

# PLM-ROM-1

## Fully Automatic Ro Membrane Roll Production Line



### Features

- **High Level of Automation.** Fully automated operation from feeding, cutting, folding, to winding minimizes manual intervention, enhancing production efficiency.
- **Modular Design.** Segmented structure simplifies maintenance and upgrades, with key components (such as the splicing mechanism and gluing system) independently modularized for flexibility.
- **Stable and Reliable.** Built with renowned hardware brands and multiple monitoring systems (pressure, flow, and visual inspection) to ensure stable, consistent operation.
- **Dual-Mode Compatibility.** Supports both longitudinal and transverse production, compatible with various membrane element specifications (e.g., 1810-3013 series) to meet diverse requirements.
- **Efficient Production.** Longitudinal cutting improves efficiency for large-diameter membrane elements (12+ sheets), while transverse cutting achieves faster speeds (40 seconds per roll) for smaller diameters.
- **Precise Control.** Equipped with a high-precision servo drive, automatic web correction, and tension control system for accurate cutting, stacking, and winding.

### Specification

- **Center tube compatibility:** 17 mm diameter, other diameters can be customized
- **Standard length:** 12 inches and 13 inches, customized (250-350 mm)
- **Membrane element diameter compatibility:** 35-100 mm diameter
- **Material width compatibility:** 220-330 mm
- **RO membrane length compatibility:** about 500-800 mm vertical cut after folding; about 500-600 mm horizontal cut after olding

### Application

- **Household RO Membrane Element Production:** Suitable for mass production of 1810, 3013, and other series household water purifier membrane elements.
- **Customized Industrial Membrane Elements:** Supports the production of industrial membrane elements with diameters ranging from 35 to 100 mm and lengths ranging from 250 to 350 mm.
- **Multi-material Compatibility:** Capable of processing a wide range of materials, including diaphragms, gaskets, and flow guide fabrics, and adapting to various process requirements (such as ultrasonic welding and dual-liquid dispensing).

