	<p align="center">NLC TAMILNADU POWER LIMITED DEPARTMENTAL PROCEDURE MANUAL (Incorporating ISO 9001:2015, ISO 14001: 2015, ISO 45001:2018 & ISO 50001:2018) STANDARD OPERATING PROCEDURE</p>		
TITLE: - SOP - Preventive Maintenance of IAC ZR90.		Doc. ID: NTPL/AHD/SOP-02	
Issue No.: 01	Issue date: 06.11.2018	Revision date: 13.12.2024	Revision No.: 01

1.0 PURPOSE:

To describe the procedure to carry out Preventive Maintenance for Instrument Air Compressor (ZR90).

2.0 SCOPE:

Preventive Maintenance for Instrument Air Compressor (ZR90) in Ash Handling Division of NTPL.

3.0 RESPONSIBILITY:

Operation and Maintenance Engineer

4.0 INPUT:


- Schedule of Preventive Maintenance.
- Defects list from AHD operation logbook.

5.0 OUTPUT:

Availability of Equipment

6.0 ACTIVITIES:

- LC (Line Clearance) must be applied by the Shift In-charge and inform to the PLC operator.
- Ensure the compressor is in OFF condition and press the Emergency Stop button to ensure safe working status.
- Check the Compressor air outlet gate valve to be in closed condition.
- Clean the compressor using instrument air.
- Safely remove the air filter and clean the air filter properly using low pressure air. Avoid using high-pressure air that may damage the filter.
- After cleaning the air filter, reinstall the air filter properly in its original position in the filter box.
- Then check the intercooler and after cooler drain valve, if any dust, sludge, or blockages found then clean it.

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- Next oil cooler to be water flushed.
- Any oil or water leakage to be checked in entire compressor.
- Conduct a dryer drum inspection and Rotation checking to be done.
- Check the oil level in the compressor, it must be within the green zone on the oil level indicator.
- Then open the compressor air outlet gate valve and need to be check any air leakage.
- If all conditions are okay, release the Emergency Stop button.
- Return the LC and inform the PLC operator that the compressor is ready.
- Conduct a trial run of the compressor.
- Monitor performance and confirm all parameters are within normal limits.

7.0 RECORDS:

Record No	Record Title	Location	Responsibility	Retention Time
NTPL/AHD/R-09	Daily Maintenance Log	Site Office	Site In-charge	3years
NTPL/AHD/R-11	Preventive maintenance Log	Site Office	Site In-charge	3years

8.0 VERIFICATION, CORRECTIVE AND PREVENTIVE ACTION:

HOD shall ensure adequacy and implementation of the above procedure through periodic interaction with division personnel, and regular review and monitoring of the process and compliances. In case of any observed deviation, correction and preventive action shall be immediately undertaken.

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