

### Media Degasser

#### 21 liters Mobile Dissolution Media Degasser



**EMD-21DO**

#### Features:

- Enables filtration, pre-heating, deaeration, and precise dosing of media in the vessel within the dissolution bath
- 21 ltr media tank capacity allows filling of dissolution vessels for up to 3 dissolution tests (n = 6)
- Integration with DO<sub>2</sub> probe facilitates individual vessel and pilot DO<sub>2</sub> levels for record and audit purposes
- Entire dissolution batch degassing ensures inter-vessel degassing consistency
- Volumetric dispensing with an accuracy better than  $\pm 1\%$  as per USP, FDA and Ph. Eur. Requirements
- Special internal nozzle design allows the degassing of surfactant and frothing media like Sodium Lauryl Sulphate (SLS) and avoid frothing Tween
- Programmable deaeration time, temperature and vacuum for effective deaeration of different media
- Maintains media under vacuum at desired temperature while in idle condition
- Fast aspiration, heating and degassing allows 8 litres of media to be dispensed in less than 15 mins
- Fast filling of dissolution vessels at a dispensing rate of 900 ml/min
- Programmable rinse and cleaning cycle allows the instrument to run through a prevalidated self cleaning procedure
- On-board memory stores 10 batch information of degassed media
- 360 turning radius allows it to be maneuvered in tight places
- Multifunction single hose for dispensing, aspirating, cleaning, rinsing, and draining ensures no lifting of heavy media tanks
- Print report consisting validation, calibration and main cycle report. Main cycle report consists set vacuum level, dispensed volume, degassing temperature, O<sub>2</sub> level, O<sub>2</sub> level of pilot reading, O<sub>2</sub> level of individual

- Vessel and maximum vacuum level attained
- **Features of optical DO probe:**
  - Compliance with ASTM International Method D 888 - 05
  - Quick response optical sensor technology
  - No membrane : Cost-effective optical sensor technology allows maintenance – free operation
  - No electrolyte, no drift
  - No O<sub>2</sub> consumption : Precise in low O<sub>2</sub> concentration
  - No cross sensitivity with pH 1-14, CO<sub>2</sub>, H<sub>2</sub>S, SO<sub>2</sub>
  - Real time temperature compensation
  - Provides reliable and reproducible results
  - Rugged and robust stainless steel construction

#### Specifications:

| Model                  | EMD-21DO                                                                                                                                      |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Flow rate              | 900 ml/min. (During run cycle)                                                                                                                |
| Dispense Volume        | Programmable from 50 ml to 4000 ml                                                                                                            |
| Temperature Range      | 20°C to 50°C                                                                                                                                  |
| Temperature Accuracy   | $\pm 0.5^\circ\text{C}$                                                                                                                       |
| Media preparation time | 25 min                                                                                                                                        |
| O <sub>2</sub> level   | Normal tap water which contains 85% of dissolved O <sub>2</sub> before degassing will contain 40% of dissolved O <sub>2</sub> after degassing |
| Hose                   | Single                                                                                                                                        |
| Media tank             | S.S. 316, Teflon coated                                                                                                                       |
| Vacuum pump            | 760 mmHg                                                                                                                                      |
| Piston pump            | Ceramic metering piston pump                                                                                                                  |
| Accuracy               | Better than 1%                                                                                                                                |
| Power                  | 1200 watts                                                                                                                                    |
| Power supply           | 230V AC/ 50Hz. $\pm 10\%$ & 110V AC/60Hz $\pm 10\%$                                                                                           |
| Storage temperature    | 10°C to 50°C                                                                                                                                  |
| Operating temperature  | 10° C to 30°C                                                                                                                                 |
| Dimensions (LxWxH)     | 562mm x 425mm x 871mm                                                                                                                         |
| Weight                 | 60Kg (Approx.)                                                                                                                                |

