

PHARMA DEVILS PRODUCTION DEPARTMENT

STANDARD OPERATING PROCEDURE			
Department: Production	SOP No.:		
Title: Cleaning of Combo Metal Detector cum De-duster	Effective Date:		
Supersedes: Nil	Review Date:		
Issue Date:	Page No.:		

1.0 OBJECTIVE:

To lay down a procedure for cleaning of De-duster cum Metal detector (Technofour).

2.0 SCOPE:

This procedure is applicable to the cleaning of De-duster cum Metal detector (Technofour) in Compression area.

3.0 RESPONSIBILITY:

Production: Technical Associate/Officer /Executive/Assistant Manager.

Head Production: To ensure execution & compliance.

Head QA: To ensure the compliance.

4.0 **PROCEDURE:**

4.1 CLEANING: TYPE A

Change over from one batch to next batch of the same product and potency and of similar product with ascending potency.

- 4.1.1 Remove "TO BE CLEANED" label and affix "UNDER CLEANING" label to the machine with date and signature of the production officer as per SOP.
- 4.1.2 Enter the cleaning start time in equipment log book as per SOP.
- 4.1.3 Unplug the electric connections.
- 4.1.4 Dismantle all knobs, outlet chute, SS cover over perforated spiral plate, clamping rod assembly, perforated spiral plate and dust collection box of deduster, remove the powder from above dismantle parts and clean with dry lint free duster.
- 4.1.5 Dismantle acrylic feed chute, rejection collection box and dry clean with dry lint free duster.
- 4.1.6 Dry clean the external body of metal detector and utility cables using a dry lint free duster.
- 4.1.7 Dry clean the internal and external body of deduster and utility cables using a dry lint free duster.
- 4.1.8 Replace the "UNDER CLEANING" status label with "CLEANED" status label with date and signature of the Production Officer.



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Department: Production	SOP No.:			
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Supersedes: Nil	Review Date:			
Issue Date:	Page No.:			

4.1.9 Record the cleaning activity in equipment sequential log as per SOP.

4.2 TYPE B:

This is a cleaning procedure for Change over of product with different actives/color/ descending potency or after maintenance of contact parts.

- 4.2.1 Replace the "TO BE CLEANED" status label with "UNDER CLEANING" status label with date and signature of the Production officer and enter cleaning time in log sheets.
- 4.2.2 Enter the cleaning start time in equipment log book as per SOP.
- 4.2.3 Follow the procedure from step 4.1.3 to 4.1.5.
- 4.2.4 Dismantle the parts Acrylic feed chute, acrylic chute support plate, rejection box, Discharge chute with its cover and Teflon flap of metal detector
- 4.2.5 Dismantle all knobs, gasket screening, spiral helix, spiral cover (ss and poly carbonate), drum, outlet chute and dust collection box knob, clamping rod assembly outlet chute, SS cover over perforated spiral plate of deduster and clean with nylon scrubber.
- 4.2.6 Keep all parts in polythene bag and affix "TO BE CLEANED" labels dully filled and signed, Take it to washing area on a trolley.
- 4.2.7 Clean the dismantle parts of point no 4.2.4 with nylon scrubber and jet of approximate 10-20 Kg of purified water.
- 4.2.8 Clean the dismantle parts of point no 4.2.5 with nylon scrubber and jet of approximate 5-10 Kg of purified water.
- 4.2.9 Rinse the dismantle part with approximate 2-5 Kg of purified water.
- 4.2.10 Dry the all parts with compressed air and followed by dry lint free duster.
- 4.2.11 Wipe out the body of metal detector cum deduster with wet lint free duster followed by dry lint free duster.
- 4.2.12 Wipe the bellow of deduster with wet lint free cloth dipped in purified water and dry with dry lint free duster. Clean the dust collection pipe with nylon brush after that visually ensure the cleaning.
- 4.2.13 Wipe all dismantled parts and body of the metal detector cum deduster with 70% v/v IPA solution.
- 4.2.14 Wipe the test sample blocks (Ferrous, Non-ferrous, stainless steel and Dummy test piece)



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Department: Production	SOP No.:	
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Supersedes: Nil	Review Date:	
Issue Date:	Page No.:	

used for metal detector challenge test with dry lint free cloth and finally clean the blocks with lint free cloth dipped in 70 % v/v IPA solution.

4.2.15 Reassemble the all the parts of metal detector in reverse order of dismantling.

Place gasket around bellow properly.

□ Place INVERTED Cone over gasket at center.

- $\hfill\square$ Place screening dish on main bush by matching the key way.
- \Box Fitting of spiral above the screening dish by matching the key way.
- \Box Clamp the rod assembly on the spiral by rotating the handle and make it fully tight.
- \Box Put the drum over the spiral and locate it on the ring over the drive unit box.
- \Box Fix the drum by knobs, on deciding the side of inlet chute required by rotating the drum.
- $\hfill\square$ Locate S. S spiral cover over the drum by matching the spiral and outlet chute.
- \Box Press fit the polycarbonate cover on the pins of S. S spiral cover.
- \Box Fit the outlet chute and dust collection box on spiral cover outlet chute by knobs provided.

□ Adjust the height of deduster assembly, by sliding pillar mechanism, by matching the compression machine outlet height.

Check for

- 1) Proper fitting of screening dish and spiral in the key way of the bush.
- 2) Note that clamping rod must be fully tight.
- 3) Knobs for fitting drum and spiral covers should be properly tight.
- 4) Match the spiral helix outlet and spiral cover outlet properly.
- 4.2.16 Properly fit the screening dish and perforated spiral plate in the key way of the bush of deduster.
- 4.2.17 Insert the clamping rod in the spiral helix and tight it with the knob. Fix the drum and SS cover over the perforated spiral plate with the help of three knobs provided, Ensure that the outlet of perforated spiral plate and outlet of SS cover are matching.
- 4.2.18 Replace the "UNDER CLEANING" status label with "CLEANED" status label with date and signature of the Production officer and enter cleaning time in equipment sequential log as per SOP.
- 4.2.19 Fill the cleaning checklist duly signed by the technician and concerned officer as per



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Department: Production	SOP No.:		
Title: Cleaning of Combo Metal Detector cum De-duster	Effective Date:		
Supersedes: Nil	Review Date:		
Issue Date:	Page No.:		

Annexure –I.

5.0 ANNEXURE (S):

Annexure I: Cleaning checklist of Deduster cum Metal detector (Technofour).

6.0 **REFERENCE** (S):

SOP: Preparation, approval, Distribution control, Revision and destruction of Standard Operating Procedure (SOP).

SOP: Procedure for area line clearance.

SOP: Status labeling in production department.

7.0 ABBREVIATION (S) /DEFINITION (S) :

SOP: Standard Operating Procedure QA: Quality assurance IPA: Iso-Propyl Alcohol

REVISION CARD

S.No.	REVISION No.	REVISION DATE	DETAILS OF REVISION	REASON (S)FOR REVISION	REFERENCE CHANGE CONTROL No.
1	00			New SOP	