

STEP 1 RAW WATER TANK

Raw water is collected from borewell / municipal supply and stored in the raw water tank.



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.



FUNCTION

The raw water tank stores incoming water and ensures continuous supply to the treatment system.

EQUIPMENT

- Raw Water Tank
- Inlet Pipe & Fittings
- Level Indicator
- Overflow & Drain Arrangement

STEP 2 RAW WATER PUMP

The raw water pump transfers water from the raw water tank to the treatment system.



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.



FUNCTION

Draws water from the raw water tank and delivers it to the pretreatment system.



EQUIPMENT

- Centrifugal Raw Water Pump
- Motor, Coupling & Base Frame



BENEFITS

- ✓ Ensures continuous flow
- ✓ Reliable & energy efficient
- ✓ Maintains stable pressure for effective treatment

RAW WATER
TANK

RAW WATER
PUMP

MGF

ACF

DOSING
SYSTEM

CARTRIDGE
FILTER

HP PUMP

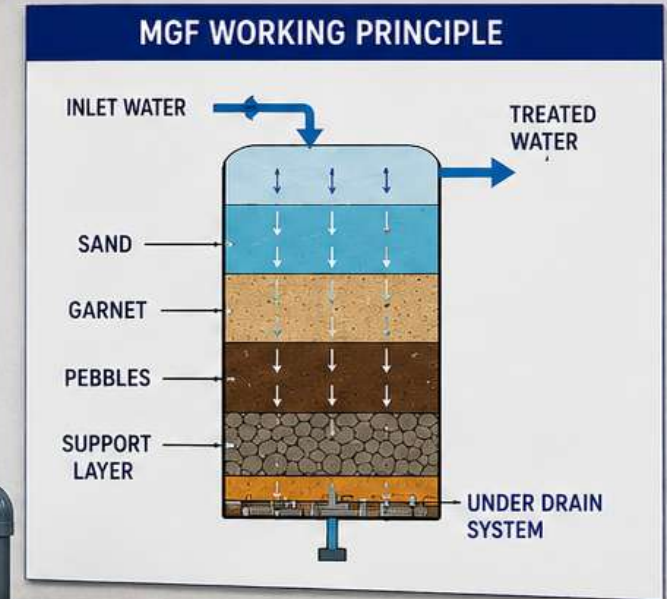
RO SYSTEM

STEP 3 MULTI GRADE SAND FILTER (MGF)

MGF removes suspended solids, turbidity, sand and dirt particles from the water.



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.



FUNCTION

Removes suspended solids, turbidity, sand, silt and dirt particles to protect the downstream equipment.



EQUIPMENT

- FRP/Steel Pressure Vessel
- Multi Grade Filter Media (Sand, Garnet, Pebbles)
- Inlet, Outlet & Drain Piping
- Pressure Gauge & Multiport Valve



BENEFITS

- ✓ Improves water clarity
- ✓ Reduces turbidity
- ✓ Protects RO membranes
- ✓ Increases system life

RAW WATER TANK

RAW WATER PUMP

MGF

ACF

DOSING SYSTEM

CARTRIDGE FILTER

HP PUMP

RO SYSTEM



STEP 3: CLEANER WATER STARTS HERE. MGF REMOVES IMPURITIES. BUILDS STRONGER TREATMENT.

STEP 4

ACTIVATED CARBON FILTER (ACF)



OM JYOTI

ENGINEERING ENTERPRISES

PURE WATER. PERFECT SOLUTION.

ACF removes chlorine, bad taste, odor, organic compounds and improves the overall quality of water.



FUNCTION

Removes chlorine, bad taste, odor, color and organic compounds from water.



