

Operating pressure	-- 2.0 - 3.5 kg/cm ²
Resin name	-- Suitable for Caustic soda flake (NaOH)
Regenerants	-- Caustic soda flake (NaOH)
Regeneration tank	-- One No. (strong acid and base resistant)
Resin quantity	-- suitable for 20,000 liter D/M water is generated in one regeneration cycle.
Sampling point	-- 1NO.

2. MINOR PARAMETER :-

Complete D/M plant is installed in a room with all the switches, pipeline etc in the same room and easy to operate.

3. CONCOMITANT ACCESSORIES(Standard Accessories)**(i) Pumps for Rawwater & Treated water**

Quantity	-- 4 Nos(2working +2spare fitted with DM plant for stand by)
Flow rate	-- 7500 LPH @ 30MWC 3 HP
M.O.C.	-- Cast iron (CI)
Type	-- Centrifugal, Monoblock
Make	-- Kirloskar/Crompton /GE
(ii) Ejector for SAC & SBA	-- 2Nos
(iii) Conductivity meter	-- 1No
(iv) Water meter	-- 1 No
(v) Pressure gauge for MGF,SAC & SBA	--- 3Nos
(vi) Instruction Manual	-- 2Nos

4. Optional Accessories -- Nil**5. SPARES**

CI Diaphragm valve for MGF	--- 4 Nos
CIEL Diaphragm valve for SAC & SBA	-- 8Nos
Ejector for SAC & SBA	-- 2Nos
Water meter	-- 1 No

6. AMC REQUIREMENT -- Not Required

7. WARRANTY REQUIREMENT -- Required for 24 months from the date of installation and commissioning. Supplier to ensure after sale services and supply of spares during and after warranty period for 10 years minimum.

8. SPECIAL REQUIREMENT

Installation and commissioning shall be carried out by firm at consignee premises along with all accessories like switch board,Electical cable, starter,main switch,MCBs,all civil works, pipeline etc. required during installation & commissioning. Rly shall provide water supply and electrical supply at site of installation only.

ASST. CHEMIST & METALLURGIST (Diesel)
पश्चिम मध्य रेलवे, क.क.जं.
Asstt. Chemist & Metallurgist (Diesel)
West. C. Rly. N. K. J.

Sr. DME(DANK)

वरिष्ठ मंडल यंत्रिक इंजीनियर (डीजल)
बड़ई कटनी जं० (म०प्र०) प०म०रेल
Sr. Div. Mech. Engr. (Diesel)
New Katni Jn. (M.P.) W.C.R.

SPECIFICATION FOR WATER DEMINERALISING PLANT

1. MAJOR PARAMETER

- (a) Input raw water supply
- | | | |
|-------------------------------|----|----------|
| Hardness as CaCO ₃ | -- | 600 mg/l |
| Chloride as NaCl | -- | 300 mg/l |
| TDS | -- | 800 mg/l |
- (b) Output treated water from D/M plant should conform to IS- 1069/93 or latest and also have following parameter.
- | | | |
|-------------------------------|----|-----------|
| pH | -- | 6.5 - 7.5 |
| Hardness as CaCO ₃ | -- | 0 mg/l |
| Chloride as NaCl | -- | 0 mg/l |
- (c) D/M plant consist of following
- (i) Multigrade Filter
- | | | |
|---------------------------------------------|----|--------------------------------------------------------------------------|
| Quantity | -- | One set |
| Flow rate | -- | 850 - 8500 LPH |
| Operating pressure | -- | 2.0 - 3.5 kg/cm ² |
| Material of Construction (M.O.C.) of Vessel | -- | Mild steel (Bituminous painted internally & Red oxide coated externally) |
| Vessel dimensions | -- | 600mm dia × 2500mm |
| Valve Type | -- | Height of straight (HOS) approx. CI Diaphragm valve |
| Frontal pipework size | -- | 50 Nominal bore (NB). |
- (ii) Strong acid cation
- | | | |
|----------------------------------|----|------------------------------------------------------------------------------------------------------------------|
| Quantity | -- | One no. |
| Flow rate | -- | 750 - 7500 LPH |
| M.O.C. of vessels | -- | MSRL (Mild steel internally rubber lined & externally coated with Red oxide) |
| Vessel dimensions | -- | 600mm dia × 1500mm H.O.S. Approx. |
| Frontal pipework M.O.C. and size | -- | M.S.R.L. 40NB |
| M.O.C. and type of valve | -- | CIEL Diaphragm (Cast iron ebonite lined) |
| Operating pressure | -- | 2.0 - 3.5 kg/cm ² |
| Resin name / Type | -- | Suitable for HCl acid regeneration. |
| Regenerate | -- | Approx 30% HCl acid |
| Regeneration tank | -- | One No. (strong acid and base resistant) |
| Resin quantity | -- | suitable amount of resin to be used so that about 20,000 liter D/M water is generated in one regeneration cycle. |
| Sampling point | -- | 1No. |
- (iii) Strong Base Anion
- | | | |
|----------------------------------|----|------------------------------------------------------------------------------|
| Quantity | -- | One No. |
| Flow rate | -- | 750 - 7500 LPH |
| M.O.C. of vessel | -- | MSRL(Mild steel internally rubber lined & externally coated with Red oxide) |
| Vessel dimensions | -- | 600mm dia × 1500mm H.O.S. Approx. |
| Frontal pipework M.O.C. and size | -- | M.S.R.L. 40NB |
| M.O.C. and type of valve | -- | CIEL Diaphragm (Cast iron ebonite lined) |