Annexure-1

R1

Technical Data Sheet for Ash Filters

|  |  |  |
| --- | --- | --- |
| Description | Not used | Ash Filter for FGTR Effluent Transfer Pump |
| Quantity |  | Two (02) ( 1W + 1S ) |
| Tag |  | 50HSM10AT007/8 |
| Liquid handled |  | Acidic water ( **Typ.10% conc to 20% max** ) H2SO4 solution with suspended ash particles |
| Type |  | Vertical cylindrical with dished ends |
| Location |  | Outdoor |
| Design Rated Service Flow Rate in m3/hr |  | 12.0 |
| Time Period for each Service Cycle between two consecutive backwash, in hrs |  | 24 preferable. However, Bidder to indicate to optimize selection. |
| Volume of treated water between two consecutive backwash (Net), in m3 |  | As above. |
| Design surface flow rate in during filtering m3/m2/hr |  | Bidder to indicate. |
| Design surface flow rate in during backwash m3/m2/hr |  | Bidder to indicate. |
| Design Temperature in o C |  | 60.0 |
| Design Pressure , kg/cm2 g |  | 10.0 |
| Design Inlet TSS, ppm |  | 600 (maximum above 25 microns) |
| Design Outlet TSS ppm |  | **5ppm above 25 microns.** |
| Particle size , micron |  | Over 15 microns |
| Particles to be captured |  | **All above 25 microns.** |
| Design Code |  | Bidder to indicate |
| Code for Tests and Inspections |  | As per the requirements of Tender Specification. |
| Filter Media Type |  | Bidder to indicate. |
| Filter Media Depth |  | Bidder to indicate. |
| Percentage freeboard |  | 30 % minimum. |
| Pressure drop across the filter ( Clean ) |  | Bidder to indicate |
| Pressure drop across the filter ( Before backwash ) |  | Bidder to indicate |
| Material of construction |  |  |
| Shell |  | PP( Polypropylene) lined FRP ( Fibre Reinforced Plastic ) |
| Dished ends |  | PP lined FRP |
| Thickness |  | Bidder to indicate |
| Manhole |  | One (1) no. of flanged nozzle and minimum 500 mm diameter. |
|  |  |  |
| Hand hole |  | Bidder to indicate |
| Pipe and fittings |  | PP( Polypropylene) / Suitable for application |
| Valves |  | PP( Polypropylene) / Suitable for application, Flanged type with Counter flanges |
| Instruments |  | Minimum as per Tender P&ID and Bidder to indicate |
| **Nozzles :** |  | ( NB ) / QTY ( nos.) / PROJ. (mm ) /RATING |
|  |  | Sizes are indicative for tendering purpose |
| Inlet |  | 50 NB/01/150/ 150 lb |
| Outlet |  | 50 NB/01/150/ 150 lb |
| Manhole |  | 500 / 01 / 100 / 150 lb |
| Handhole |  | 150 / 01 / 100 / 150 lb |
| Vent |  | 40 / 01 / 100 / 150 lb |
| Backwash Inlet |  | Bidder to indicate / 150 lb |
| Backwash Drain |  | Bidder to indicate / 150 lb |
| Sample port (on pipeline) |  | 15 / 02 / 100 / 150 lb |
| Pressure Guage |  | 15 / 01 / 100 / 150 lb |