EQUIPMENT

- FRP/Steel Pressure Vessel
- Activated Carbon Media
- Inlet, Outlet & Drain Piping
- Pressure Gauge & Multiport Valve



BENEFITS

- ✓ Improves taste and odor
- ✓ Removes residual chlorine
- ✓ Protects RO membranes
- ✓ Enhances overall water quality

RAW WATER TANK

RAW WATER PUMP

MGF

ACF

DOSING SYSTEM

CARTRIDGE FILTER

HP PUMP

RO SYSTEM



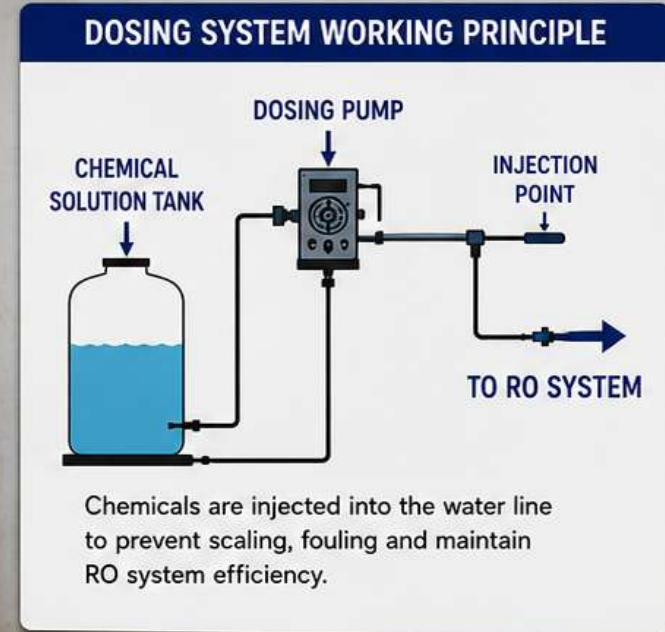
STEP 4: BETTER TASTE. ODOR FREE WATER. ACTIVATED CARBON FILTER FOR PREMIUM QUALITY.

STEP 5 DOSING SYSTEM (ANTISCALANT / CHEMICAL DOSING)



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.

Dosing system adds precise amount of chemicals to prevent scaling, fouling and to maintain optimal performance of the RO system.



FUNCTION

Accurately doses antiscalant or other chemicals to protect the RO membranes from scaling, fouling and damage.



EQUIPMENT

- Dosing Pump
- Chemical Solution Tank
- Injection Quill / Check Valve
- Piping & Fittings



BENEFITS

- ✓ Prevents scaling and fouling
- ✓ Improves RO system performance
- ✓ Reduces downtime and maintenance
- ✓ Extends membrane life



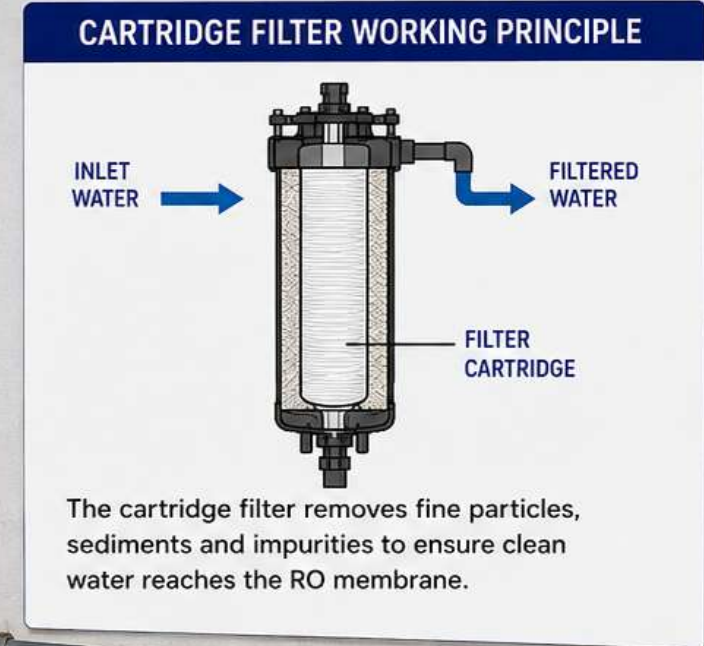
STEP 5: PRECISE DOSING. OPTIMAL PROTECTION. BETTER PERFORMANCE.

STEP 6 CARTRIDGE FILTER

Cartridge filter removes fine particles and protects the RO membrane from damage, clogging and extends its life.



