

# O-TFC-V 1700 / 50Hz everse Osmosis Systems

# **OSMO ASIA PACIFIC LTD.**

**FACT SHEET** 



Reverse Osmosis Machine RO-TFC-V 1700 / 50Hz

# The Model: RO-TFC-V 1700 Reverse Osmosis Machine

is designed to produce up to 276 Lt/Hr (1750 GPD) of pure water. The TFC-V 1700 provides high quality product water, user-friendly controls, durable construction, and easy installation.

### **Standard Features:**

- 1.0 or 5.0 micron pre-filter
- Automatic inlet shut-off valve
- Centrifugal type pump
- Two rotameters
- Auto-flush system
- Status indicators
- Adjustable reject recirculation
- Pre-filter, post filter, pump discharge concentrate pressure gauges
- Single source power
- Digital purity monitor
- Mimic diagram c/w pilot lights

### **Typical Applications:**

- Hemodialysis
- Safe drinking water
- Research and laboratory use
- Boiler feed water
- Humidification system
- Rinse water
- lon exchange pre-treatment
- Other commercial applications

### **Operating Parameters**

| Operating Pressure            | 15 bar (220 psig) |
|-------------------------------|-------------------|
| Maximum Recovery              | 50-60%            |
| Nominal Rejection             | 95-98%            |
| Maximum Operating Temperature | 40°C (104°F)      |
| Minimum Inlet Pressure        | 2 bar (30 psi)    |
| Design Temperature            | 25°C (77°F)       |

### **Material of Construction**

| Frame              | Epoxy coated steel     |
|--------------------|------------------------|
| Membrane Elements  | TFC Polyamide          |
| Membrane Housing   | Polish Stainless Steel |
| Low Pressure Pipe  | SCH.80 PVC             |
| High Pressure Pipe | Stainless Steel        |
| Control Enclosure  | NEMA 4                 |
| Pump               | Stainless Steel        |

## **RO-TFC-V 1700 / 50Hz**

### **Specifications:**

| Feed        | Permeate    | Reject      | Recovery | Quantity |
|-------------|-------------|-------------|----------|----------|
| Lt/Hr (GPD) | Lt/Hr (GPD) | Lt/Hr (GPD) | %        | Element  |
| 458 (2900)  | 276 (1750)  | 182 (1150)  | 60       | I        |

| Motor | Connection       | $\cong$ Dimensions (cm) | Shipping    |  |
|-------|------------------|-------------------------|-------------|--|
| KW-H  | Feed Perm. Conc. | HxWxD                   | Weight (Kg) |  |
| 1.5   | 1/2" 1/2" 1/2"   | 160 x 70 x 64           | 165         |  |

### **Feed Water Requirements:**

The Reverse Osmosis machines require the following feed water conditions:

■ Temperature (°C) : 20 to 40

■ Functional pH : 5 to 10 (ultimate pH element limit 3 to 11)

Langelier Index : Negative
Residual Chlorine (ppm) : Nil
Fouling Index : < 3
Total Dissolved Solids (ppm) : < 1500
Metals – Iron, Manganese (ppm) : < 0.03

considered shall be : Multi-Media Filter (will remove Turbidity)

: Activated Carbon Filter (will remove Organic Matters, Chlorine)

: Softener (will remove Hardness, Metals)

### **Installation Considerations:**

- The system should be installed on a firm, level surface.
- A drain with suitable capability to handle the concentrate flow rate is required.
- A power source of 380V 3PH 50Hz or 460V 3PH 60Hz is required.
- Minimum dynamic operating feed pressure of 2 bar for proper system operation.

### For More Information:

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<sup>\*</sup> Recommendation: Should the feed water does not meet above requirement, the typical pretreatment to be