document the structural, mechanical, and electrical condition of overhead bridge cranes in compliance with OSHA 1910.179 and ASME B30.2 standards. Regular annual inspections are critical for preventing catastrophic failures, ensuring load handling safety, and maintaining regulatory compliance in industrial facilities.

This form covers all major crane components including the bridge structure, trolley, hoist mechanism, electrical systems, runway rails, and load testing verification. It is intended for use by qualified maintenance technicians and certified crane inspectors.

2.0 Administrative & Asset Details

Inspection Date: _____

Inspector Name & Certification Number: _____

Crane ID / Asset Tag Number: _____

Crane Manufacturer & Model: _____

Rated Load Capacity (Tons): _____

Crane Serial Number: _____

Location / Bay Number: _____

Hour Meter Reading (if applicable): _____

Last Annual Inspection Date: _____

3.0 Inspection / Parameter Checklist

☐ Pass ☐ Fail - Inspect bridge beams for cracks, deformation, corrosion, or weld defects.

☐ Pass ☐ Fail - Verify end trucks and cross shaft connections are tight and free of wear.

☐ Pass ☐ Fail - Check runway rails for alignment, wear, and secure fastening to support structure.

☐ Pass ☐ Fail - Inspect hoist drum for grooving, cracks, or rope wear; verify rope lay and fleet angle.

☐ Pass ☐ Fail - Examine wire rope for broken wires, kinking, corrosion, or reduction in diameter.

☐ Pass ☐ Fail - Test load brake and holding brake for proper engagement and stopping distance.

☐ Pass ☐ Fail - Inspect all electrical wiring, contactors, limit switches, and pendant controls for damage.

☐ Pass ☐ Fail - Verify bridge and trolley travel limit switches function correctly in both directions.

☐ Pass ☐ Fail - Check hook and latch for deformation, cracks, or throat opening beyond 15% of normal.

☐ Pass ☐ Fail - Inspect sheaves for wear, cracks, or rope groove damage.

☐ Pass ☐ Fail - Verify all warning labels, load capacity tags, and emergency stop devices are present and legible.

☐ Pass ☐ Fail - Perform no-load operational test: bridge travel, trolley travel, hoist up/down, and emergency stop.

4.0 Deficiencies & Work Order Generation

Deficiency Description (include component and location): _____

Severity Rating (Critical / Major / Minor): _____

Required Corrective Action: _____

Parts Required (include part numbers if known): _____

Estimated Repair Time (hours): _____

Work Order Number Assigned: _____

Crane Tagged Out-of-Service? (Yes/No): _____

5.0 Sign-off & Return to Operations

Inspector Signature & Date: _____ Date: _____

Maintenance Supervisor Review & Date: _____ Date: _____

Safety Manager Approval & Date: _____ Date: _____

Operations Manager Authorization to Return to Service & Date: _____ Date: _____