

Daily Maintenance Checklist

This document was developed by [Build Health International](http://www.bhioxygen.org) to support global medical oxygen infrastructure planning, site preparation, operation, maintenance, and sustainability. Additional technical resources are available at www.bhioxygen.org.

Instructions:

- *Complete daily maintenance checklist and perform daily maintenance each day that PSA plant is turned on and operated.*
- *Maintain a separate set of records for both systems in a duplex PSA plant and all three systems in a triplex PSA plant.*
- *The technician who completes the daily maintenance checklist must initial the form.*
- *Customize this form to your PSA plant. Electronic copies of this form are available at www.bhioxygen.org*

Daily Maintenance Checklist

| | Mon | Tues | Wed | Thurs | Fri | Sat | Sun |
|--|--|------|-----|-------|-----|-----|-----|
| Date | | | | | | | |
| Technician Initials | | | | | | | |
| Visual Inspections | <i>Indicate Y (Yes) or N (No) in the spaces provided below</i> | | | | | | |
| Have all combustible materials been removed from the in and around the PSA plant? | | | | | | | |
| Has the floor and surfaces been mopped and dusted? | | | | | | | |
| Is the PSA plant free of any physical damage? | | | | | | | |
| Are cylinders stored safely? (with caps and chains) | | | | | | | |
| Are all ventilation systems working, including fans? | | | | | | | |
| Are air intake filter mats, intake cover, and ventilation filters in place? | | | | | | | |
| Is the inlet air filter in good condition? | | | | | | | |
| Are the air compressor and equipment housing covers in place? | | | | | | | |
| Is the air compressor motor belt free of any visible damage (if equipped)? | | | | | | | |
| Is the air compressor oil level at the manufacturer's specified level? | | | | | | | |
| Is the bottom of the air compressor free from any signs of oil leakage? | | | | | | | |
| Is the air compressor condensate draining correctly? | | | | | | | |
| Have the condensate containers been emptied (if equipped)? | | | | | | | |
| Is the air dryer condensate draining correctly? | | | | | | | |
| Are the in-line filters' condensate draining correctly? | | | | | | | |
| Is the air tank condensate draining correctly? | | | | | | | |
| Is the booster compressor operating without unusual noises or leaks (water and oil)? | | | | | | | |

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| If the backup manifold has not been used in the past day, does the pressure gauge indicate it is maintaining pressure? | | | | | | | |
| Are the manifold pigtails in good working condition? | | | | | | | |
| Check the status of the fire detection and suppression system. Are they in good working condition? | | | | | | | |

| Data Collection | Mon | Tues | Wed | Thurs | Fri | Sat | Sun |
|---|---|-------------|------------|---|------------|------------|------------|
| Record the temperature in PSA plant room or container (°C) | | | | | | | |
| Are there any alarm codes? If so, identify components and take a picture of the alarm. | | | | | | | |
| Record the air compressor temperature (°C) | | | | | | | |
| Record the air compressor running hours | | | | | | | |
| Record the PDP temperature (°C) | | | | | | | |
| Record the oxygen purity (%) - PLC | | | | | | | |
| Record the oxygen purity (%) using a handheld oxygen analyzer | | | | | | | |
| Record the oxygen generator running hours | | | | | | | |
| Record the booster compressor running hours | | | | | | | |
| Record the booster compressor pressure gauge readings (list every stage) and temperature (once/week) | Inlet Pressure: 1st Stage Pressure: 2nd Stage Pressure: 3rd Stage Pressure: Exhaust Pressure: | | | Inlet Temp: 1st Stage Temp: 2nd Stage Temp: 3rd Stage Temp: Exhaust Temp: | | | |
| Enter the number of cylinders filled for your standard cylinder size. Indicate standard cylinder size _____ [L] | | | | | | | |
| Record the number of hours during which cylinders were filled. | | | | | | | |
| Compare the running hours recorded above with the Preventive Maintenance Schedule. Is service needed? | | | | | | | |