#### Ordering Information:

| Products     |                                     |          |
|--------------|-------------------------------------|----------|
| Product code | Description                         | Quantity |
| 720400       | EMD-21DO (Body made of M.S.) - 230V | 1        |
| 710400       | EMD-21DO (Body made of M.S.) - 110V | 1        |

| Standard Accessories |                                           |          |
|----------------------|-------------------------------------------|----------|
| Part number          | Description                               | Quantity |
| 0705A00004           | EMD Hose Assembly with Handle             | 1        |
| 0705B00015           | EMD DO2 Sensor                            | 1        |
| 0705B00024           | EMD-21 PDO Extension Cable For DO2 Sensor | 1        |

| Dismantling Charges |                                                       |          |
|---------------------|-------------------------------------------------------|----------|
| Product code        | Description                                           | Quantity |
| 0704S12             | Dismantling Charges for Media Degasser Model EMD-21DO | 1        |

| Single Validation Charges |                                                             |          |
|---------------------------|-------------------------------------------------------------|----------|
| Product code              | Description                                                 | Quantity |
| 0704S08                   | Single Validation Charges for Media Degasser Model EMD-21DO | 1        |

## Media Degasser

### 21 liters Mobile Dissolution Media Degasser

| Optional Accessories |                                                |          |
|----------------------|------------------------------------------------|----------|
| Product code         | Description                                    | Quantity |
| 0909A00007           | STARLITE-12 Thermal paper roll (Set of 24)     | 1        |
| 0104A00449           | Deconex 12 Basic (1000ml bottles)              | 1        |
| 0705A00001           | EMD-21PDO Handle                               | 1        |
| 0104A00785           | Connexion +                                    | 1        |
| 0705A00013           | EMD Aspiration Nozzle Assembly SS              | 1        |
| 0705A00009           | EMD Prime Nozzle Assembly SS                   | 1        |
| 0705A00013           | EMD Aspiration Nozzle Assembly SS              | 1        |
| 0705A00009           | EMD Prime Nozzle Assembly SS                   | 1        |
| 0705A00005           | EMD Media Aspiration Holder                    | 1        |
| 0705A00003           | EMD Prime Holder                               | 1        |
| 0705A00012           | EMD PCB Card Cover                             | 1        |
| 0705A00006           | EMD Magnetic Mains Cords                       | 1        |
| 0705A00007           | EMD Acrylic Cover for Printer                  | 1        |
| 0705A00008           | EMD Front Cover                                | 1        |
| 0705A00010           | EMD Stand for Prime And Aspirate Nozzle Sensor | 1        |

| Breakdown Accessories |                                                                |          |
|-----------------------|----------------------------------------------------------------|----------|
| Part number           | Description                                                    | Quantity |
| 0705B00002            | EMD-21PDO Driver Card                                          | 1        |
| 0705B00032            | EMD-21PDO top cover                                            | 1        |
| 0704B00005            | EMD-21PDO Processor Card New (1904002)                         | 1        |
| 0705B00001            | EMD-21PDO Processor Card                                       | 1        |
| 0705B00003            | EMD-21PDO Front Panel with Keypad                              | 1        |
| 0705B00019            | EMD-21PDO Display Card                                         | 1        |
| 0705B00004            | EMD-21PDO Proxy Sensor                                         | 1        |
| 0705B00010            | EMD-21PDO LCD Display                                          | 1        |
| 0705B00005            | EMD-21PDO 30 Pin FRC Cable SMD (Processor Card to Driver Card) | 1        |
| 0705B00026            | EMD Hose Assembly Handle                                       | 1        |
| 0704B00008            | EMD SS Encloser                                                | 1        |
| 0705B00037            | EMD Proactive Kit(Mechanical)                                  | 1        |
| 0705B00027            | EMD Software Customization                                     | 1        |
| 0705B00031            | EMD Heater Coil With Chamber For 110V                          | 1        |
| 0704B00006            | EMD-21 Heater,Circulation Pump,Card (1905001)                  | 1        |
| 0703B00001            | EMD-21 Driver Card                                             | 1        |
| 0705B00038            | EMD Back Cover                                                 | 1        |
| 0705B00022            | EMD-21 DO Back panel Mains Bracket                             | 1        |
| 0703B00005            | EMD 20 Pin FRC cable (Display Card to Front Panel with Keypad) | 1        |
| 0703B00004            | EMD Printer Patch                                              | 1        |
| 0705B00033            | EMD Mains Cord With Connector                                  | 1        |
| 0705B00014            | EMD Magnetic Sensor                                            | 1        |
| 0704B00007            | EMD-21 Motor Drive                                             | 1        |
| 0705B00035            | EMD Break Handle Assembly                                      | 1        |
| 0705B00006            | EMD LED Light for Indication                                   | 1        |
| 0705B00007            | EMD Break Camp Disk                                            | 1        |
| 0705B00008            | EMD Front Panel housing Weldment                               | 1        |
| 0705B00012            | EMD FAN 24V                                                    | 1        |
| 0705B00013            | EMD 34 Pin FRC cable - Display to Processor card               | 1        |
| 0705B00016            | EMD Break Wire                                                 | 1        |
| 0705B00036            | EMD-Driver Card With Motor Drive(SR3-MINI)                     | 1        |
| 0705B00009            | EMD Dispense Key for Hose Assembly                             | 1        |
| 0703B00003            | EMD Hall Effect Sensor                                         | 1        |
| 0705B00034            | EMD Platinum Kit                                               | 1        |
| 0705B00028            | EMD-21 Heater Coil With Chamber 230V                           | 1        |

