Work instructions for inspection of air receiver

Objective                 Certification & Inspection of Air receivers in the plant

Scope              compressor room

Responsibility      Engineer In charge and workmen at the job, Contractors

PPEs to be used:    Helmet, Safety shoes, hand gloves, goggles, CO monitor in gas

  area, safety belt / harness at height

Work No 1            Certification of air receiver

Aspect-Impact

Waste generation ` Resource Depletion

Noise Noise pollution

Hazards identified

Mechanical Hazard Fall of tools, pressure testing accessories, fall from height, Breakage of

air receiver components

Physical hazard Air Pressure, Noise

Procedure

External, Internal and hydraulic testing of pressure vessel

The approved agency of Goa Factory Inspector will carry out the inspection.

 The thickness of shell will be checked with calibrated thickness gauge brought by the agency.

Air received shall be isolated from service for hydraulic testing after taking Work permit from production department. Intimate User department in advance.

Barricade the area near air receiver

Release the air from air receiver by opening drain valve standing away from the valve.

All safety items, gauges, fittings shall be inspected and replaced if required.

Use safety belt/harness while working at height while checking/replacing the gauges. Do not keep the tools, gauges hanging on the structure while working.

Blank the inlet and out let pipe and fill the air receiver with water.

Set the safety valve to 1.5 times of operating pressure for testing.

Stay away from air receiver during hydraulic testing.

Now connect hand pump with help of hose and pressurize to 1.5 times (10.2kg/cm2) of operating pressure. Keep the pump at least 5 mtrs away and operate hand pump. The operating pressure is 6.8kg/cm2.

Keep all men away during hydraulic testing

Check for drop in pressure and leakage to the satisfaction of inspector.

Recertify After every maintenance get the receiver recertified.

De pressurizes the air receiver and remove the blanks and bolt to the system

 Set the relief valve to 1.1 times (7.5 kg/cm2) of operating pressure.

Connect the air receiver with the permission of User department and release it for service. Clear work permit

Write the certification details on the air receiver.

Carry out the housekeeping activity after completion of the job.