

Equipment Name: - FUNDAMIX®, WA 30189, P.O. No. 4511002729

Date: 06/09/2019

MOM cum Service report Between Indian Immunological & DrM Filter Technology

Working Date	Working Hour	Place
04/09/2019	10:00 A.M. to 05:00 P.M.	Hyderabad
06/09/2019	10:00 A.M. to 02:00 P.M.	Hyderabad

Working Activities: -

- 1) Installation of FUNDAMIX® drive Size-1 with 5L Glass Vessel - Completed
- 2) Changing new Frequency Converter with proper wiring & termination - Completed
- 3) Power Cable termination to control panel of FUNDAMIX® Size 1 drive unit – checked and found ok.
- 4) Main power cable (230VAC, 50 Hz) termination with Control Panel and drive unit was functional.
- 5) Membrane seal assembly and drive unit was observed with sound during installation. The silicone gasket was fixed to arrest the sound which was causing due to uneven mount between the vessel head plate and the membrane seal assembly.
- 6) Speed of the FUNDAMIX® drive has been changing w.r.t. Potentiometer. Also, different amplitude observed by varying the frequency drive Speed, Maximum Amplitude operated– 2.4 mm.

Below Points Observed between Frequency Converter and Amplitude Scale.

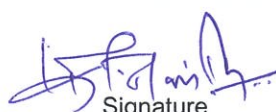
FUNDAMIX® Size 1 (5L Glass Vessel)	
Voltage in FC (V)	Amplitude in Scale (mm)
240	2.4
230	2.2
220	1.9
210	1.6
200	1.4
190	1.2
180	0.9
170	0.6
160	0.4
150	0.2
140	0.1

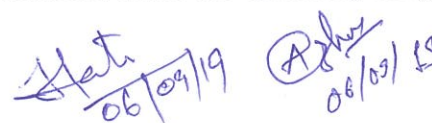
Customer Remarks: -

Installation was checked and satisfied with equipment operational conditions. However, on Wednesday (04.09.2019) we observed abnormal sound from the membrane seal assembly, the assembly was opened and re-adjusted by DrM Service engineer. Due to this change we assume there might be an effect on the membrane seal assembly integrity associated with the 5.0L jacketed vessel which might turn unsafe during aseptic operations.

Therefore, IIL-R&D confirm to check Media trial simulation and confirm the integrity of membrane seal assembly and functional satisfaction will be declared thereafter.

Note: We have requested the service engineer to provide us the connector which was specifically designed to accommodate both 5.0L and 10.0L shaft for future use.


Signature
(Indian Immunological Ltd.)


Signature
(DrM Filter Technology Pvt. Ltd.)