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.



FUNCTION

Removes fine particles, sediments and undissolved impurities to protect RO membrane from clogging and damage.



EQUIPMENT

- Filter Housing
- PP Cartridge (5 Micron)
- Pressure Gauge
- Inlet, Outlet & Drain Valves



BENEFITS

- ✓ Protects RO membrane
- ✓ Improves filtration efficiency
- ✓ Ensures consistent water quality
- ✓ Increases system life



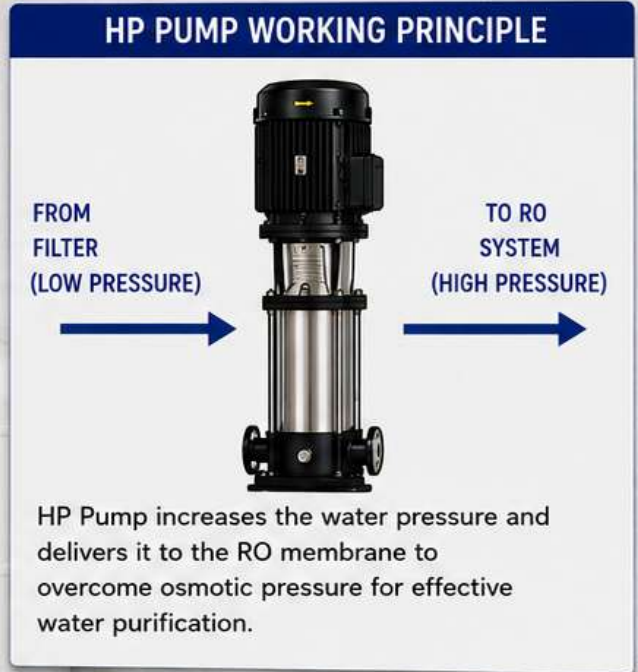
✓ **STEP 6: CLEANER WATER. STRONGER PROTECTION. LONGER LIFE FOR YOUR RO SYSTEM.**

STEP 7 HIGH PRESSURE PUMP (HP PUMP)

HP Pump provides the required high pressure to feed purified water to the RO membrane for maximum efficiency.



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.



FUNCTION

Delivers high pressure to the water so that it can pass through the RO membrane efficiently for maximum recovery.



EQUIPMENT

- High Pressure Pump (SS 304)
- Pressure Gauge
- Inlet & Outlet Piping
- Non Return Valve



BENEFITS

- ✓ Provides required pressure for RO
- ✓ Improves system efficiency
- ✓ Ensures consistent performance
- ✓ Extends RO membrane life

RAW WATER TANK



RAW WATER PUMP



MGF



ACF



DOSING SYSTEM



CARTRIDGE FILTER



HP PUMP



RO SYSTEM



STEP 7: HIGH PRESSURE. HIGH PERFORMANCE. POWERING PURE WATER.

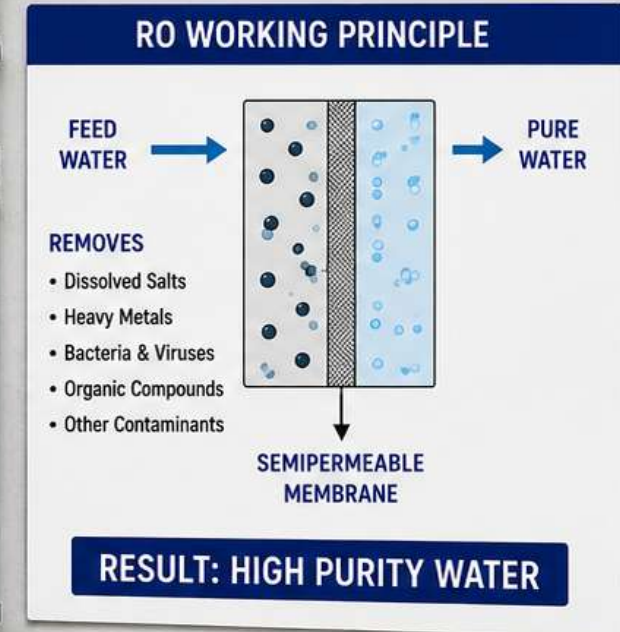
Thank You for Choosing Om Jyoti Engineering Enterprises.

