



PHARMA DEVILS

PRODUCTION DEPARTMENT

STANDARD OPERATING PROCEDURE

Department: Production	SOP No.:
Title: Regeneration of Soft Water Plant	Effective Date:
Supersedes: Nil	Review Date:
Issue Date:	Page No.:

Purpose: To lay down operating procedure for regeneration of soft water plant.

Scope: This procedure is applicable to

Responsibility: Production Chemist
To supervise the activity

Equipment used: Softener (Indion NGS - 3B)

Regeneration procedure:

Brine injection:

1. Prepare NaCL solution by dissolving 16.0 kg NaCL in 32.0 liters water.
2. Add NaCL solution to brine tank.
3. Puch down hand lever valve (multiport valve) and move it to REGENERATION/SLOW RINSE POSITION.
4. Start the feed water pump and adjust delivery valve pressure between 3.0 to 3.5 kg/cm²
5. Time 10 to 15 minutes.

Brine/slow rinse:

1. Remove the brine solution-feeding pipe.
2. Leave multiport valve in same position as in brine injection
3. Time 10 to 20 minutes.

Fast rinse:

1. Switch off the feed water pump.
2. Move multiport valve by pressing down to FAST RINSE position and release it.
3. Switch on the feed water pump.
4. After 5 minutes take sample from the drain pipe test for hardness with the INDION SAMPLE TEST KIT.
5. When the results shows hardness to be within desired limit, switch off the pump, moves the valve hand lever to service position. Switch on the pump.
6. Open the delivery valve, placed between hand liver valve and by pass valve.

