



STANDARD OPERATING PROCEDURE

Department: Engineering

TITLE: Sanitization of Purified and Distilled Water Loop

SOP No.		Revision No.	
Effective Date		Supersedes No.	
Review Date		Page No.	1 of 5

1.0 OBJECTIVE

The purpose of this SOP is:

- 1.1 To describe the procedure for sanitization of Purified and distilled water loop.

2.0 SCOPE

- 2.1 This SOP is applicable for the procedure for sanitization of Purified and distilled water loop.

3.0 RESPONSIBILITY:

- 3.1 The Maintenance Operator shall be responsible:

- 3.1.1 Responsible for sanitization of Purified and distilled water loop.

- 3.1.2 Responsible for maintaining the sanitization record.

- 4.2 The Maintenance Engineer shall be responsible:

- 4.2.1 Responsible for ensure the proper sanitization.

- 4.2.2 Responsible to take corrective action if any deviation observed.

4.0 ACCOUNTABILITY:

Head –Engineering Services

5.0 PROCEDURE:

5.1 STARTING PROCEDURE:

- 5.1.1 Before starting the sanitization, switch OFF the MCB of the feed pump,

- 5.1.2 Drain out the storage tank and water distribution line by opening the drain valve.



STANDARD OPERATING PROCEDURE

Department: Engineering

TITLE: Sanitization of Purified and Distilled Water Loop

SOP No.		Revision No.	
Effective Date		Supersedes No.	
Review Date		Page No.	2 of 5

- 5.1.3 Close the drain valves.
- 5.1.4 Keep the zero dead leg valves at the user points closed.
- 5.1.5 Clean the SS flexible hose, which is being used to connect the pure steam generator and distribution loop with purified water for about ten minutes.
- 5.1.6 After cleaning of SS flexible hose, connect the pure steam line to distribution loop by flexible hose.
- 5.1.7 Start the pure steam generator, ref. SOP.
- 5.1.8 Allow to flow the pure steam through distribution loop and tank for about two hours.
- 5.1.9 After 2 hours, stop the pure steam generator.
- 5.1.10 Mean time, partially open all the user points one by one for ten minutes (Approx.) for passing the steam through the inter connecting pipe between the valve and machine.
- 5.1.11 Pass the Nitrogen Gas through the loop for cooling down the system to ambient temperature.
- 5.1.12 After that, Flush out the close loop and inter connecting pipes with purified water for about 30 minutes.
- 5.1.13 After flushing, close the zero dead valves (user points) and start the distribution loop SOP.
- 5.1.14 Keep the SS flexible hose properly rolled and closed at both ends for next



STANDARD OPERATING PROCEDURE

Department: Engineering

TITLE: Sanitization of Purified and Distilled Water Loop

SOP No.		Revision No.	
Effective Date		Supersedes No.	
Review Date		Page No.	3 of 5

sanitization.

5.2 FREQUENCY OF SANITIZATION:

5.2.1 Sanitization of Purified water loop to be carried out once in Month and
Sanitization of WFI loop to be carried out once in Month.

6.0 ANNEXURES:

Annexure –I : Sanitization record of purified water loop

Annexure – II : Sanitization record of WFI loop

8.0 References (S)

NIL

9.0 Glossary

SOP : Standard Operating procedure

No : Number

WFI : Water for Injection.

SS : Stainless Steel.

