

Technical Specs of aro



Informations	aro (1)	aro (2)	aro (3)	aro (4)	aro (5)	aro (6)	aro (7)	aro (8)	aro (9)	aro (10)
Product capacity (m ³ /day)	120	180	240	300	400	535	670	800	935	1075
Efficiency	55%	60%	65%	75%	75%	75%	75%	75%	75%	75%
Desing inlet TDS (mg/l)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Number of membranes	6	9	12	15	18	24	30	36	42	48
Membranes per housing	3	3	4	5	6	6	6	6	6	6
Number of housings	2	3	3	3	3	4	5	6	7	8
Type of membrane	8"x40"	8"x40"	8"x40"	8"x40"	8"x40"	8"x40"	8"x40"	8"x40"	8"x40"	8"x40"
Cartridge filter	5 µm	5 µm	5 µm	5 µm	5 µm	5 µm	5 µm	5 µm	5 µm	5 µm
Inlet connection	2"	2"	2"	2 1/2"	2 1/2"	3"	3"	3"	4"	4"
High pressure piping	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
Low pressure piping	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC
Skid material	SS	SS	SS	SS	CS+epoxy	CS+epoxy	CS+epoxy	CS+epoxy	CS+epoxy	CS+epoxy
Electrical connection (kWh)	7.5	7.5	11	11	15	18.5	30	30	37	45

- › With over 32 years of engineering & manufacturing expertise,
- › Proven design and quality-control,
- › Process guarantees and full customer support,
- › ARTAŞ is your enduring partner.



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Reverse Osmosis Units

aro
by ARTAŞ



aro

PASSION FOR THE ENVIRONMENT. ENERGY FOR THE FUTURE.

Fields of application



- Steam Boilers
- Drinking water
- Medical and laboratory applications
- Metal Finishing Industry
- Plating Industry
- Textile Industry
- Food Industry
- Hotels & Residences
- All Process water applications

Design parameters



- Capture Efficiency: 90-99 %
- Silt Density-Index: < 3
- Oil & Grease: None
- Fe - Mn: None
- Oxidants: None
- Organic Matter: None
- Design Temperature: 15 °C
- Inlet Pressure: min. 3 bar
- Inlet TDS: 2000 mg/l

Benefits of aro



- Additional pre and post treatment can be combined
- Higher quality water produced
- Automatic and works constantly without intervals
- Compact
- Easy to maintain and operate
- Emergency shut-down
- Minimum space requirement
- Easy to install
- Stable water quality production
- Professional after-sale service

ARO components



- Cartridge filters,
- High pressure pump,
- Pressure vessels,
- Membranes,
- Instruments,
- Control cabinet.

Optional equipment



- Pre-Treatment Unit (Filtration, chemical dosing, etc.)
- Post-Treatment Unit (Remineralization, chemical dosing, degasser, mixed-bed etc.)
- Disinfection

ARO process description



- ARO system mainly consists of cartridge filters, high pressure pumps, RO system, CIP Units and chemical dosing system,
- ARO is highly effective in removing several impurities from water such as total dissolved solids (TDS), turbidity, asbestos and other toxic heavy metals, radium and many dissolved organics,
- ARO membranes are capable of rejecting almost partially all particles, bacterias and organics
- Treated water is divided into two flows after treatment; as permeate and concentrate,
- Permeate is treated water and ready to use.
- Concentrate is the water that must be discharged, it contains most of contaminants,
- High Pressure pumps are used to feed ARO system,
- Cartridge Filters are used to prevent ARO and high pressure pumps from particulates,
- Chemicals are being dosed to prevent ARO system from clogging and fouling,
- Additional pre-treatment must be used to lengthen the life of ARO membranes,
- Optional Post-treatment can be used to further increase the quality of permeate water.

