#### BIOPHARMACEUTICAL

# MASTER*pak*<sup>™</sup>

## **OVERVIEW:**

- Completely pre-packaged "plug and play" system
- Product quality exceeds current USP standards up to 18 M $\Omega$
- Integrated controls system
- Customizable to customer specifications for valves, instruments and other mechanical components
- Optional complete validation package with IQ/OQ protocol execution
- Supported by MECO 24-hour customer service
- Backed by warranty

## **PRODUCT HIGHLIGHTS:**

### **Standard Features**

- All major pretreatment, RO and EDI components located on skid(s)
- Unit is completely piped, wired, and assembled at the factory
  - Fully functional wet FAT
  - Reduces installation costs and startup time
- All functions of the unit are automated and controlled from the Operator Interface Terminal (OIT)
- Feedwater PID loop
  - Allows for fluctuations in feedwater pressure and temperature without affecting performance • Stainless steel hardware
- Backwashable Carbon Filter
  - · Eliminates channeling associated with nonbackwashable designs
  - Allows for the removal of dead microorganisms after sanitization
  - Reduces operational costs
  - Increases reliability when compared to chemical injection
- Pump with Variable Frequency Drive (VFD)
  - Allows for unit operation, chemical cleaning and hot water sanitization functions all with a single pump

- Hot water sanitization via either electricity or steam utilities
- Recirculation mode
  - Allows unit to continue operation when no water is being drawn from the system

## **Equipment Details**

- Stainless Steel Feedwater Break Tank
- TEFC motor
- CPVC pretreatment piping
- Sanitary 316L SST permeate and EDI piping
- Premium valves and instrumentation
- Polypropylene air lines
- Single point power supply

MODEL	CAPACITY IN GPM [LPM]
MP2	1-3 [4-10]
MP4	3-5 [11-19]
MP7	6-8 [23-28]
MP10	9-13 [32-47]
MP22	17-26 [64-98]
MP65	59-68 [223-257]





