



STANDARD OPERATING PROCEDURE

Maintenance and Inspection of Rupture Disc

Document ID	SOP/SIN/028
Version	00
Effective Date	
Validity	

Details	Prepared by	Reviewed by	Approved by
Name	Yogesh Patil	Jitendra Behera	Jitendra Sinha
Designation	Sr. Officer Instrumentation	Dy-Mgr. Instrumentation	DGM Engineering
Signature with Date			

Crop Protection Chemicals
Coromandel International Limited

Check this is the latest version of the document before use


<div>Coromandel</div> 	Integrated Management System Procedure				
	Document type	Standard Operating Procedure			
	Document No.	SOP/SIN/028	Revision No.	00	Page 2 of 5
	Version No.	00	Revision Date	-	
	Department	Instrumentation			
Title	Maintenance and Inspection of Rupture Disc				


Table of Contents

1.0	PURPOSE	3
2.0	SCOPE	3
3.0	RESPONSIBILITY	3
3.1	Asst. Manager/Sr. Officer Instrument and Instrument Technician	3
3.2	Area Owner (Production)	3
3.3	Section Head Instrument	3
4.0	DEFINITION	3
5.0	PROCEDURE	3
5.1	Frequency: Once in a year.	3
5.2	Health and Safety:	3
5.3	Tools Requirement:	4
5.4	Flow of Activities	4
6.0	FORMS AND RECORDS	4
7.0	ABBREVIATIONS	4
8.0	REFERENCES	5
9.0	REVISION HISTORY	5

Prepared by

Reviewed by

Approved by

<div>Coromandel</div>	Integrated Management System Procedure				
	Document type	Standard Operating Procedure			
	Document No.	SOP/SIN/028	Revision No.	00	Page 3 of 5
	Version No.	00	Revision Date	-	
	Department	Instrumentation			
Title	Maintenance and Inspection of Rupture Disc				

1.0 PURPOSE

The purpose of this procedures is to ensure that preventive maintenance and physical Inspection internally/externally of a rupture disc is conducted safely and effectively.

2.0 SCOPE

This procedure is applicable to servicing, preventive maintenance and inspection of all Rupture disc in Coromandel International Ltd. Sarigam unit.

3.0 RESPONSIBILITY

3.1 Asst. Manager/Sr. Officer Instrument and Instrument Technician

- Responsible for
 - Timely doing the preventive maintenance and inspection of rupture disc safely as per given frequency.
 - Ensure the checklist properly filled with co-ordination of process person.

3.2 Area Owner (Production)

- Responsible for
 - Give process clearance to do the preventive maintenance and inspection of particular rupture disc (as per scheduled tag name) safely.
 - Ensure the job is doing as per sop and verify the checklist of rupture disc.

3.3 Section Head Instrument

- Accountable for
 - Reviewing the above job and if any deviation found then correct it within minimum time period.

4.0 DEFINITION

Rupture disc: A Rupture disc used as process safety barriers to prevent from pressurization of reactors, vessels and other pressurized equipment's. Which will burst and discharge gases, vapors or liquids on a predetermined safe operating pressure being exceeded. It is designed on a predetermined safe operating pressure.

Burst pressure: The predetermined safe operating pressure measured at the Rupture disc inlet at which a Rupture disc should burst and rapidly vent the gases, vapours or liquids to a practically full open position.

Discharge Capacity: Actual rate of discharge of service media, which can be expressed in mass flow or volumetric terms.

5.0 PROCEDURE

5.1 Frequency: Once in a year.


5.2 Health and Safety:

One of the most significant health and safety risk during Physical inspection internally/externally is position of people. RD must be cleaned and ensure the equipment have no hazardous

Prepared by

Reviewed by

Approved by

<div>Coromandel</div> 	Integrated Management System Procedure				
	Document type	Standard Operating Procedure			
	Document No.	SOP/SIN/028	Revision No.	00	Page 4 of 5
	Version No.	00	Revision Date	-	
	Department	Instrumentation			
Title	Maintenance and Inspection of Rupture Disc				

material. In addition, the following personal protective equipment (PPE) should be worn during maintenance activities:

Safety Shoes

Helmet

Safety goggle

Work Gloves

Organic Mask

Pressure suit if required.

Special PPE which would be recommended by process person

5.3 Tools Requirement:

Spanners

Screwdrivers and other required tools

Spares like gaskets, Holder and Rupture disc etc.

5.4 Flow of Activities

- Take cold work permit and pipe line opening permit from the shift/area in-charge to inspect/maintenance of Rupture disc.
- Remove the RD with the help of mechanical fitter from the line/equipment and put blind in upstream and downstream line.
- Lowering and take away the Rupture disc from the process.
- Check the outer condition and name plate of Rupture disc, whether it corroded or not.
- Dismantling it from the holder, internal inspection and cleaning done.
- If the internal Rupture Disc Liner and holder have found any abnormality then replace RD and holder wherever required.
- Any other part like nut bolt, gasket or Rupture Disc, holder is required than arrange it to get the job done.
- Re-Installation done on its location with new suitable gasket & nut bolts with the help of mechanical fitter.
- It shall be witnessed by Instrument engineer and operation person.
- Filled up the checklist (SGM/IND/F021-00) and signed including all witness.
- Hand over the Rupture Disc to the shift/area in-charge to take it in operation.
- Close all the permits.
- Note the job in shift record book and attach the signed checklist in preventive record file.

6.0 FORMS AND RECORDS

SGM/IND/F021-00 for preventive maintenance of Rupture disc


7.0 ABBREVIATIONS

RD : Rupture disc

Prepared by

Reviewed by

Approved by

<div>Coromandel</div> 	Integrated Management System Procedure				
	Document type	Standard Operating Procedure			
	Document No.	SOP/SIN/028	Revision No.	00	Page 5 of 5
	Version No.	00	Revision Date	-	
	Department	Instrumentation			
Title	Maintenance and Inspection of Rupture Disc				

PPE : Personal Protective Equipment

Inst : Instrumentation

e.g. : Example

SOP : Standard Operating Procedure

Dept : Department

8.0 REFERENCES

Rupture Disk Manufacturer, M/s BS&B

9.0 REVISION HISTORY

Date	Ver./Rev. no.	Reason for Revision	Author	Designation
	00 / 00	New SOP developed as per the updated SOP format	Yogesh Patil	Sr. Officer Instrumentation

Prepared by

Reviewed by

Approved by