STEP 8 REVERSE OSMOSIS SYSTEM (RO)

RO system removes dissolved salts, heavy metals, bacteria, viruses and other contaminants to produce high purity water.



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.



FUNCTION

Removes up to 95–99% of dissolved solids, salts, heavy metals, bacteria, viruses and other impurities to produce high purity water.



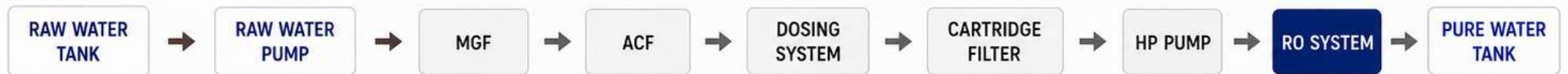
EQUIPMENT

- RO Membranes (High Rejection)
- Pressure Vessels (FRP/SS)
- RO Control Panel
- Pressure Gauges
- Flow Meter, Solenoid Valve
- Piping & Fittings



BENEFITS

- ✓ Produces high purity water
- ✓ Removes 95–99% TDS
- ✓ Reduces risk of scaling & fouling
- ✓ Ensures safe & reliable water quality
- ✓ Extends membrane life & system efficiency



STEP 8: PURE WATER. PURE LIFE. PURE PERFORMANCE.

Thank You for Choosing Om Jyoti Engineering Enterprises.

STEP 9 PURE WATER TANK

Pure water tank stores the purified water from RO system safely and maintains consistent supply for use.

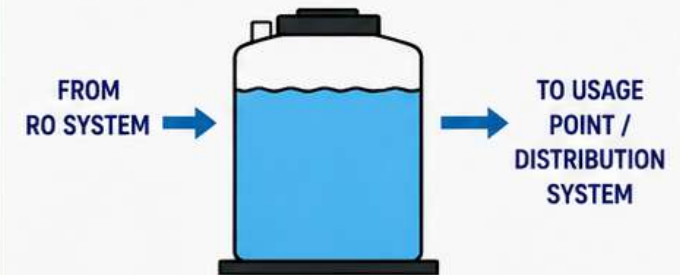


OM JYOTI
ENGINEERING ENTERPRISES

PURE WATER. PERFECT SOLUTION.



PURE WATER TANK WORKING PRINCIPLE



- Stores high purity water produced by the RO system.
- Maintains water pressure and ensures continuous supply.
- Protects water quality from external contamination.



FUNCTION

Stores purified water safely, maintains pressure and ensures continuous supply while preventing contamination and quality deterioration.



EQUIPMENT

- Pure Water Tank (HDPE/FRP/SS)
- Inlet, Outlet & Overflow Piping
- Level Indicator / Float Valve
- Vent Filter
- Drain Valve



BENEFITS

- ✓ Ensures safe storage of purified water
- ✓ Maintains consistent water pressure
- ✓ Prevents re-contamination
- ✓ Ensures continuous and reliable supply
- ✓ Supports smooth operation of the system

RAW WATER TANK

RAW WATER PUMP

MGF

ACF

DOSING SYSTEM

CARTRIDGE FILTER

HP PUMP

RO SYSTEM

PURE WATER TANK

✓ **STEP 9: SAFE STORAGE. CONSISTENT SUPPLY. PURE PERFORMANCE.** | *Thank You for Choosing Om Jyoti Engineering Enterprises.*

STEP 10 DISTRIBUTION / USAGE POINT

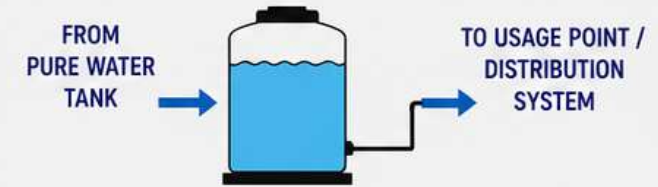
Purified water is supplied to the point of use / distribution system with consistent pressure and quality.



