OpsAuditHub opsauditihub.com	DOC ID: **SAF-0145**	REVISION: **Rev 2.4 (2026)**
	STANDARD: **OSHA 29 CFR 1910.169 & ASME Pressure Vessel Code Section VIII**	AUDIT FREQUENCY: **Daily Pre-Shift & Monthly Maintenance Audit**

Air Compressor Inspection Sop Template

Operational Scope: This Standard Operating Procedure establishes mandatory inspection protocols for industrial air compressors to mitigate catastrophic pressure vessel failure and pneumatic hazards. Compliance is strictly required by all facility operators and maintenance personnel to ensure a safe operational environment.

MANDATORY PPE:	Safety Glasses (ANSI Z87.1), Steel-Toe Safety Boots (ASTM F2413), Hearing Protection (NRR 25dB minimum), Heavy-Duty Industrial Work Gloves, High-Visibility Safety Vest
PREREQUISITES:	Verify proper Lockout/Tagout (LOTO) status prior to performing internal or mechanical maintenance. | Ensure the compressor area is adequately ventilated and free from combustible materials. | Review previous shift logs and verify all prior critical defects have been resolved.

PRE-START & VISUAL SYSTEM INSPECTION

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
1	**Oil Level Sight Glass**	Oil level must be within the upper and lower operating limits indicated on the sight glass; no milky discoloration or contamination.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**
2	**Drive Belts and Guards**	Belts must show no signs of excessive fraying, cracking, or slipping with proper tension (maximum 1/2-inch deflection); safety guards securely bolted in place.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
3	**Air Intake Filter**	Filter element is clean, unobstructed, and securely seated to prevent particulate ingestion into the compression chamber.	**Standard**	**[ ] PASS [ ] FAIL [ ] N/A**
4	**Ambient Environment & Ventilation**	Clearance around the unit meets manufacturer specifications; ventilation louvers are unobstructed to prevent thermal overload.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**

OPERATIONAL & SAFETY CONTROL VERIFICATION

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
5	**Pressure Relief Valve (PRV)**	Manually test the PRV ring to ensure free movement and unhindered discharge capability; no corrosion or paint buildup on the valve seat.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
6	**Auto-Drain & Condensate System**	Verify automatic moisture drain functions correctly to prevent excessive water accumulation in the receiver tank.	**Warning**	**[ ] PASS [ ] FAIL [ ] N/A**
7	**Pressure Gauge & Cut-Off Switch**	Gauge reads accurately under pressure and auto-start/stop pressure switches cycle within calibrated manufacturer limits.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**
8	**Receiver Tank Integrity**	Inspect exterior vessel shell and welds for signs of rust scaling, bulging, deep pitting, or pneumatic air leaks.	**Critical (Immediate Out of Service)**	**[ ] PASS [ ] FAIL [ ] N/A**

Certified Inspector / Lead Operator Signature: _____	**Date / Time:** _____	**Badge / Cert #:** _____
Site Safety Supervisor / Operations Manager Sign-off: _____	**Review Date:** _____	**Audit Status:** [ ] Approved [ ] Rectify

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