

# Hollow Fiber Membrane Spinning Machine

PVDF/PTFE Membrane Spinning For Water Filter Manufacturing  
Lab Scale Hollow Fiber Spinning Machine (1 Spinneret)



PVDF Membrane



PVDF Filter

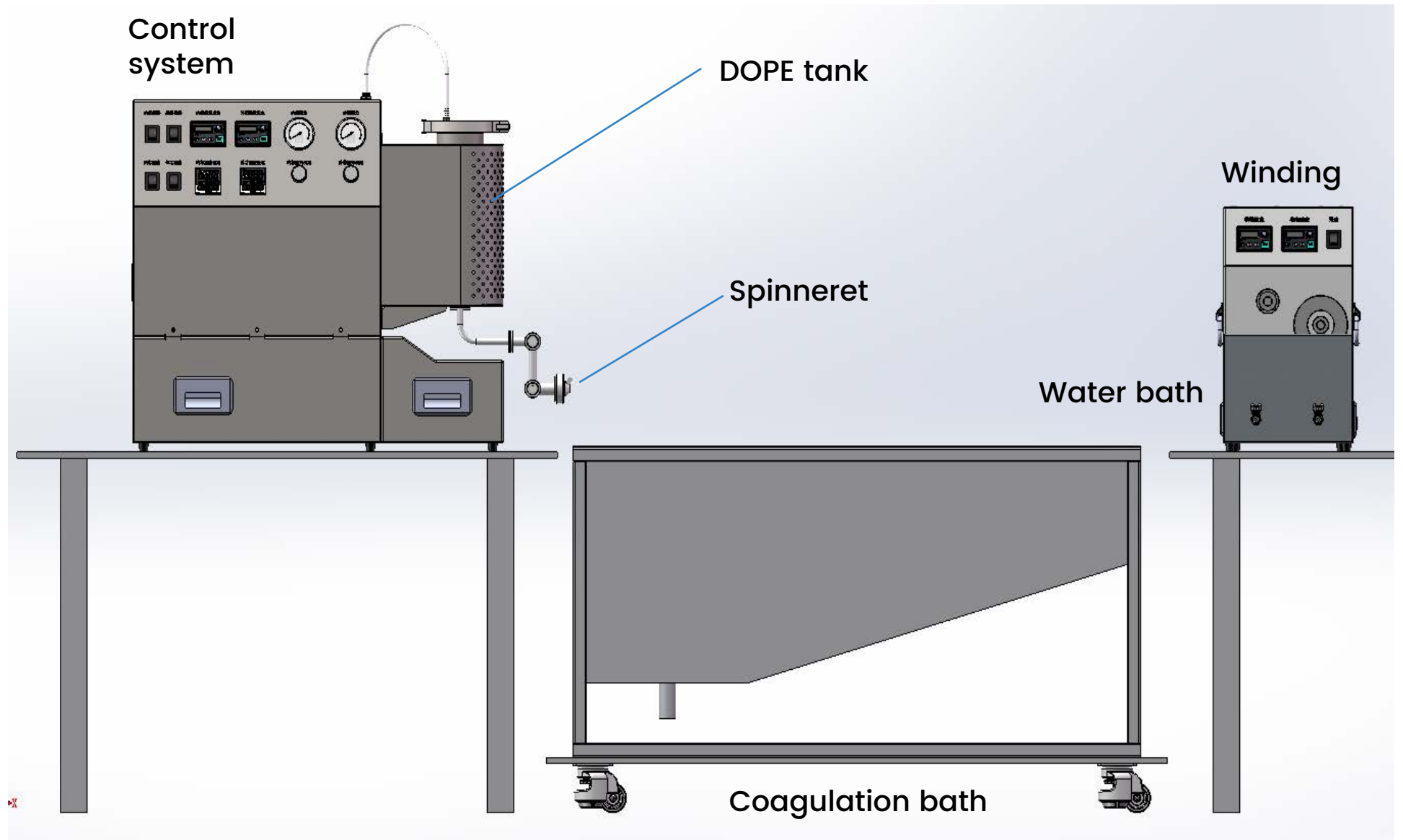


PTFE Membrane



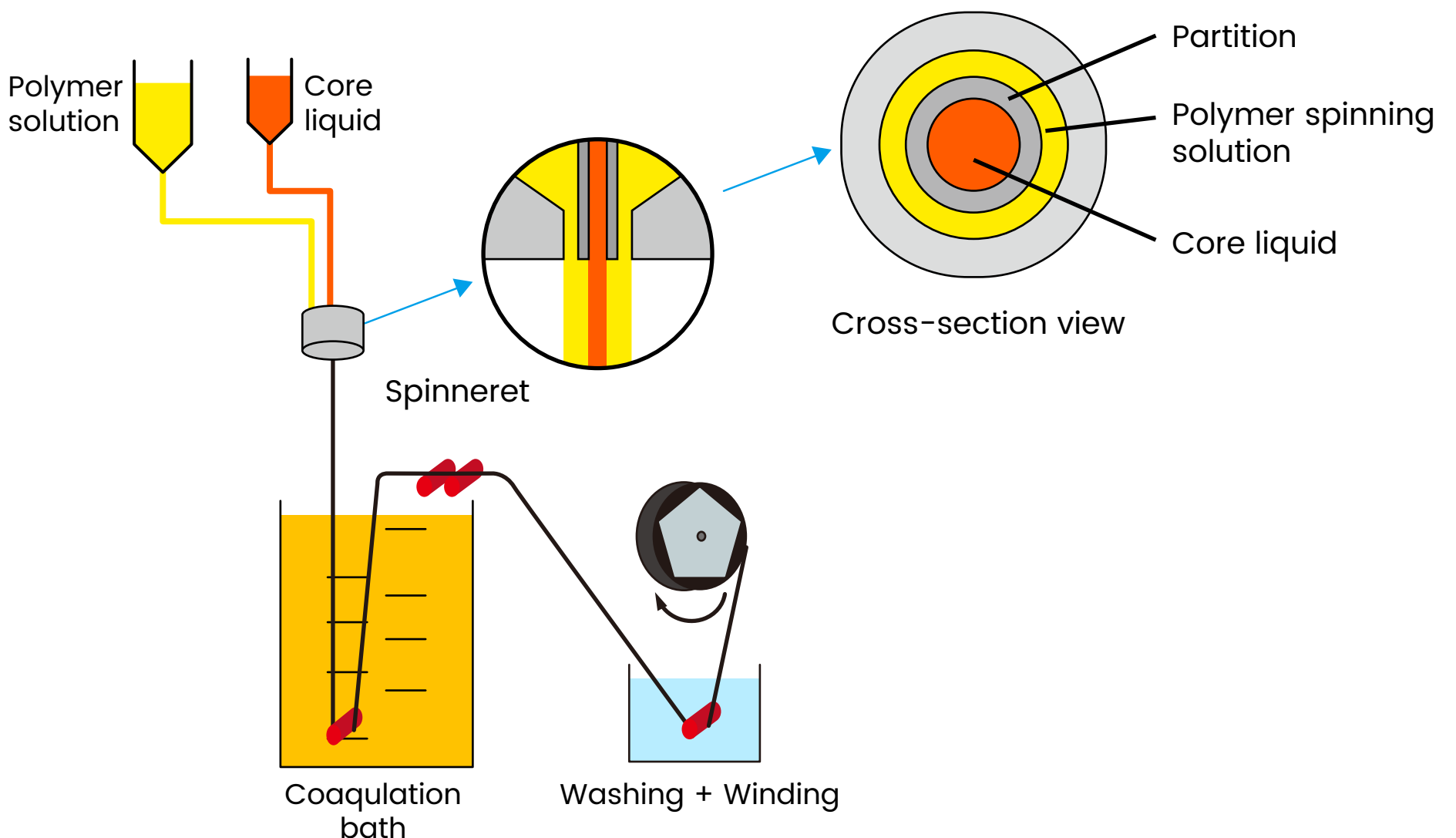
PTFE Filter

## Hollow Fiber Membrane Spinning Machine-Structure



## Hollow Fiber Membrane Spinning Machine-Spinning Processes

Control system --> Spinneret --> Coagulation bath --> Washing + Winding



## Hollow Fiber Membrane Spinning Machine – Parameter

NO.	Parts	Detail	Quantity
1	Control system	<p>Place the prepared polymer solution into the DOPE tank, and remove the bubbles in the original solution by static and vacuuming. The degassed polymer solution is delivered to the metering pump by external nitrogen filling. The flow rate of the spinning solution is controlled by controlling the speed of the metering pump. After the polymer solution is filtered through the filter, it is sent to the spinneret through the melt pipe.</p> <p>DOPE tank volume: 1L            DOPE tank quantity: 2 pcs            DOPE tank material: 316L            Metering pump: 0.3cc/r            Metering pump quantity: 2 pcs            Heating method: Electric heating jacket            Heating device: 2 pcs            Heating temperature: room temperature -200°C            Temperature control: Omron            Motor brand: Jingyan            Air path control: AirTac            Power: 3Kw</p>	1
2	Spinneret	<p>The function of the spinneret is to extrude the viscous skin and core polymer spinning solutions through a coaxial nozzle to achieve a thin stream skin-core structure. The solution thin stream spit out by the nozzle is solidified by a coagulation medium such as air or a coagulation bath to form a filament.</p> <p>Outer core diameter: Ø1.5 mm            Inner layer diameter: Ø0.4 mm            Material: 316L            Other specifications can be customized</p>	1
3	Coagulation bath & washing bath	<p>This part is used for coagulation, condensation, wet heat stretching and soaking and washing of primary fibers between room temperature and 80°C.</p>	1
4	Winding system	<p>This part winds the fiber around the I-tube. Mainly used for winding finished fiber.</p> <p>I-tube: Ø55x100            Transverse stroke: 100mm            Transverse speed: 500mm-780mm/min            Winding speed: 2-20m/min            Motor brand: Jingyan</p>	1

### Basic information

**Equipment dimension:** 3200\*900\*1500mm  
**Ambient temperature:** 15°C-35°C

**Relative humidity:** 20%-85%;  
**Working voltage:** 220V

### Video

● <https://youtu.be/53uroisrTMU>