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.



DISTRIBUTION SYSTEM WORKING PRINCIPLE



Purified water is delivered to various usage points with stable pressure and consistent quality to meet application requirements.



FUNCTION

Delivers purified water from the storage tank to different usage points with required pressure and flow.



EQUIPMENT

- Distribution Piping (SS / UPVC)
- Pressure Regulator
- Pressure Gauge
- Sampling Valve
- Point-of-Use Outlet



BENEFITS

- ✓ Ensures consistent supply of high purity water
- ✓ Maintains stable pressure and flow
- ✓ Supports multiple usage points
- ✓ Improves process reliability
- ✓ Ensures safe and efficient operation



STEP 10: CLEAN, SAFE & RELIABLE PURIFIED WATER – DELIVERED TO WHERE YOU NEED IT. | *Thank You for Choosing Om Jyoti Engineering Enterprises.*

STEP 11 SYSTEM CONTROL & MONITORING



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.

The control and monitoring system ensures efficient operation, protects equipment and maintains consistent water quality.



CONTROL & MONITORING WORKING PRINCIPLE



Monitors all critical parameters in real time (pressure, flow, TDS, level, etc.)



Provides alarms and alerts for any deviation or fault



Protects equipment from dry run, high pressure, low pressure and other abnormal conditions



Ensures efficient operation and longer equipment life

PARAMETERS MONITORED

- Feed Water Pressure
- HP Pump Pressure
- RO Inlet Pressure
- RO Outlet Pressure
- Permeate Flow
- TDS (Raw Water)
- TDS (Pure Water)
- Tank Level
- Filter Pressure Drop
- System Status

✓ SMART CONTROL – SAFE OPERATION – MAXIMUM PERFORMANCE



FUNCTION

Monitors and controls the entire RO system automatically to ensure safe operation, optimum performance and consistent water quality.



EQUIPMENT

- PLC / Microcontroller based Panel
- HMI / Touch Screen Display
- Pressure Transmitters & Gauges
- Flow Meter
- TDS Meter
- Level Switch / Float Switch
- Alarms & Indication Light



BENEFITS

- ✓ Real-time monitoring of critical parameters
- ✓ Automatic protection and alarm system
- ✓ Reduces downtime and maintenance cost
- ✓ Ensures consistent water quality
- ✓ Improves efficiency and system reliability
- ✓ User friendly operation and data logging

COMPLETE RO PLANT FLOW



STEP 11: INTELLIGENT CONTROL. REAL-TIME MONITORING. RELIABLE PERFORMANCE.

Thank You for Choosing Om Jyoti Engineering Enterprises.

STEP 12 MAINTENANCE & SUPPORT

Regular maintenance and timely support ensure long equipment life, optimum performance and consistent water quality.



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.



MAINTENANCE & SUPPORT CHECKLIST



REGULAR INSPECTION

Check system parameters, gauges, leaks and overall performance.



FILTER REPLACEMENT

Replace pre-filters, cartridge filters and membranes as per schedule.



WATER QUALITY TESTING

Test raw, RO and purified water quality regularly to ensure standards.



CLEANING & SANITIZATION

Clean membranes (CIP) and sanitize system periodically to prevent fouling.



SPARES & SUPPORT

Use genuine spare parts and get timely support from our service team.

PARAMETERS MONITORED

- Feed Water Pressure
- HP Pump Pressure
- RO Inlet Pressure
- RO Outlet Pressure
- Permeate Flow
- TDS (Raw Water)
- TDS (Pure Water)
- Tank Level
- Filter Pressure Drop
- System Status



PREVENTIVE CARE TODAY, RELIABLE PERFORMANCE EVERYDAY.



FUNCTION

Ensures the RO system operates efficiently for a long time with optimum performance, minimum downtime and consistent water quality.