| Assurance Plan |                                                           |          |
|----------------|-----------------------------------------------------------|----------|
| Product code   | Description                                               | Quantity |
| 0704S03        | Silver Assurance Plan for Media Degasser Model EMD-21DO   | 1        |
| 0704S01        | Platinum Assurance Plan for Media Degasser Model EMD-21DO | 1        |
| 0704S02        | Gold Assurance Plan for Media Degasser Model EMD-21DO     | 1        |
|                | Bronze Assurance Plan for Media Degasser Model EMD-21DO   | 1        |

| Inspection & Service Charges |                                                                 |          |
|------------------------------|-----------------------------------------------------------------|----------|
| Product code                 | Description                                                     | Quantity |
| 0704S06                      | Inspection & Service Charges for Media Degasser Model EMD-21PDO | 1        |

| IQ/OQ Document |                                                  |          |
|----------------|--------------------------------------------------|----------|
| Product code   | Description                                      | Quantity |
| 0704S15        | IQ/OQ Document for Media Degasser Model EMD-21DO | 1        |

| Reinstallation Charges |                                                                              |          |
|------------------------|------------------------------------------------------------------------------|----------|
| Product code           | Description                                                                  | Quantity |
| 0704S11                | Reinstallation Charges with IQ/OQ Document for Media Degasser Model EMD-21DO | 1        |

| In-House Repairing |                                                      |          |
|--------------------|------------------------------------------------------|----------|
| Product code       | Description                                          | Quantity |
| 0704S07            | In-House Repairing for Media Degasser Model EMD-21DO | 1        |

| Extended IQ/OQ Document |                                            |          |
|-------------------------|--------------------------------------------|----------|
| Product code            | Description                                | Quantity |
| E0704S15                | Extended IQ/OQ Document for Model EMD-21DO | 1        |

| Extended Warranty Support Plan |                                                                            |          |
|--------------------------------|----------------------------------------------------------------------------|----------|
| Product code                   | Description                                                                | Quantity |
| 0704S31                        | Extended Warranty Support Plan for Media Degasser Model EMD-21DO (2 Years) | 1        |

| Upgradation  |                                               |          |
|--------------|-----------------------------------------------|----------|
| Product code | Description                                   | Quantity |
| 0704S13      | Upgradation for Media Degasser Model EMD-21DO | 1        |

| Service Charges |                                    |          |
|-----------------|------------------------------------|----------|
| Product code    | Description                        | Quantity |
| 0704S05         | Service Charges for Model EMD-21DO | 1        |

| Re-Calibration Charges |                                                          |          |
|------------------------|----------------------------------------------------------|----------|
| Product code           | Description                                              | Quantity |
| 0704S09                | Re-Calibration Charges for Media Degasser Model EMD-21DO | 1        |

| Re-installation Charges without IQ/OQ |                                                                         |          |
|---------------------------------------|-------------------------------------------------------------------------|----------|
| Product code                          | Description                                                             | Quantity |
| 0704S10                               | Re-installation Charges Without IQ/OQ for Media Degasser Model EMD-21DO | 1        |

| Inspection Charges |                                                      |          |
|--------------------|------------------------------------------------------|----------|
| Product code       | Description                                          | Quantity |
| 0704S04            | Inspection Charges for Media Degasser Model EMD-21DO | 1        |