

**TATA STEEL LIMITED**

Doc. No. KIM/EQPT/CN/01

/ No: -0.02

**KHONDBOND IRON MINES**

Effective Date: -01.09.2023

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

e/Shift: - 10/09/2024

**CHECK POINTS BEFORE START UP THE AIR COMPRESSOR**

No.	Activity	Status	Remarks
1	Relieve the compressor of dirt and dust.	OK/ NOT OK	Cleaned.
	Check the oil level. Top up with the correct grade if required.	OK/ NOT OK	Level good.
	Drain condensate water from air receiver through the drain valve.	OK/ NOT OK	
	Check the compressor belt tension.	OK/ NOT OK	
	Check the insulation of electrical connections.	OK/ NOT OK	Visually check
	Check the air/oil filter condition	OK/ NOT OK	Cleaned.
	Access control (Lock out/ Tag out)	OK/ NOT OK	
	Directional marking on valves.	OK/ NOT OK	
	Check for overload setting	OK/ NOT OK	
	Check for any service alarms if any	OK/ NOT OK	No Alarms.

**CHECK POINTS AFTER START UP THE AIR COMPRESSOR**

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

**CHECKS DURING COMPRESSOR OPERATION**

	Check whether the compressor is running smoothly and that the running sound is normal.	OK/ NOT OK	
	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	
	Observe for air leaks at the joints of the pipes and if notice, stop the compressor and rectify the defects.	OK/ NOT OK	No leakage.

**PERIODIC CHECKS**

	All guards are in place and securely fastened.	OK/ NOT OK	
	All hoses and pipes inside the compressor are good condition, secure and not rubbing against each one.	OK/ NOT OK	
	Any leaks exits.	OK/ NOT OK	No leaks.
	All fasteners are tight.	OK/ NOT OK	
	All electrical leads are secure and in good order.	OK/ NOT OK	
	Safety valves and other pressure relief devices are not obstructed	OK/ NOT OK	
	Any outlet, air filter, pipes, couplings, manifolds belt, valves, hoses etc. are in good condition.	OK/ NOT OK	
	Check Pressure relief valve setting for Compressor & its vessel (15.5 bar).	OK/ NOT OK	
	Checking process of compressor loading- unloading setting and working.	OK/ NOT OK	
	Check cut off pressure (12 bar)	OK/ NOT OK	



Rev: 0.00

# TATA STEEL LIMITED

## KHONDBOND IRON MINES

### CHECKLIST OF COMPRESSOR

Date :- 01/11/24

Shift : General

Sl. No.	Check Points before start	Activity	Remarks
1	Relieve the compressor of dirt and dust	OK / NOT OK	cleaned
2	Check the oil in the crankcase / chamber. Top Up with the correct grade if required.	OK / NOT OK	oil level ok
3	Drain condensate water from the air receiver through the drain valve.	OK / NOT OK	Drained
4	Check the compressor belt tension.	OK / NOT OK	
Check points initial start-up			
1	Check that the compressor rotates freely by hand and there are no mechanical obstructions.	OK / NOT OK	w/l A
2	Check that the drains on the air receiver is closed.	OK / NOT OK	closed
3	Open the shut off valve of the service line slightly.	OK / NOT OK	
4	Re-inspect the machine for temperature and leaks, the following day.	OK / NOT OK	P = 8.9 Bar T = 26°C
Checks during compressor operation			
1	Check whether the compressor is running smoothly and that the running sound is normal.	OK / NOT OK	normal sound
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 noticed, stop the compressor and rectify the defects.	OK / NOT OK	
Periodically check whether			
1	All guards are in place and securely fastened.	OK / NOT OK	
2	All hoses and pipes inside the compressor are in good condition, secure and not rubbing against each other.	OK / NOT OK	
3	Any leaks exists.	OK / NOT OK	No any leakage
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 by dirt or paint.	OK / NOT OK	
7	Any outlet valve, air filter, pipes, couplings, manifolds, belt, valves, hoses, etc are in good repair and free of wear and abuse.	OK / NOT OK	

Report (if any)

Run ⇒ 828 Hrs

Signature of Sectional Incharge

Ch. Hand / Mechanic / FCO