EQUIPMENT / ACTIVITIES

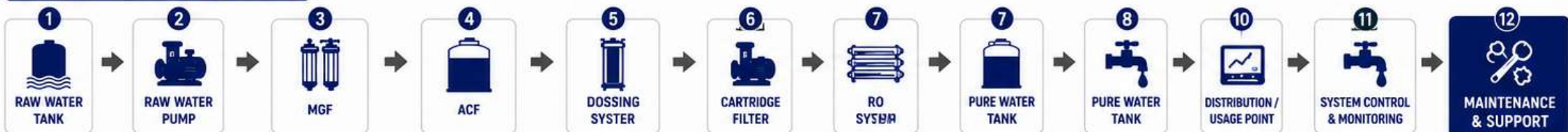
- Filter & Membrane Replacement
- System Inspection
- CIP (Cleaning In Place)
- Water Quality Testing
- Spare Parts & Technical Support



BENEFITS

- ✓ Extends equipment & membrane life
- ✓ Maintains high water quality
- ✓ Ensures system reliability & efficiency
- ✓ Reduces breakdown & maintenance cost
- ✓ Provides continuous & trouble-free operation

COMPLETE RO PLANT FLOW (RECAP)



STEP 12: REGULAR MAINTENANCE. TIMELY SUPPORT. LONG LIFE & RELIABLE PERFORMANCE.

Thank You for Choosing Om Jyoti Engineering Enterprises.

STEP 13 SYSTEM STARTUP & COMMISSIONING



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.

System startup and commissioning ensure all components work together efficiently to deliver high quality purified water.



STARTUP & COMMISSIONING CHECKLIST		
	PRE-CHECKS Verify all installations, connections, valves, instruments and electricals.	<input checked="" type="checkbox"/>
	SYSTEM FLUSHING Flush the system and remove any residual dust or impurities.	<input checked="" type="checkbox"/>
	SYSTEM STARTUP Start the system and check all pumps, valves and instruments.	<input checked="" type="checkbox"/>
	PARAMETER VERIFICATION Verify pressure, flow, TDS, pH and other critical parameters.	<input checked="" type="checkbox"/>
	WATER QUALITY TEST Test RO permeate quality and ensure water meets required standards.	<input checked="" type="checkbox"/>
	DOCUMENTATION & TRAINING Provide operation manuals, records and train the operating staff.	<input checked="" type="checkbox"/>
COMMISSIONED SYSTEM = RELIABLE SYSTEM		



FUNCTION

Ensures the complete RO plant is tested, verified and optimized to operate smoothly and deliver high quality purified water.



KEY ACTIVITIES

- Pre-commissioning inspection
- System flushing & cleaning
- Equipment functional testing
- Parameter tuning & calibration
- Water quality verification
- Operator training & handover



BENEFITS

- ✓ Ensures safe and smooth system operation
- ✓ Delivers consistent high quality water
- ✓ Optimizes performance and efficiency
- ✓ Reduces breakdown & downtime risk
- ✓ Builds confidence and reliability of the system

COMPLETE RO PLANT FLOW (SUMMARY)



STEP 13: VERIFIED. VALIDATED. READY TO DELIVER HIGH QUALITY PURIFIED WATER – CONSISTENTLY.

STEP 14 DOCUMENTATION & HANDOVER



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.

Complete documentation and successful handover ensure smooth operation, compliance, and long-term reliability of the RO system.



HANDOVER CHECKLIST

	OPERATION MANUAL Provide detailed operation manual for the complete RO system.	<input checked="" type="checkbox"/>
	MAINTENANCE MANUAL Provide maintenance schedule, procedures and guidelines.	<input checked="" type="checkbox"/>
	TEST REPORTS Provide all testing and commissioning reports.	<input checked="" type="checkbox"/>
	WARRANTY CERTIFICATES Provide equipment and membrane warranty certificates.	<input checked="" type="checkbox"/>
	OPERATOR TRAINING Train operators on system operation, maintenance and safety.	<input checked="" type="checkbox"/>
	PROJECT HANDOVER Complete handover and ensure customer satisfaction.	<input checked="" type="checkbox"/>

WELL DOCUMENTED. WELL TRAINED. WELL HANDOVERED.



