

MONTHLY CHECKLIST FOR AIR COMPRESSOR, NITROGEN GENERATOR, VESSEL & PIPELINES

Date/Shift: -

CHECK POINTS BEFORE START UP THE AIR COMPRESSOR

SL No.	Activity	Status	Remarks
1	Relieve the compressor of dirt and dust.	OK / NOT OK	
2	Check the oil level. Top up with the correct grade if required.	OK / NOT OK	
3	Drain condensate water from air receiver through the drain valve.	OK / NOT OK	
4	Check the compressor belt tension.	OK / NOT OK	
5	Check the insulation of electrical connections.	OK / NOT OK	
6	Check the air/oil filter condition	OK / NOT OK	
7	Access control (Lock out/ Tag out)	OK / NOT OK	
8	Directional marking on valves.	OK / NOT OK	
9	Check for overload setting	OK / NOT OK	
10	Check for any service alarms if any	OK / NOT OK	

CHECK POINTS AFTER START UP THE AIR COMPRESSOR

1	Check that the drains on the receiver is closed	OK / NOT OK	
2	Open the shut off valve of the service line slightly.	OK / NOT OK	
3	Re-inspect the machine for temperature and leaks the following day	OK / NOT OK	
4	Check for loading/unloading pressure	OK / NOT OK	
5	Check the outlet temperature	OK / NOT OK	

CHECKS DURING COMPRESSOR OPERATION

1	Check whether the compressor is running smoothly and that the running sound is normal.	OK / NOT OK	
2	The compressor delivery pipe shall be checked for abnormal colour change to ensure that their temperatures are within limits throughout the duration of operation of the compressor.	OK / NOT OK	
3	Observe for air leaks at the joints of the pipes and if notice, stop the compressor and rectify the defects.	OK / NOT OK	

PERIODIC CHECKS

1	All guards are in place and securely fastened.	OK / NOT OK	
2	All hoses and pipes inside the compressor are good condition, secure and not rubbing against each one.	OK / NOT OK	
3	Any leaks exits.	OK / NOT OK	
4	All fasteners are tight.	OK / NOT OK	
5	All electrical leads are secure and in good order.	OK / NOT OK	
6	Safety valves and other pressure relief devices are not obstructed	OK / NOT OK	
7	Any outlet, air filter, pipes, couplings, manifolds belt, valves, hoses etc. are in good condition.	OK / NOT OK	
8	Check Pressure relief valve setting for Compressor & its vessel (15.5 bar).	OK / NOT OK	
9	Checking process of compressor loading- unloading setting and working.	OK / NOT OK	
10	Check cut off pressure (12 bar)	OK / NOT OK	

11	Check for NDT & UT test validity	OK / NOT OK	
12	Check for Timer Based Auto Drain in both reservoir	OK / NOT OK	

CHECK POINTS – PRESSURE VESSEL

1	Test certificate of pressure relief valve	OK / NOT OK	
2	Testing frequency (Yearly) & process of pressure vessel	Available/ Not Available	
3	Check Pressure setting of pressure relief valve. (It is to be set at 1.1 times (i.e., 10% higher) of the maximum permissible working pressure (MPWP) of the vessel (Reference SMP /MECH/0032 for safety relief valve).(13.5 Bar)	OK / NOT OK	
4	Testing frequency & process of SRV (6 Months)	OK / NOT OK	
5	Check Auto drain valve is working or not	OK / NOT OK	
6	Check Isolation arrangement at delivery line.	OK / NOT OK	
7	Calibration of vessel pressure gauge.	OK / NOT OK	
8	U/T & NDT Test validity.	OK / NOT OK	
9	Directional marking on valves.	OK / NOT OK	
10	Visual inspection (rusting, cracks, decaying, etc.)	OK / NOT OK	
11	Access control (Lock out/ Tag out)	OK / NOT OK	
12	Check for Leakages if any	OK / NOT OK	

CHECK POINTS – PIPELINE

1	Directional marking on valves.	OK / NOT OK	
2	Colour coding on pipeline	OK / NOT OK	
3	Check for damages on bended pipes & T joints (in every 6 months)	OK / NOT OK	
4	Air Audit/ Hydro Test/UT validity (Yearly)	OK / NOT OK	
5	Check Isolation arrangement at delivery valves.	OK / NOT OK	
6	Visual inspection of welded joints.	OK / NOT OK	
7	Check for Leakages if any	OK / NOT OK	
8	Position of start stop switch w.r.t. the compressed air line (1.5 m)	OK / NOT OK	
9	Availability of remote start/stop switch	OK / NOT OK	
10	Check for corroded sections or flaking welded joints	OK / NOT OK	
11	Dye penetration test for corroded sections (If any)	OK / NOT OK	
12	For vulnerable points UT test (every 6 months)(If any)	OK / NOT OK	
13	Painting & Coating on pipes	OK / NOT OK	

CHECK POINTS – NITROGEN GENERATOR

1	Relieve the N2 generator of dirt and dust.	OK / NOT OK	
2	Supplies desired purity of nitrogen.	OK / NOT OK	
3	Compressed air effective inlet pressure (10 bar)	OK / NOT OK	
4	Oxygen level in the N2 generator room	OK / NOT OK	
5	Calibration of pressure gauge.	OK / NOT OK	
6	Visual inspection of welded joints.	OK / NOT OK	
7	Check for Leakages if any	OK / NOT OK	
8	Air Dryer Availability	OK / NOT OK	
9	Check for De-moisturized inspection (Yearly)	OK / NOT OK	

Signature of Vendor

TSL Shift in charge /Ch. Hand