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| **STANDARD OPERATING PROCEDURE**  SCREW COMPRESSOR |

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| **Date** | 10-01-2020 |
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| **Date** | 10-01-2020 |
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| **Date** | 10-01-2020 |

## Purpose

The main purpose of screw compressor is to provide high-pressure air to the mixers, extruder lines. They are used for the discharge of the mixers, to open the lid of the mixing unit and for the Pelletizer cutters of extruders. Apart from this, the compressed air is also being used for the cleaning purposes.

## Scope

## This is to intimate to all the staff of maintenance department that they are bound to follow the procedures of Screw Compressor. They have to follow instructions and working process of compressor and its related handling.

## Responsibilities

* All the maintenance staff is responsible for process following.
* All the individuals connected to this process are bound to follow.

## Procedure

Before you start the compressor, check the following:

* Make sure that the operating parameters are according to the control instruction.
* Inspect all the electrical connections and if there is a loose connection, make it a secure connection.
* Check that the valves of the compressor being used at that time must be open.
* Check all fittings are securely connected prior to being pressurized.

After these checks, Turn ON the compressor by pressing the Start button.

After turning on the compressor, check the following:

* After starting the compressor, check the pressure increase and cut-out/cut-in pressure.
* Listen for any air leaks from any airlines and immediately report if any leaks are observed.
* During operation, often inspect oil level, working pressure and temperature.
* Pressure Safety valve should be in working condition, so it may release excess pressure in case of automatic un-load failure.
* Automatic water drain filters should be in working condition to drain moisture and water from the air.
* If unexpected abnormal situation of the compressor is found, press the emergency stop button to stop the machine immediately and inform your department head.
* Check the compressor at regular intervals.

To shut down the compressor:

* Press the STOP button to stop the compressor.
* Main Breaker of control panel should also stand on trip or off position.

## Associated Documents and Records

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| **Sr. #** | **Equipment** | **Std Value** | | | **Day Value** | | | | | | | | | | | |
|  |  | On-Load | | Off-Load | 9 A.M | | | | 1 P.M | | | | 5 P.M | | | |
|  |  | On-Load | | Off-Load | | On-Load | | Off-Load | | On-Load | | Off-Load | |
| 1 | Main Motor | 45 AMP | | 22 AMP |  | |  | |  | |  | |  | |  | |
| 2 | Exhaust Fan | 1.20 AMP | |  |  | |  | |  | |  | |  | |  | |
| 3 | Dryer | 6 AMP | |  |  | |  | |  | |  | |  | |  | |
| 4 |  |  | |  |  | |  | |  | |  | |  | |  | |
| 5 |  |  | |  |  | |  | |  | |  | |  | |  | |
| 6 |  |  | |  |  | |  | |  | |  | |  | |  | |
| 7 |  |  | |  |  | |  | |  | |  | |  | |  | |
| 8 |  |  | |  |  | |  | |  | |  | |  | |  | |
| **Checked By** | |  | | |  | |  | |  | |  | |  | |  | |
| **In-charge Sign** | |  | | |  | |  | |  | |  | |  | |  | |
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**AMENDMENT HISTORY**

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| --- | --- | --- | --- |
| **REV. #** | **DCR #** | **SECTION** | **AMENDED TEXT** |
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\* All changes made in the document are notified in the Amendment History Table.