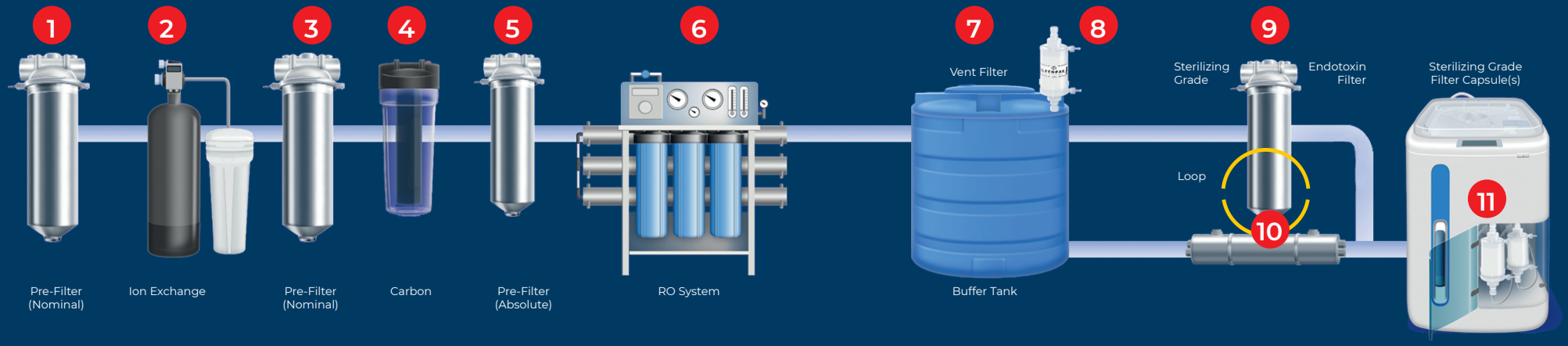
PALL Medical

Water Treatment for Endoscope Reprocessing

What is this process doing step by step?



1. Pre-filtration 1
   Large particulate & organic debris

2. Ion Exchange & Brine Tank
   Ion-exchange devices reduce the hardness by replacing magnesium and calcium (Mg^{2+} and Ca^{2+}) with sodium ions

3. Pre-filtration 2
   Particulate & debris removal

4. Carbon Filtration
   Adsorption of systemic disinfectant chemicals

5. Absolute filtration
   Fine (<1 micron absolute) filtration for fine particulate removal for protection of RO

6. Reverse Osmosis (RO) System
   Removing dissolved contaminates (sodium ions), bacteria, fine particulate

7. Storage Vessel
   Large sealed water tank to act as buffer, often as RO may not be able to keep up with peak demand

8. Tank Vent Filter
   Sterilizing grade vent filtration to protect tank water from bacteria and airborne particles

9. Sterilizing & Endotoxin Filtration
   Removing any bacteria and endotoxin within recirculating loop

10. Ultra Violet (UV) Light System
    Virus reduction

11. Final Rinse Water Filter (within Endoscope Washer Disinfector EWD)
    Final stage sterilizing grade filtration step to remove bacteria & particulate (typically forms part of AER system)