

#### ENGINEERING DEPARTMENT

| STANDARD OPERATING PROCEDURE                               |                        |
|--|------------------------|
| Department: Engineering                                    | SOP No.:               |
| Title: Inspection And Maintenance of Pressure Relief Valve | <b>Effective Date:</b> |
| Supersedes: Nil  | Review Date:           |
| Issue Date:  | Page No.:              |

#### 1.0 REVISION HISTORY

| Rev. No. | Details of changes | Reason for change |
|----------|--------------------|-------------------|
| 00       | NIL                | NEW SOP           |

#### 2.0 OBJECTIVE:

**2.1** The Objective of this SOP is to describe the procedure for inspection and maintenance of pressure Relief valve (Safety Valve), installed on Boiler, raw steam distribution line, and pure steam distribution Line, manufacturing vessels, autoclave, compressed gas line and its receivers.

#### 3.0 SCOPE:

2.1 This SOP is to describe the procedure for inspection and maintenance of pressure Relief valve (Safety Valve), installed on Boiler, raw steam distribution line, and pure steam distribution. Line, manufacturing vessels, autoclave, compressed gas line and its receivers.

#### 4.0 RESPONSIBILITY:

- **4.1** The Maintenance Engineer shall be:
  - **4.1.1** Responsible for the co-ordination with competent authority for inspection and maintenance of pressure relief valve (Safety Valve).
  - **4.1.2** Responsible for corrective action in case of deviation.

#### 5.0 ACCOUNTABILITY:

Head -Engineering Services



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#### 6.0 PROCEDURE:

- 6.1 The inspection and maintenance of pressure relief valve is to be done by a Competent Person approved by Directorate of Industrial Safety and Health (statutory body from the Government of India).
- **6.2** Engineering department should inform the concerned department head before carrying out the inspection and maintenance of safety valve
- **6.3** Engineering department should put the `Under Maintenance' board on equipment and respective control valve provided on utility lines.
- **6.4** Remove the safety valve from equipment and check visually the spring and valve seat for any physical damage. Rectify or replace it, if required.
- **6.5** Fix the safety valve on the `pressure setting manifold'.
- **6.6** Open the air inlet valve and check for air leakage. Rectify it, if required.
- **6.7** Gradually apply the compressed air pressure on manifold and allow the safety valve to blow-on.
- **6.8** Check the blow-on pressure on the gauge and compare it with the specifications.
- **6.9** Ensure that the blow-on pressure correlates with the designed set pressure.
- 6.10 Set the `blow-on' pressure of safety valve by adjusting spring tension of safety valve at required pressure by loosening/tightening the `setting screw', if required.
- **6.11** Close the air inlet valve and remove the safety valve.
- **6.12** Fix the safety valve in place.
- **6.13** Take a running trial of the equipment or system and check for any leakage. Rectify it, if required.
- **6.14** Record the set pressure on the tag and up date the 'checked on' date and 'next due' date'.
- **6.15** Certificate of safety valve setting to be obtained from the Competent Person.
- **6.16** The engineering department for one year should preserve such test certificates.

#### 6.17 FREQUENCY:

**6.17.1** Checking of all safety valves to be done once in a year.



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**7.0** ANNEXURES:

Nil

8.0 REFERENCES (S)

Nil

9.0 GLOSSARY

SOP : Standard Operating procedure

No : Number



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