FUNCTION

Ensures all system information, test results, and guidelines are provided for safe operation, maintenance, and future reference.



KEY DOCUMENTS PROVIDED

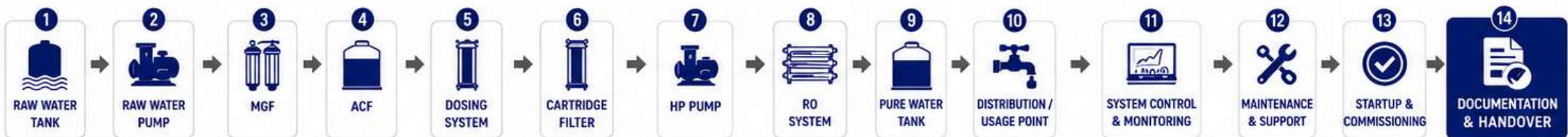
- Operation Manual
- Maintenance Manual
- P&ID, GA Drawings & Schematics
- Test Reports (FAT/SAT, Water Quality)
- Warranty Certificates
- Spare Parts List
- Training & Handover Records



BENEFITS

- ✓ Ensures smooth & safe operation
- ✓ Helps in preventive maintenance
- ✓ Ensures compliance & traceability
- ✓ Reduces downtime & repair cost
- ✓ Builds customer confidence & long-term trust

COMPLETE RO PLANT FLOW (SUMMARY)



STEP 14: COMPLETE DOCUMENTATION. SUCCESSFUL HANDOVER. RELIABLE PERFORMANCE FOR YEARS.

FINALIZING IMAGE

COMPLETED RO PLANT - READY TO PERFORM

- ✓ High Quality Purified Water
- ✓ Reliable Performance
- ✓ Sustainable Solution



OM JYOTI
ENGINEERING ENTERPRISES
PURE WATER. PERFECT SOLUTION.



HANDOVER CHECKLIST

- OPERATION MANUAL**
Provide detailed operation manual for the complete RO system. ✓
- MAINTENANCE MANUAL**
Provide maintenance schedule, procedures and guidelines. ✓
- TEST REPORTS**
Provide all testing and commissioning reports. ✓
- WARRANTY CERTIFICATES**
Provide equipment and membrane warranty certificates. ✓
- OPERATOR TRAINING**
Train operators on system operation, maintenance and safety. ✓
- PROJECT HANDOVER**
Complete handover and ensure customer satisfaction. ✓

✓ WELL DOCUMENTED. WELL TRAINED. WELL HANDOVERED.



PURE & SAFE WATER

Delivers high quality purified water that meets industry standards.



ADVANCED TECHNOLOGY

Equipped with high efficiency components for reliable and consistent performance.



RELIABLE & EFFICIENT

Designed for long-term operation with minimal downtime and low maintenance.



ENERGY & COST SAVING

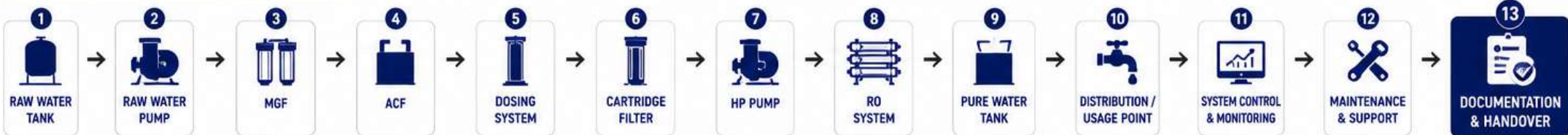
Optimized system for low energy consumption and reduced operating costs.



SUSTAINABLE SOLUTION

Environment friendly solution for a better tomorrow and responsible water use.

COMPLETE RO PLANT FLOW (SUMMARY)



YOUR RO PLANT IS READY TO DELIVER EXCELLENCE EVERY DAY.

Thank You for Choosing Om Jyoti Engineering Enterprises.



QUALITY ASSURED



EXPERT SUPPORT



TRUSTED PARTNER